

# Police Science

Australia & New Zealand Journal of Evidence Based Policing  
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# Editorial Foreword



*Superintendent David Cowan,  
Victoria Police*

Welcome to the Summer edition of POLICE SCIENCE, published slightly later than intended - in no small part impacted by the continued policing response to CV19 and extra-ordinary demand on policing services in recent months in both Australia and New Zealand.

In this edition we are proud to present you with a range of articles, including a body of Rapid Evidence Assessments (REA) produced by the Global Policing Database team, led by Professor Lorraine Mazerolle, at the University of Queensland. These REA's were commissioned through the on-going partnership with the New Zealand Police Evidence-based Policing Centre. Each of the REA's in this edition has been summarised by the team into short-format papers. This snapshot of REA's has been used by New Zealand Police to inform a range of strategies, and importantly the applied testing or implementation of strategies from Mental health to Road Policing.

As you will know the ANZ SEBP held its annual conference in 2021, raising the bar in online policing conferencing in the process. We welcomed nearly two and a half thousand delegates who tuned in to three days of police and policing-practitioner led presentations and discussion on around the conference theme of 'Leadership, Legitimacy, and the Role of Evidence'.

Our official media partner for the 2021 conference, [Policing Insights](#), have summarised a number of sessions including the opening remarks I gave on day one. This session talked to making a difference and the changing relationship between academia and policing. The article can be accessed [here](#) using your Policing Insights login. In addition to this I'd like to share with you some of my notes made in preparation for the day one session referenced above.

The objectives of the ANZ Society for Evidence-based Policing are simple: communicating, using and generating the best evidence to add to the body of knowledge and professionalism of policing.

But what I want to talk about is not the 'what' of EBP, but the 'how' of EBP. I am going to share with you, some of my insights into how you can apply EBP in a practical way, on the ground, and how policing more generally might continue to build this.

To start I just want to share something a little bit abstract with you. The Royal Society in the UK is a fellowship of the world's most Eminent Scientists. Their motto is 'Nullius in verba', which simply means 'take nobody's word for it'. That motto is an expression of the determination of Fellows to withstand the domination of authority and to verify all statements by an appeal to facts as determined by evidence. And I share that with you because I think it shares a very similar philosophy with that of evidence-based policing.

The movement towards EBP and the application of science and research to policing has not historically been a smooth path, but nor was the path smooth for nurses, who half a century ago were seen as bed-changers or paramedics who were seen as stretcher-carriers. And when you think about those professions, what makes those professions professional, it is the evidence upon which their craft is now based.

So where are we at in policing? Some may suggest that put simply, police don't like research. They don't particularly engage, and they find it irrelevant to practice. It is fair to say Police are pragmatic and often reject the theoretical for the practical. The pace at which police are required to respond is often perceived to be inconsistent with research and the demands of the authorising environment in which we operate.

Police take a reactive approach to problem solving and move quickly from the problem definition to solution – with greater emphasis on responding with less rigor in the analysis of the outcome. Before and after comparisons are the main game, but police are astute enough to also realise that before and after comparisons have serious limitations where we rarely know what actually works in an empirical sense.

In relation to the reactive approach of police, Professor Jerry Ratcliffe (Temple University), refers to it as 'school-boy' football – where everyone simply follows the football wherever it's kicked to on the field, it gets kicked again and off everyone follows in the next direction. Professor Gloria Laycock (University College London) refers to police simply as 'Geronimo', as we immediately jump in and solve problems.

# Editorial Foreword

So, what is the perception of researchers and academics by police? Some would suggest they are entirely focussed on analysis, data and publications. They are perceived to be too slow for our pace, take forever to deliver any results, everything is caveated. This is not entirely the researcher's fault. Police have traditionally been poor consumers and generators of research and historically police have not owned their science, nor developed a culture that values research.

Some of this might sound a little harsh, but I think it is a perception. However, it is not all doom and gloom. Evidence-based Policing is shifting that relationship. A kinder view would be that there is a growing movement towards EBP largely driven by individual academics rather than institutions.

In many respects EBP challenges policing conventions. But evidence doesn't occur in a vacuum. For EBP to be relevant to policing it needs to be considered within the authorising environment. Just because it works doesn't mean that policy makers are going to adopt it, or street level bureaucrats are going to embrace it. So, it's not all about the science and the evidence.

The approach adopted by the Evidence-based Policing Centre in New Zealand is based on the healthy tension between three disciplines; strategic intent, the best available evidence, and the experience of its people. This approach, combined with embedding EBP within agency structures, will guide the movement into the future and ultimately add to the professionalism of policing and most importantly the delivery of policing services.

I'll finish here but would like to take this opportunity to thank all our delegates, the organising committee, our partners, and sponsors, and most of all those who presented their evidence stories and spent time online with us. You can still access over 40 hours of conference material by visiting our [conference website](#). In the coming months we plan to share some of this content via our YouTube channel, so look out for this on our social media channels and website.

Yours in policing,  
Superintendent David Cowan  
President, ANZ SEBP

# Conversations In Custody: Shining Our Values In The Darkest Places

**Authored By:** Emma Burns

## Introduction

New Zealand often features in the international media. Most of the time this is positive publicity for our country. However, an article by Dr Ruth Gammon on the Massey University website states that “New Zealand continues to rate among the worst countries for (intimate partner violence). The links between exposure to family harm and negative trajectories across the lifespan are well established (Jirapramukpitak et al, 2011). Many of the “high end” offending behaviours have traditionally been viewed as intractable, and the offenders themselves as “resistant” to change. It is the author’s professional observation that a deficit-based mindset has a negative impact on how these individuals and families are generally viewed, which in turn adversely impacts strong engagement. Research suggests that “authenticity and genuine human relatedness” are identified by clients as the highly valued key components of therapy (Eugster & Wampold, 1996).

Research has shown that a workforce who adopts a strength-based approach experiences greater job satisfaction, perceived and evidenced practice effectiveness, and reduced burnout (Medina & Beyebach, 2014). One of the key studies linking the adoption of a strength-based (Solution Focused) mind-set and practice with a reduction in burnout was conducted with child protection workers in Tenerife (Medina & Beyebach, 2014).

It has been said that “conversation is the fundamental unit of change, if you change the conversation you change everything that surrounds it” (Jackson & Waldman 2010). However, there are many approaches to conversations, and as the physicist Thomas Kuhn correctly noted “the answers you get depend upon the questions you ask.”

The Solution Focused approach is a goal-directed collaborative approach to problem resolution. It was developed by a core group of practitioners at the Brief Family Therapy Centre in Milwaukee in the 1980s (de Shazer & Dolan, 2007). The roots of the approach lie in strategic family therapy, and it is heavily influenced by other theories such as social constructionism – the belief that all meaning is socially constructed - and Wittgenstein’s philosophy of language. It is an approach that utilises the process co-construction to articulate a person’s preferred future, and to then map a path towards this. The approach is predicated on several key tenets, including the following:

- 1) The focus is on solution-building rather than problem-solving.
- 2) No problem happens all the time – thus there are already exceptions that can be used to co-construct future solutions.
- 3) Effective conversations focus on the person’s preferred future, rather than on the history of problems or current difficulties.

There has been a significant amount of research into the effectiveness of the Solution Focused approach, including an extensive number of empirical studies, meta-analyses, systematic reviews, as well as combined effectiveness data from thousands of cases, and it is considered to be an evidence-based approach (Kim et al, 2019). This research clearly demonstrates the efficacy of Solution Focused approach across a wide range of personal difficulties, ranging from addictions and suicide prevention, through to high performance and criminal offending. The conclusion from scholarly work is that the Solution Focused approach is an effective approach to the treatment of a wide range of problems, with effect sizes similar to other evidenced-based approaches, but that these effects are found in fewer average sessions, and using an approach style that is more benign (Gingerich et al, 2012).

Many studies have been conducted in “real world” settings, meaning that the results are more generalisable. It should also be noted that the approach was found to be equally effective across social classes and cultures (Dierolf et al, 2020). Accordingly, Solution Focused is an evidenced-based approach which can be rapidly understood and utilized by “non-professionals” who may encounter persons experiencing difficulties.

Police are called to attend and resolve a wide range of incidents, requiring a wide repertoire of responses, and a diverse skillset. Among these skills is the ability to create effective engagement with members of the public who require assistance. Many of these incidents may be one-off conversations, others may result in repeated contact with a person or whanau. The mindset and tools that make up the Solution Focused approach are therefore a good fit for a policing context. It is the author’s experience that police who have learned this approach, report improved engagement and personal satisfaction in their work.

Furthermore, the principles underpinning the approach uphold the principles of Te Tiriti o Waitangi and core concepts in Te Ao Maori. For example, the collaborative nature of Solution Focused engagement and the supportive nature of the approach is consistent with Kotahitanga, where all voices and views are heard and respected. In the Solution Focused approach, a person or whanau retains control over decisions and selects desired outcomes that are personally meaningful, which aligns with the principle of Rangatiratanga (self-determination). Additionally, the strong focus on creating the future that is desired by the person or whanau speaks of the concept of potentiality or better futures, as expressed in Nga Moemoea. The spirit of the approach is founded on respect and seeks to uplift people and uphold their personal mana. This is in harmony with the principle of Manaakitanga. In addition, the approach upholds the four principles of procedural justice – voice, fairness, respect, and trust.

These findings suggest that Solution Focused is a good “fit” for working with offending, where there is high volume coupled with a need to reduce harm and increase safety in a relatively short period of time. There is a large body of research evidencing its effectiveness in reducing offending. In addition, the core principles of the approach are an excellent fit with both the New Zealand Police core values and Our Business.

Persons detained in custody are widely known to be at increased risk of self-harm and suicide. While this may be correct, it is also true that they are maximally motivated to change at this time. It is therefore evident that engagement at this time is critical to influence subsequent positive change. Accordingly, custody represents a “missed opportunity” for engagement. While police and partner agencies provide extensive support for victims of family harm, there existed a significant gap in providing appropriate support for offenders. Given that many couples and families desire to remain in the relationship, this represented an opportunity for enhancing existing processes within the family harm space.

## Methodology

This project consisted of two phases. In the initial phase, the focus was on maintaining a presence in the custody area. This involved the author working on a Sunday and being available to speak with individuals who are detained in custody for family harm related offending. These conversations were conducted utilising the Solution Focused approach, with the goal of assisting the person to begin to develop personalised ideas about what some initial steps towards a better future might entail. A secondary goal was the gathering of feedback from persons in custody around perceived gaps in service.

Phase two focused on the provision of ongoing support following release from police custody, and the development of stronger partnerships with Hawke’s Bay Regional Prison and Community Probations staff. Phase two will be described in a following section.

Approval was gained to conduct a three-week trial. In that time, conversations were offered to a total of eight persons. This represented 29% percent of total persons in custody. Demographic data is illustrated in Table 1.

**Table 1: Case Demographics**

Variable	Week One	Week Two	Week Three	Total
Number offered conversation	4	1	3	8
Number accepting conversation	4	1	3	8
Female	2 (50%)	0 (0%)	1 (33%)	3 (38%)
Aged 18 or under	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Aged 19-29	2 (50%)	0 (0%)	2 (67%)	4 (50%)
Aged 30-39	2 (50%)	1 (100%)	1 (33%)	4 (50%)
Aged 40-49	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Aged 50-59	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Aged 60 or above	0 (0%)	0 (0%)	0 (0%)	0 (0%)
NZ Maori	4 (100%)	0 (0%)	3 (100%)	7 (87%)
NZ European	0 (0%)	1 (100%)	0 (0%)	1 (13%)
Pacific Island	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Reasons for a person not being offered a conversation included being deemed at high risk of violence, being asleep at the time an approach was to be made, or the person being released or transferred before a conversation could take place. Conversations were only offered to those in custody for family harm related offending, as per the scope of the pilot. These are outlined in Table 2.

Table 2: Reason for Arrest

<i>Variable</i>	<i>Week One</i>	<i>Week Two</i>	<i>Week Three</i>	<i>Total</i>
Breach of bail	2 (50%)	0 (0%)	1 (33%)	3 (38%)
Contravenes protection order	1 (25%)	0 (0%)	1 (33%)	2 (25%)
Warrant to arrest	1 (25%)	0 (0%)	1 (33%)	2 (25%)
Fails to comply with PSO	0 (0%)	1 (25%)	0 (0%)	1 (12%)

Of those who were offered a conversation, 100% were receptive to the opportunity. This is in significant contrast with the 30-40% rate of acceptance found in academic literature on brief intervention in police custody. It is likely that the higher rate of acceptance in this pilot is due to the conversational approach utilised. Brief intervention is traditionally conducted with the goal of having the person engage in a conversation around a predetermined “problem” or “issue” e.g., substance abuse. This frequently results in resistance from the person, who may not wish to focus on that issue. In this project, a Solution Focused approach was used, meaning that the subject and direction of the conversation was very much in the hands of the person, and introduced simply as “the opportunity to have a chat about what might make a difference for you when you go home.”

While the hope was that there would be a rate of uptake at least comparable to published research, the response was far more positive than anticipated. Length of conversation ranged from 15 minutes to 40 minutes, with an average of 24 minutes. In all cases, there was genuine engagement, and a high degree of emotion expressed during the conversation.

These conversations were initiated by simply asking a person if they would like to “have a chat about what you would like to be different when you go home.” There was no necessity for the person to speak about the incident that had led to their arrest, or their history. It was clear that this was an unexpected approach for people, and some openly stated they were surprised that the author had not made a point of reading through their (at times extensive) history of offending. They were informed simply that this was a conversation about the future, not the past, as the past cannot be changed. A further reason for not conducting an extensive review of a person’s history was to ensure that the author would enter these conversations with an open mind, and not be clouded by any degree of pessimism in cases where a person may have up to 30 years of frequent and significant offending. However, as mentioned, any persons who may pose a safety risk were excluded from this pilot. These safety decisions were made by custody staff.

Despite there being no requirement for a person to “tell their story” most did share extensive detail about their life and difficulties. During these conversations, the power of the organisational values, particularly respect and empathy, was highlighted. All persons spoken to displayed significant emotion, with nearly all becoming tearful at times.

The Solution Focused approach, while giving space and time for a person to share their story of difficulty, then shifts in focus to what is wanted. In these conversations, questions were selected to elicit dialogue and rich description of the person’s preferred future. During this part of the conversation many issues were identified as barriers to the desired future state, and this led to dialogue around how to best navigate these challenges. Often this led to a person sharing information they had not shared with other agencies. For example, some spoke about previously undisclosed gang association, substance use, suicidal ideation, or past trauma.

Regarding issues or challenges reported by those spoken to, there were several themes that emerged. These included homelessness, suicidal ideation, access to children, physical or mental health concerns, lack of employment, and substance misuse. Of these themes, homelessness was highlighted as the most significant stressor by 62% of those spoken to. Lack of stable accommodation creates extreme difficulty for a person to begin to address other coexisting issues.

As indicated in Table 3, half of those spoken with identified four or more significant challenges. In conversation, the issue creating the most concern and stress for males was access to children. This and homelessness, appeared to be the two key drivers for individuals breaching their bail conditions i.e., to see their children or to have somewhere to sleep.

Table 3: Issues Identified

<i>Variable</i>	<i>Week One</i>	<i>Week Two</i>	<i>Week Three</i>	<i>Total</i>
Homelessness	3 (75%)	1 (100%)	1 (33%)	5 (62%)
Mental health	2 (50%)	0 (0%)	0 (0%)	2 (25%)
Suicidal ideation	1 (25%)	1 (100%)	1 (33%)	3 (38%)
Access to children	1 (25%)	1 (100%)	2 (67%)	4 (50%)
Lack of employment	3 (75%)	0 (0%)	1 (33%)	4 (50%)
Substance misuse	1 (25%)	1 (100%)	2 (50%)	4 (50%)
Physical health	2 (50%)	0 (0%)	0 (0%)	2 (25%)
One or less issue identified	0 (0%)	0 (0%)	1 (33%)	1 (12%)
Two issues identified	0 (%)	0 (0%)	1 (33%)	1 (12%)
Three issues identified	1 (25%)	0 (0%)	1 (33%)	2 (25%)
Four or more issues identified	3 (75%)	1 (100%)	0 (0%)	4 (50%)

Current problems and stressors notwithstanding, the conversations then shifted to encouraging the person to imagine the desire future state, either in the absence of the current challenges, or with increased ability to cope with these difficulties (recognising that not all problems can be removed). This shift is a fundamental aspect of the Solution Focused approach and is underpinned by studies in neuroscience showing that various types of questions differentially impact both the brain and consequent emotional and motivational states (Neipp et al 2016; Koorankot et al 2019). It is well evidenced that questions and conversations focusing on positive content (past successes, current coping and exceptions, and future hopes) lead to more positive emotional and motivational states that those that focus on negative content (problem history, current concerns and future worries) (Grant, 2012).

Many individuals spoke about finding being detained in custody to be psychologically distressing. Several people reported trying to sleep as much as possible, a desire to “get away from my head, and gain respite from constant thinking and ruminating. It should be noted that many persons in custody have a previous trauma history, and detention in custody could represent an additional traumatic experience.

In summary, the pilot clearly demonstrated that there is a strong desire from those detained in police custody to engage in supportive and future focused conversation. It reinforced that compassion, respect, and empathy are of paramount importance. Those spoken with often stated that this was their first experience of feeling that someone cared about them, and it was not uncommon for them to be surprised that the agreed follow up had taken place as stated. Many of those who participated in the trial voiced a sense of feeling let down by agencies, and a lack of trust in the system as a whole.

Engaging with those in police custody is a significant opportunity, and results from the initial pilot indicated that the work should continue. Accordingly, the project was extended and expanded to include some additional areas of focus.

Phase Two

At the conclusion of the pilot, further development was considered as below:

- 1) Continuation of the Sunday conversations with those in custody.
- 2) Intensive case management of those requesting follow up.
- 3) Increased collaboration with key stakeholders, particularly Corrections staff,

These goals were all achieved. Provision of more intensive case management led to some outstanding outcomes for those released into the community. For example, one young man was able to discontinue a significant (2g/day) methamphetamine habit, and another phoned the author to proudly announce that he had “handed in my patch” and turned away from gang membership.

Continued on next page



The project received strong interest from case managers at HB Regional Prison who expressed a desire to work more collaboratively with police.

Training in the Solution Focused approach was delivered to case managers at Hawke's Bay Regional Prison, as well as several staff in Community Probations. This training was well-received and led to increased collaborative practice between services. For example, if a person in custody was then remanded at Hawke's Bay Prison, the author would accompany the allocated prison case manager to the initial assessment, and continue to work collaboratively with prison staff around assessment, intervention, and support upon release. This support included therapeutic intervention for whanau if desired, as well as individual support that was a blend of Solution Focused and motivational interviewing approaches to change.

A key achievement of phase two was the creation of an opportunity for Corrections and Probations staff to continue the future focused conversations that had been started while in police custody, and also to create offender plans that are person-centred and more likely to result in increased safety, reduced offending, and better futures.

Summary

Engaging with those in police custody is a significant opportunity to begin a process towards positive change. However, for this to be successful and lead to positive change, it is critical that a suitable approach to the conversation is utilized. The Solution Focused approach has been demonstrated to result in high levels of engagement, and there is clear research evidence that a focus on approach goals is associated with increased motivation, confidence, and goal attainment (Braunstein & Grant, 2016). It is the author's view that this project would not have been as successful if a problem-focused approach had been utilised. Interventions focusing on avoidance goals have been shown to result in decreased motivation and perceived self-efficacy, poor engagement, and poorer outcomes. (Braunstein & Grant, 2016).

Moreover, this work is clearly aligned with the Prevention First operating model, and consistent with Our Values. It is the view of the author that the findings from this work could be translated into teachable skills across police and underpin a paradigm shift in how we engage with not only those in custody, but in general. This has particular relevance for the Resolutions Framework project, and the potential to lead not only to better outcomes for the community, but to increased job satisfaction and reduced burnout for police staff.

The Solution Focused approach is easily learned and applied in practice by those in helping professions, including police, who have demonstrated the ability to transfer the skills into their practice after a relatively brief educational session. Accordingly, there is considerable opportunity for this project to be scaled up across the organisation. This creates the potential not only for better outcomes for people and whanau, but for improved job satisfaction for staff, and increased trust and confidence in police from the community we serve.

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Rapid systematic reviews in policing: Using the Global Policing Database in a partnership between the University of Queensland and New Zealand Police

Authors: Elizabeth Eggins, Lorelei Hine & Lorraine Mazerolle

Introduction

One of the big contemporary challenges for police and policing is accessing and making sense of an ever-increasing abundance of studies on policing effectiveness. The New Zealand Evidence Based Policing Centre (NZEBPC) works in a central capacity within New Zealand Policing, positioning itself to ensure scientific evidence underpins every aspect of what police do to improve public safety across New Zealand. Our Global Policing Database (GPD) team at the University of Queensland became, therefore, one of the many partners that the NZEBPC works with in fostering a comprehensive and systematic approach to evidence informed practice.

The NZEBPC funded the UQ team to utilise the GPD to complete seven rapid reviews drawing on high-quality impact evaluation literature relating to topics within police and policing. This paper introduces rapid reviews as a hybrid alternative to systematic reviews and describes the search strategy and screening and coding methods used across the seven projects. Results from each review are summarised in seven separate articles in this issue of Police Science. The topic areas for the reviews, determined in collaboration with NZ Police, are as follows:

- Road policing
- Policing alcohol impaired driving
- Mental health co-response models
- Policing child sex offenders and offending
- Reducing alcohol-related harm in the night-time economy
- Policing responses for crime and social problems in Auckland
- Policing approaches prior to the point of arrest, charge, or prosecution

Methods used for the rapid reviews  
Rapid systematic reviews

The growth of evidence-based policy and practice in criminal justice has led to an increase in experimental research and systematic reviews as a means for identifying best practice. Randomised experiments and systematic reviews are considered “gold standard” methods in evidence-based policy and practice (Mazerolle & Bennett, 2011). Randomised experiments provide the most robust methods for establishing causality and the impact of an intervention (Blumstein, 2013). Systematic reviews of interventions, which may or may not include a meta-analysis, expand single study evidence by utilising a series of standardised methodological stages to capture and synthesise impact evaluations of interventions (Liberati et al., 2009; Peters et al., 2020). Systematic reviews provide concise and comprehensive summaries of high-quality research evidence and are valuable tools for policymakers and practitioners aiming to identify interventions that are most effective for particular problems and populations (Wilson & Tanner-Smith, 2014).

While systematic reviews are considered the highest quality evidence, they are time and labour-intensive. As a result, scholars have developed alternative review methodologies to allow for

expedited syntheses of empirical literature, including reviews of existing systematic reviews, overviews of reviews, scoping reviews, evidence maps, and rapid reviews (Arksey & O'Malley, 2005; Levac, Colquhoun, & O'Brien, 2010; Snilstveit et al., 2016; Peters et al., 2020).

The reviews we completed adopt a hybrid approach that draws on a range of review method frameworks. We aimed to provide a rapid and broad synthesis of the highest quality available evidence for the effectiveness of specific interventions. We determined the review topics in collaboration with NZ Police and developed Terms of Reference to guide the expectations and outcomes for each review. The initial stages of each review utilised a standard systematic review methodology, beginning with a systematic search of academic and grey literature (in this case, we utilised the GPD). All studies identified by the search were progressed through standardised sequential screening stages. At the point of inclusion, studies were categorised and narratively synthesised. We describe these rapid review methods used in our seven reviews in more detail below.

The Global Policing Database

For each review, we conducted a systematic search within the GPD , housed at UQ. The GPD is searchable database designed to capture all published and unpublished experimental and quasi-experimental evaluations of interventions relating to police or policing that have been conducted since 1950. Using innovative systematic review technologies developed at UQ, the GPD is being compiled by systematically searching, retrieving, and screening published and unpublished literature that reports on impact evaluations of interventions relating to police or policing from 1 January 1950. There are no restrictions on the type of policing technique, type of outcome measure or language of the research. A complex search string using a large number of search terms (free-text and controlled vocabulary) and several search fields (e.g., title, abstract, keywords) has been used to search more than 65 databases that collectively cover peer-reviewed and grey literature (see Higginson et al., 2015).

Within the GPD, an eligible intervention is defined as some kind of a strategy, technique, approach, activity, campaign, training, directive, or funding or organisational change that involves the police in some way (other agencies or organisations can also be involved). Police involvement is broadly defined as:

- Police initiation, development or leadership;
- Police staff or populations are recipients of the intervention or the intervention is related;
- Police practices are the focus or target of an intervention; or
- Police deliver or implement the intervention.

Search strategy

We developed a wide range of search terms to capture relevant literature for each review. As well as iteratively piloting terms, we sought input from police practitioners and researchers to ensure that they were not overly sensitive (capturing a high proportion of irrelevant research) or restrictive (not identifying sufficient relevant research). Because the systematic search underpinning the GPD utilises policing terms, the terms for each review focused on the topic area. Search terms were applied to the title and abstract fields in the GPD to return results potentially relevant to each review.

Screening and coding

All search results were exported from the GPD into SysReview, a Microsoft Access database designed for managing systematic reviews (Higginson & Neville, 2013). We created separate SysReview databases such that data was stored separately for each review. Prior to screening, all efforts were made to remove ineligible document types (e.g., book reviews) and duplicate records.

The studies identified by the searches progressed through standardised screening stages to ascertain whether they met the pre-specified inclusion criteria. These criteria were determined by our Terms of Reference and were unique to each review topic. They followed a PICOS (population, intervention, comparison, outcomes,

After screening, trained research staff coded each eligible study using standardised guidelines to inform the qualitative syntheses. For all reviews, data were extracted for each study on the following domains:

- Citation information (type of document, date, etc.);
- Geographical location;
- Research design (including comparison condition);
- Type of outcome measure(s) used to evaluate the intervention; and
- Type of intervention and intervention description (e.g. setting, focus, treatment components, intensity).

We extracted additional data for some of the reviews to answer the research questions per stakeholder requirements. These extra coding domains are described in each relevant review article. Once data were extracted, we organised the reviews by intervention type and/or outcome category and provided a narrative synthesis of results alongside summary tables.

Table 1. PICOS and timeframe inclusion criteria summary across the rapid reviews

	Road policing	Alcohol impaired driving	Mental health co-response models (MHCR)	Child sexual offending	Night-time economy (NTE)	Policing responses to social and crime problems in Auckland <sup>1</sup>	Policing prior to arrest, charge or prosecution
Participant(s)	• Police practitioners or organisations; • Organisations, businesses, or entities working in partnership with police; • Micro- or macro-places; • Citizens.	• Police practitioners or organisations; • Organisations, businesses, or entities working in partnership with police; • Micro- or macro-places; • Citizens.	• Police practitioners or organisations; • Individuals experiencing mental health issues; • Organisations, businesses, or entities working in partnership with police; • Micro- or macro-places.	• Police practitioners or organisations; • Organisations, businesses, or entities working in partnership with police; • Micro- or macro-places; • Citizens.	• Police practitioners or organisations; • Organisations, businesses, or entities working in partnership with police; • Micro- or macro-places; • Citizens; • Offenders.	• Police practitioners; • Micro- or macro-places; • Organisations, businesses, or entities working in partnership with police; • Offenders or those at risk of offending; • Victims of crime; • Citizens.	• Macro-places or micro-places; • Practitioners (police and partner organisations); • Citizens; • (Potential) offenders (convicted, charged, or arrested); • (Potential) victims.
Intervention(s)	Any policing intervention falling within the purview of road policing.	Any policing intervention aiming to address alcohol impaired driving.	Crisis Intervention Teams and/or MHCR models, provided there was an active collaboration, co-response, or partnership component.	Any policing intervention aiming to respond to child sex offenders or offending.	• Any policing intervention responding to, preventing, or reducing alcohol-related harm in the NTE • One-way door policies • Reducing hours of operation in establishments • Alcohol outlet density • Transport for patrons in the night-time economy	Any policing responses to: • Domestic and family violence • Homelessness • Mental illness • Youth crime and delinquency • Organised crime • Cybercrime • Financial crime	Policing activity prior to the point of arrest, charge or prosecution that is a direct response to a clearly defined social problem, suspicion of an offence, or an actual offence.
Comparison	For all reviews: no treatment, placebo, "business-as-usual", waitlist control, or an alternative treatment.						
Outcome(s)	• Road safety (e.g., fatalities, injuries) • Offence detection (e.g., speeding violations) • Social costs (e.g., traffic congestion) • Organisation effects for police personnel and organisations • Public trust, confidence, and legitimacy in the police	Any	• Criminal justice outcomes for mental ill individuals • Referral to other services • Demand or use of agency resources • Perceptions of police • Police and stakeholder perceptions of MHCR model	Any	Any	Any	• Offending, crime • Victimisation • Victim experience or satisfaction with the encounter • Perceptions of safety and police • Quality of police decision-making
Study type	Randomised control trials (RCTs) and reviews synthesised (quasi-experiments listed).	RCTs and reviews synthesised (quasi-experiments listed).	RCTs and reviews synthesised (quasi-experiments listed).	RCTs and reviews synthesised (quasi-experiments listed).	Prioritised RCTs and reviews for synthesis, but quasi-experiments synthesised where no RCTs or reviews existed.	Prioritised RCTs and reviews for synthesis, but quasi-experiments synthesised where no RCTs or reviews existed.	RCTs and reviews synthesised (quasi-experiments listed).
Timeframe	Search: Jan 2004 to Dec 2018. Synthesis: Jan 2010 to Dec 2018.	Search: Jan 2004 to Dec 2018. Synthesis: Jan 2010 to Dec 2018.	Search: Jan 2004 to Dec 2018. Synthesis: Jan 2010 to Dec 2018.	Search: Jan 2004 Dec 2018. Synthesis: Jan 2010 to Dec 2018.	Search and synthesis for GPD data: Jan 2010 to Dec 2018. Search and synthesis for additional sources: Jan 2010 to Oct 2020.	Search and synthesis: Jan 2009 to Dec 2018.	Search and synthesis: Jan 2009 to Dec 2018.

Summary

This article introduced the seven reviews of policing interventions funded, so far, by the NZEBPC and conducted by researchers at UQ. These reviews followed a rapid review methodology and involved standardised screening, coding, and narrative synthesis. Results of the seven reviews we prepared for the NZEBPC are discussed in separate articles published in this issue of Police Science.

The success of the UQ-NZ Police partnership was based on the three-step process: co-developing the Terms of Reference, producing the rapid reviews, and working with the NZEBPC to distil the key findings from these reviews into workable plans of action for police in NZ. The results presented in this issue of Police Science are, therefore, just the starting point for evidence-informed policy and practice. It is really the workable (and localised) plans of action that bring life to the evidence.

Acknowledgements

Development of the GPD was funded by the Australian Research Council and the College of Policing (United Kingdom). Funding to update the GPD has been provided by grants for systematic reviews using the GPD, from sources including Arnold Ventures, the Australian Institute of Criminology, and the Department of Homeland Security (United States). We also acknowledge over 150 volunteer student interns who have contributed over 7,000 hours of work on the GPD since 2015.

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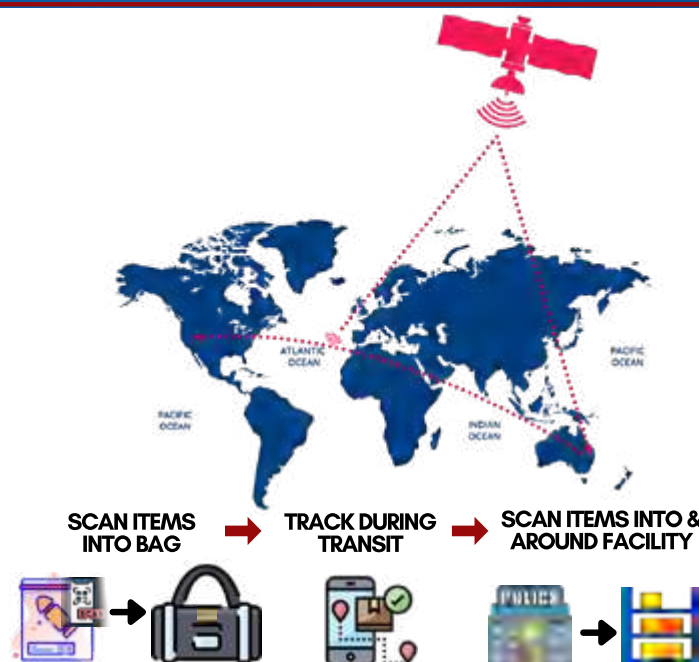


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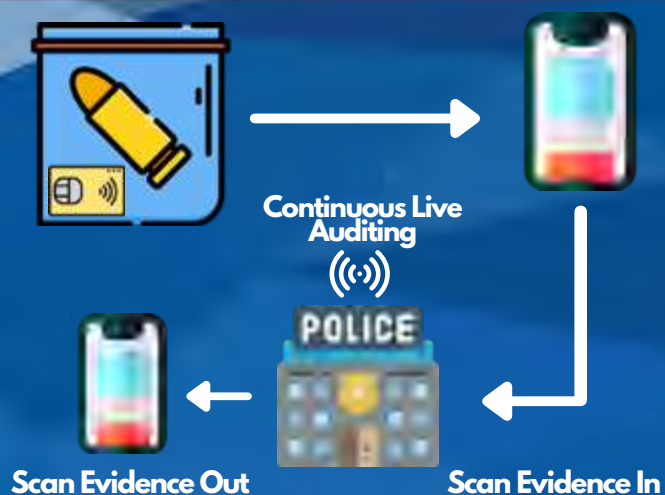
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# Policing approaches prior to the point of arrest, charge, or prosecution: A rapid review of the evaluation literature

Authored By: Lorelei Hine, Elizabeth Eggins, Lorraine Mazerolle, & James McEwan

## Introduction

The New Zealand Police Reframe Te Tarai Hou Strategy is underpinned by NZ's goal to be the safest country in the world, striving for fewer victimisations, less harm, and fewer people in the courts and prison system. Reframe Te Tarai Hou aims to improve frontline police practice and decision-making and the end-to-end case management process for better resolution outcomes and a safer NZ. During 2021, the NZ Police and NZ Evidence-Based Policing Centre worked with the University of Queensland Global Policing Database team to conduct a rapid evidence review of policing interventions to inform the development of a strategic resolutions policy framework and decision-making model for frontline police as part of Reframe Te Tarai Hou. The rapid review reporting in this article sought to provide policymakers and police practitioners with a rapid and systematic synthesis of policing interventions that could be used to inform the development of the Reframe Te Tarai Hou Strategy.

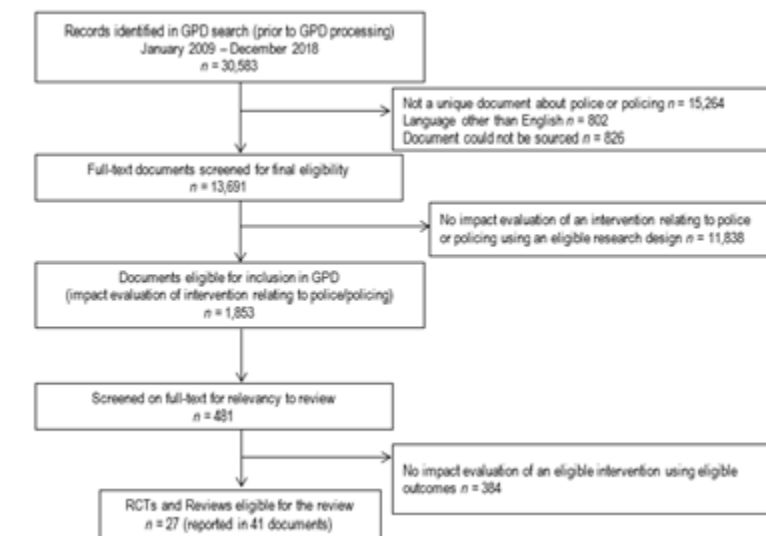
## Method

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022). The rapid review presented in this paper sought to answer the following question:

*What evidence is there for the effectiveness of interventions involving police activities prior to the point of arrest, charge, or prosecution that are a direct response to a clearly defined social problem, suspicion of an offence, or an actual offence with regard to the following outcomes: offending and crime; victimisation; victim experience or satisfaction with the encounter; perceptions of safety and perceptions of police; and quality of police decision-making?*

The PRISMA flowchart in Figure 1 (Moher et al., 2009) displays the attrition of identified records for the Global Policing Database (GPD) processing and screening specifically for this review. The search within the GPD identified 481 studies that were assessed for eligibility for this review. In addition to the standard coding fields described in Eggins et al. (2022), we coded each study for legislative or policy contexts underpinning the intervention and implementation challenges or process evaluations around internal police information dissemination and/or management of the intervention.

Figure 1: PRISMA flow diagram



## Results

We identified 27 studies eligible for this review (randomised control trials (RCTs) = 22, and reviews = 5). Interventions were categorised into six groupings.

### Proactive procedural justice encounters

We identified seven RCTs of proactive procedural justice (PJ) interventions. The studies focused on the impact of proactive use of PJ in traffic encounters on outcomes relating to perceptions of the police, with a dearth of evidence regarding other outcomes such as crime and victimisation. Results suggested that police use of PJ prior to arrest, charge, or prosecution shows promising results for improving perceptions of police during proactive police-citizen encounters, although evidence centres largely on traffic stops (Mazerolle et al., 2012; MacQueen & Bradford, 2015; Sahin et al., 2017; McLean, 2018; Maguire et al., 2016; Lowrey et al., 2016; Lowrey-Kinberg, 2017).

### Strategies targeting social groups

This review located ten reviews and RCTs falling broadly within police diversion strategies targeting the following social groups: youth offenders, domestic and family violence offenders, and people experiencing mental illness.

A 2018 Campbell Collaboration systematic review found that police use of diversion provides some promising results, particularly for diverting youth, which can lead to less future offending (Wilson, Brennan, & Olaghere, 2018).

The included studies showed mixed evidence regarding policing interventions pertaining to domestic and family violence (Brame et al., 2015; Clodfelter, 2015). Proactive enforcement of orders appears to improve victims' perceptions of police but may not reduce recidivism



**headspace** is the National Youth Mental Health Foundation, providing early intervention mental health services to 12-25 year-olds. By ensuring help is accessed in early stages of young people's lives and providing a holistic model of support, **headspace** provides a safe space where they can get their mental health and wellbeing back on track.

**headspace** services cover four core areas: mental health, physical health (including sexual health), work and study support and alcohol and other drug services. Services are confidential, youth friendly and free or low cost. Young people and their families can access services face-to-face at one of 98 **headspace** centres across which can be located Australia at [www.headspace.org.au](http://www.headspace.org.au), or via **eheadspace** – a national online and telephone counselling service at [www.eheadspace.org.au](http://www.eheadspace.org.au).

Over the past 10 years, **headspace** has proudly provided over 1.8 million services through centres, online and over the phone, helping over 310,000 young people across Australia. **headspace** wants to ensure young people aged 12-25 have access to youth friendly mental health services, no matter where they live.

Alongside **headspace** centre, online and telephone support, specialised services are provided in the following areas:

- **headspace** School Support – a suicide postvention program, which assists Australian school communities to prepare for, respond to and recover from a suicide.
- Digital Work and Study Service – a dedicated team assisting young people aged 15-24 in education and work options.
- **headspace** Youth Early Psychosis Program – a program focusing on early intervention, aiming to improve the lives of young people, and their families, who are affected by psychosis.

### HEADSPACE DONATIONS AND FUNDRAISING

There are many ways to support **headspace** and the work carried out in providing mental health and wellbeing support, information and services to young people and their families across Australia. **headspace** has helped hundreds of thousands of young people get their lives back on track and your support will assist us with our work.

Any donation generously provided to **headspace** goes towards community engagement and awareness, which can be specifically given towards a local centre or to National Office.

Donations to **headspace** National Office, ensures the promotion of the importance of seeking help, to break down stigma associated with mental health issues and to make sure every young person across Australia, as well as their friends and family, knows there is help available.

You can find out more about donations and fundraising through the 'Get Involved' page at [www.headspace.org.au](http://www.headspace.org.au)

### SEEKING HELP

Getting support can help a young person to keep on track at school, study or work, as well as personal and family relationships. The sooner help is received, the sooner things can begin to improve.

**headspace** can help any young person aged 12-25 years-old, a family member or friend wanting to seek information on youth mental health.

**These are just some of the reasons someone may seek help from headspace:**

- If someone is feeling down, stressed or constantly worrying
- If someone doesn't feel like themselves anymore
- If someone isn't coping with school/uni/work or finding it difficult to concentrate
- If someone is feeling sick or worried about their health on alcohol or other drug use
- If someone has questions about, or wants to cut down identity or relationships
- If someone wants to talk about sexuality, gender
- If someone is having difficulties with family or friends
- If someone is concerned about sexual health or wants information about contraception
- If someone is being bullied, hurt or harassed
- If someone is worried about work or study or having money trouble

### DID YOU KNOW?

One in four young people have experienced a mental health issue in the past 12 months – a higher prevalence than all other age groups. Alarmingly, suicide is the leading cause of death of young people, accounting for one third of all deaths.

Adolescence and early adulthood is a critical time in a person's life, with 75 per cent of mental health disorders emerging before the age of 25.



and different types of sanctions (e.g., arrest, citation, or police advice) seem to vary in their impact on arrests.

We found some promising evidence for police using mental health diversion approaches or training, which tend to reduce arrests (Taheri, 2016; Bonkiewicz et al., 2014; Compton et al., 2014), improve officer de-escalation skills (Duckett, 2017; Hacker, 2017), and improve referrals to mental health services (Compton et al., 2014; Watson et al., 2010; Dewa et al., 2018).

*Training for police decision-making*

Five RCTs were identified as evaluations of police training in relation to decision-making. The contents and goals of the training programs were diverse, covering critical incident proficiency and skills in investigation, communication, procedural justice, and de-escalation. Overall, the included studies have positive effects for decision-making and crisis management skill (Rosenbaum & Lawrence, 2017; Duckett, 2017; Hacker, 2017; Andersen & Gustafsberg, 2016), however none provided evidence of effectiveness on arrest rates, crime rates, or victim safety.

*Police discretionary activity during patrols*

Our findings favour discretionary police activity that use ‘soft’ policing approaches (e.g., being unarmed) at crime hot spots (Rosenfeld et al., 2014; Gill et al, 2018; Ariel et al., 2016). However, the studies only addressed crime and none of the other eligible outcomes (e.g., perceptions of police).

*Dissemination of information and resources by police*

Information dissemination tactics (to the public) had mixed evidence for effectiveness. Information dissemination through labelling illegally disposed garbage to inform citizens of correct disposal had no effect on disposal rates (Dur & Vollaard, 2017). Yet, crime prevention advice distributed by police via newsletters, leaflets, and resource packages seems to offer some promise for reducing motor vehicle theft and burglaries, and improving perceptions of police (Roach et al., 2017; Wunsch & Hohl, 2009; Johnson et al., 2017).

*Curfew checks with a diversion component*

We found little evidence regarding curfew checks. The results of the single eligible study suggested that hotspots assigned to receive a prevention-focused curfew intervention with diversion did not show a statistically detectable difference in property crime rates compared to hotspots that did not receive the intervention (Santos & Santos, 2016).

**Summary**

Our review identified no evaluation of an overarching decision-making policy framework and there was a general lack of insight provided around the context for strategic decision making. This is a significant limitation in the reporting of policing evaluations and has implications for portability of strategic frameworks across different jurisdictions and legislative systems. Additionally, the included studies reported very little information about how interventions were implemented within organisations (e.g., techniques for internal dissemination or

implementation barriers/facilitators). Nevertheless, some themes could be extracted from the extant literature. First, we identified the importance of gaining and maintaining buy-in across the organisation, from senior management as well as officers ‘on the ground.’ Second, the role of building organisational understanding of the intervention by disseminating information in multiple formats (e.g., verbal briefings, training, written summaries) is critical for success. Third, ensuring treatment fidelity through monitoring officer compliance with specified intervention protocols help to keep strategic approaches on track. Overall, the review provided general guidance as to what might be useful in helping to guide decision-making prior to the point of arrest, charge, or prosecution yet fell short in providing evidence for best practice in formulating strategic policy making frameworks.

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# Policing alcohol-impaired driving: A rapid review of the evaluation literature

**Authored By:** Elizabeth Eggins, Lorelei Hine, Lorraine Mazerolle

## Introduction

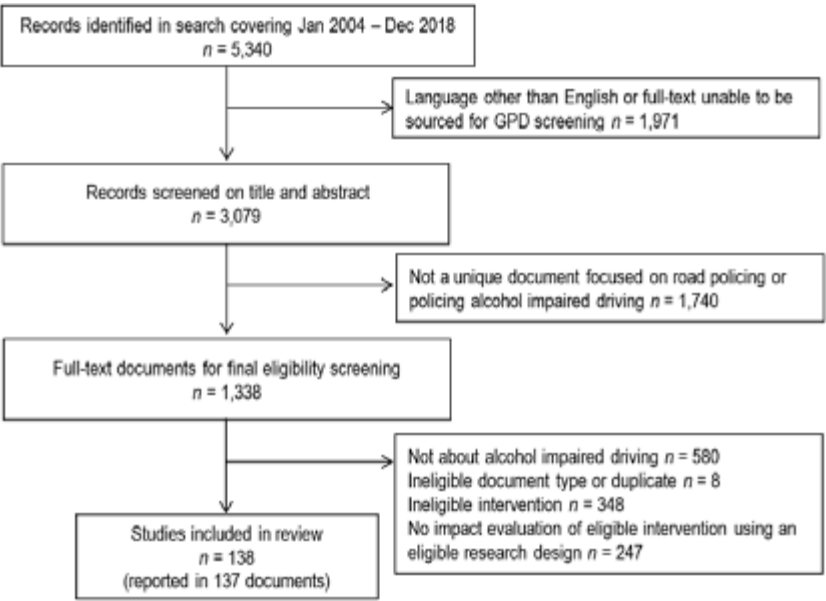
This article summarises the results of a rapid systematic review funded by The New Zealand Evidence Based Policing Centre (NZEBO) and conducted by the Global Policing Database (GPD) team at the University of Queensland. The rapid review considers the evaluation evidence for studies that examine the impact of a any police intervention for addressing alcohol impaired driving, with no limit on the outcomes used to evaluate the intervention.

## Methods

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022). The rapid review presented in this paper sought to synthesise the evaluation evidence for studies that examine the impact of a any police intervention for addressing alcohol impaired driving, with no limit on the outcomes used to evaluate the intervention.

The results of the eligibility screening and coding phases are presented in the PRISMA flowchart in Figure 1 (Moher et al., 2009). The systematic search identified 5,340 records within the corpus of eligible GPD documents. Of 3,079 available records, 1,338 were screened as potentially being about road policing or policing impaired driving, based on their title and abstract. The full-text of these eligible titles and abstracts published 2010–2018 were screened for final eligibility, and 137 documents (representing 138 studies) were deemed to meet full inclusion criteria for the review. of these 138 studies, 12 were randomised controlled trials (RCTs), 9 were reviews with or without meta-analyses, and 117 were robust quasi-experiments. We prioritised the RCTs and reviews for the written syntheses.

Figure 1: PRISMA flow diagram



## Results

The 138 eligible studies were predominantly conducted in the United States, however, a range of developing and developed countries were also represented in the corpus of studies. Almost a quarter of the studies were impact evaluations of tests of technologies for detecting alcohol intoxication in the context of policing. The remaining studies fell into a range of other intervention categories, including:

- Legislative or regulatory changes;
- Partnership policing (e.g., with licenced establishments);
- Sobriety checkpoints and randomised breath test operations;
- Varying the level of police presence or enforcement activities;
- Problem-oriented policing approaches to target policing alcohol impaired driving; and
- Integrating procedurally just communication or interaction style into DUI policing.

The following sections summarise the results of this review.

### Tests or Technologies for Policing Alcohol Impaired Driving

A total of 29 studies reported on impact evaluations of policing interventions that involved tests or technologies for detecting alcohol impaired driving. One third of the studies were conducted in the United States (n = 9), with the remaining studies being conducted across a range of developed and developing countries. Outcomes used to assess the effectiveness of interventions included biological measures of alcohol intoxication (e.g., blood alcohol concentration (BAC) or level of alcohol on the breath or in oral fluid) and behavioural indicators of intoxication (e.g., gait). Key results from the RCTs (n = 4) and single systematic review for this type of intervention are:

- Passive Alcohol Sensors (PAS) are likely to assist officers to make better decisions about arrests for driving under the influence of alcohol (Fell et al., 2008)
- Simplified clinical tests of impairment are efficacious and should be used within 1.5 hours following drug consumption, but not after 7 hours (Hjelmeland et al., 2015).
- Road police officers need to have knowledge of toxicology in alcohol absorption in order to optimise their field assessments of intoxication based on behavioural measures (Perry et al., 2017).

### Other Interventions for Preventing or Controlling Alcohol Impaired Driving

A total of 109 studies (reported in 108 documents) examined the impact of policing interventions that aimed to prevent or control alcohol impaired driving. The majority of the studies were conducted in the United States (n = 62, 56.88%), with the remaining studies being conducted across a range of developed and developing countries. Key results from the RCTs (n = 8) and reviews of eligible interventions (n = 8) are:

- Procedural justice elements applied to RBT stops can influence both police and driver perceptions of the efficacy and motives of police activities and the nature of the encounter (Mazerolle et al., 2012).
- Regardless of whether or not an individual is arrested, police traffic stops can reduce the likelihood of future alcohol impaired driving behaviours. Increasing police patrols has a generally beneficial impact on traffic fatalities and alcohol-related crashes (Leedy, 2007).
- DUI checkpoints reduce alcohol-involved crashes by a minimum of 17 per cent, and general crashes were reduced by 10-15 per cent (Erke et al., 2009).
- Police interventions targeting speeding and driving while impaired found reductions between 20 and 36 percent in accidents resulting in injury. Automated systems such as red light cameras and speed cameras were least effective (Blais & Dupont, 2005).
- Police-enacted harm reduction interventions were found to reduce the likelihood of road traffic accidents but this effect is likely to be limited to night time accidents only (Stockings et al., 2018).
- Survey results show that the strongest deterrents to driving under the influence of alcohol were intensified enforcement, severe jail penalties and instant, prolonged license suspension. Fine penalties, delayed punitive responses and legal blood alcohol concentration parameters demonstrated negligible effects (Yao, Johnson & Beck, 2014).

- Interventions involving harsher penalties were found to reduce general road traffic injuries in all road users and road traffic head injuries in motorcyclists, however stringent speed control legislation with severe penalties for speeding was not found to reduce the likelihood of road traffic accidents (Staton et al., 2016).

## Summary

The harms caused by road trauma involving alcohol are enormous. Police have a major role in community wide efforts to reduce serious injuries and death caused by alcohol impaired driving. This review provides an understanding of the impact of policing interventions to address alcohol impaired driving. Overall, the results point to the importance of police face-to-face interventions -- such as random breath testing – in helping to both educate and change driver behaviours. Automated interventions such as speed cameras and red light cameras lack the opportunity for police to educate drivers about road trauma harms and are, therefore, less effective than the face-to-face interventions. Training police in procedural justice

dialogue and knowledge of toxicology in alcohol absorption during traffic operations is likely to further the positive effects of face-to-face policing interventions to reduce road trauma.

## Acknowledgements

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# Road policing: A rapid review of the evaluation literature

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## Introduction

Many police agencies across the world have centralized Road Policing Commands with specialist road policing police. Some police agencies use a more decentralized policing system and deploy road policing at a more localized level. New Zealand Police were interested in understanding what type of organizational model might work best for road policing. This article summarises the results of a rapid systematic review funded by The New Zealand Evidence Based Policing Centre (NZEBO) and conducted by the Global Policing Database (GPD) team at the University of Queensland. The rapid review considers the evaluation evidence for studies that examine the impact of road policing interventions in the context of differing levels of jurisdictional centralisation utilised by the police organisation implementing the road policing intervention

## Methods

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022). This review synthesised studies that examined the impact of a road policing intervention on:

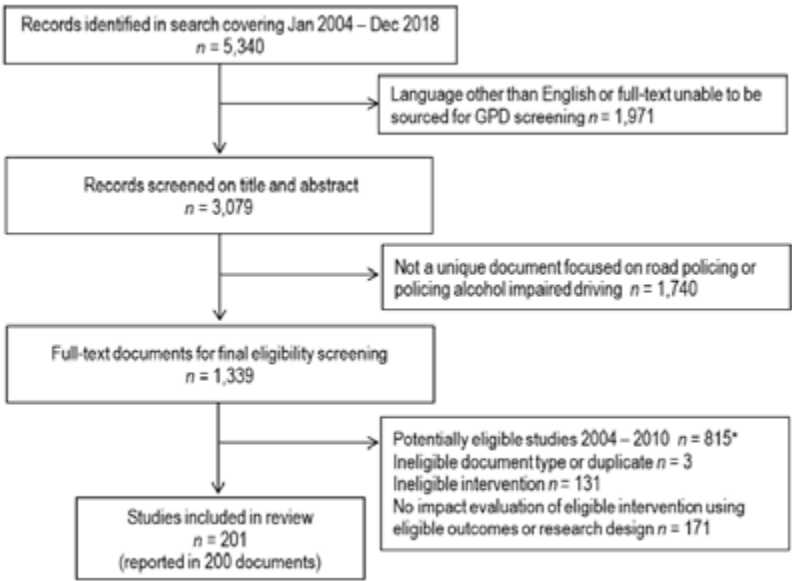
- Road safety (e.g., injuries)
- Offence detection (e.g., speeding violations)
- Social costs (e.g., traffic congestion)
- Organisation effects for police personnel and organisations (including costs)
- Public trust, confidence, and legitimacy in the police

In addition to the standard coding domains described in Eggins et al. (2022), we coded studies on a domain for level of organisational centralisation or decentralisation of police operating models for the jurisdictions where the intervention was implemented. Centralised deployment was where a road policing command provided services across a whole jurisdiction. Decentralized deployment was where road policing was embedded to a community or local area command. We used the data reported about the geographical location of the intervention to research police organisational structure in that specific location . If there were multiple locations (e.g., countries) within a study, it was coded as having 'mixed' centralisation, and if there was insufficient detail to determine the exact location (e.g., no location data reported, or only country reported), the study was coded as having 'unknown' centralisation. Eligible studies were categorised by centralisation model; that is: fully/partially centralised; decentralised; or mixed/unknown centralisation.

The results of the screening are presented in the PRISMA flowchart in Figure 1 (Moher et al., 2009). The systematic search identified 5,340

citations within the corpus of eligible GPD documents. Of these, 200 documents (representing 201 studies) were deemed to meet our inclusion criteria. The final corpus was comprised of 26 randomised controlled trials (RCTs, reported in 25 documents), 10 reviews with or without meta-analyses, and 165 robust quasi-experiments.

Figure 1: PRISMA flow diagram



Note: \*These potentially eligible studies were provided in a supplementary EndNote library.

## Results

The 201 eligible studies were predominantly conducted in the United States, however, a range of developing and developed countries were also represented. The most common outcome measure used to evaluate the road policing interventions was offending and/or offence detection, followed by: (1) safety; (2) trust, confidence or legitimacy; (3) police organisational issues or costs; and (4) social costs. We provide an overarching synthesis of eligible studies at each level of centralisation as well as a summary of results from the RCTs and reviews.

### Fully or partially centralised jurisdictions

A total of 62 studies reported on impact evaluations of road policing interventions in partially or fully centralised jurisdictions or police organisations. Almost one quarter of the were conducted in the United States (n = 14, 22.59%). The most common outcomes used to evaluate road policing interventions were road-based offending and/or offence detection or safety. Interventions fell broadly into the following categories:

- Capturing and recording traffic data or data linkage

- Legislative or regulatory changes
- Varying levels of police presence or enforcement activities
- Methods for detecting and enforcing drug and/or alcohol impaired driving
- Partnership and community-based road policing
- Integrating procedurally just communication into road policing activities
- Technologies for monitoring or enforcing speed and enhancing road policing

The five RCTs conducted in fully or partially centralised jurisdictions provided evidence for two outcome categories. We found no RCTs conducted in centralised jurisdictions that used police operational factors or costs; social costs; or safety outcomes to measure the effectiveness of the intervention.

**Road-based offending (n = 3):** These studies tested different technologies with fairly positive results. Notably, Marciano, Setter and Norman (2015) concluded that the combination of overt speed cameras and immediate fine notices is a potentially optimal strategy to encourage adherence to speed limits. Hjelmeland et al. (2015) found some support for the efficacy of clinical impairment tests for drugs and alcohol 1.5 hours following drug consumption, but not after 7 hours.

**Trust, confidence or legitimacy (n = 2):** Both studies varied police procedural justice interaction styles during traffic stops and showed a promising effect of procedural justice on participant perceptions of police (Sahin et al., 2017; Johnson et al., 2017).

### Decentralised jurisdictions

Eighty-five studies examined the impact of road policing interventions that were implemented in fully decentralised jurisdictions or police organisations. The majority were conducted in the United States (n = 60, 70.59%). The most common outcomes were road-based offending and/or offence detection or safety, followed by trust confidence, or legitimacy; police operational factors or costs; and social costs. We found a range of road policing interventions, including:

- Hot spots policing
- Legislative or regulatory changes
- Specialised traffic enforcement units
- Varying levels of police presence or enforcement activities
- Methods for detecting and enforcing drug and/or alcohol impaired driving
- Integrating procedurally just communication into road policing activities
- Technologies for monitoring or enforcing speed and enhancing road policing

We found no RCTs conducted in decentralised jurisdictions or police organisations that used safety; police operational factors or costs; or social costs as outcomes. Results of the 13 RCTs conducted in decentralised jurisdictions provided evidence for two outcome categories.

**Road-based offending (n = 3):** Results were mixed. One study disseminated text messages containing road safety information to citizens and showed that, compared with generic messages, personalised messages could result in 14% less road violations (Lu, Zhang, & Perloff, 2016). Conversely, another study found that technology such as licence plate readers did not enhance the effect of a proactive hot spots patrolling approach on crime (Koper, Lum, & Hibdon, 2015).

**Trust, confidence or legitimacy (n = 10):** All studies evaluated the impact of police procedurally just dialogue or interaction styles with citizens in traffic-related contexts. One study (the Queensland Community Engagement Trial, QCET) was a field trial, and the remainder were lab-based vignette studies. Results suggest procedural justice in traffic-related contexts can improve citizen trust and confidence in police as well as cooperation with police (Murphy et al., 2014; Lowrey, Maguire, & Bennett, 2016; Solomon, 2018; Reisig, Mays, & Telep, 2018), although some evidence for this intervention is more ambiguous (e.g., Lowrey-Kinberg, 2018; Lowrey et al., 2016).

### Jurisdictions with unknown or mixed centralisation

Fifty-four studies examined the impact of road policing interventions where the exact level of centralisation could not be determined or where there were multiple jurisdictions. The studies were predominantly conducted in the United States, without sufficient specification of the location to determine centralisation (n = 27, 50%), with the remainder of the studies either capturing multiple countries (n = 12), or reporting insufficient information to determine centralisation (n = 14). The most common outcomes used were road-based offending and/or offence detection or safety, followed by police operational factors or costs; trust confidence, or legitimacy; and social costs. We found a wide range of interventions:

- Hot spots policing
- Legislative or regulatory changes
- Partnership or community policing approaches
- Variations to police organisational structures or policies
- Methods for detecting and enforcing drug and/or alcohol impaired driving
- Technologies for monitoring or enforcing speed and enhancing road policing

Results of the 10 reviews and 8 RCTs provided evidence for three outcome categories.

**Road-based offending (n = 7):** The studies provide some support for the efficacy of enforcement and punitive legal consequences (e.g., intensified enforcement, license suspension, etc.; Yao, Johnson, & Beck, 2014). Two studies examining technology for detecting blood alcohol (Fiorentino, 2018) and cannabis (Swortwood et al., 2017)



**Trust, confidence or legitimacy (n = 4):** One field study replicated QCET but showed less promising results, highlighting the potential difficulties with translating policing approaches to different cultural contexts (MacQueen & Bradford, 2015). Lab-based studies examining procedurally just dialogue with citizens in traffic-related contexts, however, seemed to improve self-reported confidence, trust and compliance with police (Maguire, Lowrey, & Johnson, 2017; Roche, 2018; Lowrey-Kinberg, 2018).

**Road safety (n = 6):** These reviews reported promising evidence for fixed speed and section control cameras (Hoye et al., 2014; Staton et al., 2016) and road traffic injury prevention initiatives such as harsher penalties (Staton et al., 2016), but less clear evidence for whole-of-community interventions for alcohol and drug harms (Stockings et al., 2018). Rahimi et al. (2016) suggested that road safety indicators can be heavily influenced by context-specific factors such as the number of registered vehicles and drivers. Consequently, they advocated for studies which utilise sensitive indicators that can account for geographic variations to ascertain robust measures of traffic policy performance.

This review provided a preliminary understanding of the impact of jurisdictional centralisation versus decentralisation of road policing on the outcomes of road policing interventions including road trauma and traffic injuries. In many instances, it was difficult to ascertain the level of jurisdictional centralisation due to the lack of information reported on the intervention location and/or lack of information reported on police institutional websites about their organisational structures. Nevertheless, it appears that community context is an important consideration for road policing. We conclude that centralised Road Policing commands are most likely to have positive results when interventions are crafted to local conditions. Conversely, decentralized road policing interventions are most likely to work best with opportunities for police to have access to high quality training, technologies and support from centralized analysis teams to pinpoint high harm, high risk deployment locations.

This article summarises findings from a report prepared for the New Zealand Evidence-Based Policing Research Centre in July 2019. This review was funded by research grant awarded to Lorraine Mazerolle, Sarah Bennett, and Elizabeth Eggins via the New Zealand Evidence-Based Policing Research Centre. The authors gratefully acknowledge the research assistance provided by [RAs, to fill in once authorship is determined].

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# Policing responses to crime and social problems in Auckland: A rapid review of the evaluation literature

**Author:** Elizabeth Eggins, Lorelei Hine, & Lorraine Mazerolle

## Introduction

The New Zealand Police and New Zealand Evidence-Based Policing Centre worked with the Global Policing Database (GPD) team at the University of Queensland to conduct a rapid evidence review of policing interventions pertaining to seven social and crime problems faced by Tamaki Makauru (the Auckland region). The intent of the review was to enable NZ Police to use the best evidence available to inform their strategy for the future of policing in Auckland.

A number of social and geographical characteristics make Tamaki Makauru unique, including:

- NZ's largest airport and seaport
- More high-rise buildings than elsewhere in the country
- More potential targets of terrorism than anywhere else in NZ
- Challenges with congestion
- A faster growing and more diverse population than other NZ regions, with a significant and increasing overseas-born population

Additionally, the Auckland region faces seven social issues and crime problems that impact police practice: continuing challenges with (1) homelessness, (2) family harm, and (3) mental health, (4) an established based for organised crime, and more (5) cybercrime, (6) financial crime, and (7) youth offending than anywhere else in NZ.

## Methods

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022). For this project, NZ Police sought answers to the following research questions:

1. What approaches have other policing services implemented and evaluated in response to the aforementioned social and crime challenges?
2. For those policing approaches that have been rigorously evaluated, what are the:
  - a. key characteristics of the approach (including the role of the police within the intervention and how resources/capabilities are prioritised)?; and
  - b. geographical and social characteristics of the jurisdiction, and how could these impact the implementation and effectiveness of the approach?

In answering these questions, NZ Police wanted to focus on synthesising the evidence for jurisdictions that share similar characteristics to NZ and Auckland. That is, former British colonies with Westminster political systems, with similar levels of wealth demographic composition. Therefore, the review only included studies implemented in NZ, Japan, the United Kingdom, Canada, Australia, Israel, Singapore, Ireland, and Kuwait .

Studies were examined using the EMMIE framework (Johnson et al., 2015) to explore: (1) mechanisms underpinning intervention effectiveness; (2) moderators of intervention effects; (3) implementation considerations; and (4) economic considerations.

The following information was coded and synthesised:

- Resources required for implementation
- Possible barriers or facilitators for implementation
- Police organisational structure for the setting where the intervention was evaluated
- Nature of the problem and regulatory frameworks for where the intervention was evaluated

A search was conducted in the GPD for each of the seven social and crime problems, followed by systematic screening to identify the eligible studies. Combined, the seven searches identified 75,429 records. After screening, 25 studies were eligible across the seven challenges . This level of attrition is common in systematic reviews of evaluation evidence in the crime and justice arena, reflecting the dearth of high-quality evaluations in the field.

## Results

In total, we located four studies focused on domestic and family violence (DFV), two on homelessness, 12 for mental health, three on youth crime and delinquency, two focused on organised crime, two on financial crime, and none for cybercrime. In the following sections, we synthesise the findings for each crime problem pertaining to effectiveness and operational, setting, and implementation considerations.

### Domestic and family violence

Conditional cautioning with an integrated perpetrator workshop using a motivational interviewing framework can be effective for reducing crime harm and recidivism (Strang et al., 2017). Police enforcement of protection orders is associated with lowered odds of DFV re-victimisation, yet the effect on threatened violence is less clear (Dowling et al., 2018).

Second responder models may increase the level of satisfaction with police, increase the level of DFV reporting to police, facilitate family improvements, increase quality of life, reduce the likelihood of victims retracting statements, decrease victim-perpetrator contact and decrease the severity of repeat DFV incidents (Davis et al., 2008; Koppensteiner et al., 2017). However, second responder models may not substantially reduce repeat DFV incidences beyond business-as-usual approaches. These models may also increase psychosocial stress and may reduce the likelihood of finalising formal witness statements. These latter counterintuitive findings may be due to (a) victims taking action to reduce their DFV risk, which can be associated with high stress (e.g., separation from partner, legal proceedings); and (b) the length of time that lapses between initial contact with victims and subsequent contacts to finalise witness statements.

We found that implementation and enforcement of protection orders by police may be (a) facilitated by clear policies for police and level of support for victims with order applications; and (b) impeded by administrative processes which may deter victim engagement, faulty DFV perceptions held by responding officers, and difficulty meeting evidentiary standards to enforce order breaches.

### Homelessness



Police arrest for non-violent offences increases the odds of future criminal justice contact for homeless individuals, even when social supports are in place to reduce their vulnerability (Roy et al., 2016). Homeless individuals tend to view police less favourably when they use handcuffs versus no handcuffs (Kremedine & Silverstone, 2016).

Both studies were retrospective analyses of existing police approaches and provided no rigorous data about operational or implementation considerations.

### Mental illness

Taking witnesses diagnosed with Autism Spectrum Disorder (ASD) to the context or scene where the evidence was encoded may increase the amount and accuracy of memory recall to the level of neurotypical individuals (Maras & Bowler, 2012; Maras et al., 2014). However, adapting interview protocols to remove social components for individuals with ASD may not improve the amount and accuracy of information recalled unless there is a drawing component.

Reviews of Crisis Intervention Team (CIT) and Mental Health Co-Responder (MHCR) models suggest that these partnership

approaches may be effective for responding to individuals with mental illness (Taheri, 2016; Eggins et al., 2020). However, many studies in the included reviews were of low quality or conducted in the United States and may not be reliable for ascertaining effectiveness or generalisable to the Auckland context.

Specialised training may not reduce incident-level demand arising from individuals with mental illness but may improve the way police record data about individuals they have contact with who display symptoms of mental illness (Scantlebury et al., 2017).

Specialised interviewing for individuals with ASD requires specialised training, yet there is no information about the cost-benefits of this approach. Only limited information is known about factors that might moderate the effectiveness of the interview approach (e.g., characteristics of the individual's ASD presentation) or mechanism that might underpin the interview approach (e.g., context reinstatement).

Moderators of CIT and MHCR models may include officer and patient experiential and demographic characteristics. These interventions may be facilitated by effective multiagency collaboration (e.g., mutual agreements, established legal foundations) as well as police understanding of mental illness; inversely, these models may be hindered by practitioner lack of awareness of referral pathways and operational difficulties (e.g., referral services may be understaffed or not operate 24/7).

### Youth crime and delinquency

Family Group Conferencing (FGC), using a third party policing framework, may be effective for increasing parental awareness of legal responsibility and student willingness to attend school; and decreasing offending behaviour, self-reported antisocial behaviour, and self-reported impulsivity (Bennett et al., 2018; Cardwell et al., 2019; Mazerolle et al., 2017a, 2017b; Mazerolle et al., 2019).

Comprehension aids for and structure of Youth Waiver Forms (e.g., participant checking their understanding of the form during or after reading it, and varied levels of complexity of the written content) may increase youth understanding and recall of their rights when being cautioned or arrested by police (Eastwood et al., 2015, 2016).

Formal justice system processing, compared with diversion, is associated with greater levels of youth crime (Petrosino et al., 2014).

Facilitators for FGC include joint implementation, mutual goals, and continued commitment by schools and partners. This intervention model may be impacted by variation in participants' biopsychosocial histories and other factors (e.g., staffing changes).

Potential moderators for Youth Waiver Forms include contextual (e.g., situational stress) and individual factors (e.g., intelligence and comprehension skill). Factors that may impede the effectiveness of the intervention include educational level and lack of documentation regarding whether and how police assess youth cognitive abilities before presenting a waiver form.

*Continued on next page*



Organised crime

Third party policing initiatives aimed at combating drug crime in hotels (e.g., Operation Galley) may increase drug crime reports and problem notifications by hoteliers. They may also increase drug search warrants, arrests, and charges (Morton et al., 2018). Educational programs delivered by police, workshop facilitators, and child safety to educate adolescents about the nature and consequences of gang membership may be effective for reducing delinquency and gang involvement and improving attitudes toward police (Densley et al., 2017).

The key mechanism underpinning Operation Galley is third party policing whereby hoteliers are motivated by provision of information regarding their legal responsibilities and noncompliance liabilities. As such, the implementation of Operation Galley may be facilitated by a strong working relationship between hoteliers and police, as well as clear communication of roles and objectives within the intervention, and hindered by the levels of vigilance required for hoteliers to implement the intervention, which may be considered outside of their role in the hotel and/or the business model of the hotel itself.

The effectiveness of multiagency educational gang interventions may be influenced by the number of existing youth gangs, along with their trauma histories. Barriers to implementation can include scheduling errors, timeframe mismanagement, inconsistencies with educational materials, and lack of signposting sessions for students. Implementation may be facilitated by natural and non-judgemental communication by facilitators and bespoke videos with local examples.

Financial crime



Corporate crime deterrence strategies via legal mechanisms may influence whether illegal behaviour or non-compliance is reported to police (Simpson et al., 2014). However, many of the studies in this review were not from Westminster nations, and of those that were, none clearly explicated police involvement with the intervention, thereby limiting the ability to ascertain effectiveness or generalise to the Auckland context.

Covert investigative techniques for identifying and eliciting confessions of involvement in financial crime were evaluated by mock jurors (Connors et al., 2019). Results show that cases with high financial incentives (\$35,000) were less likely to receive a guilty verdict than those with low incentives (\$5,000). The intervention showed no effect for juror perception of confession falseness, defendant character, or defendant-officer social bond.

The included study was conducted in Canada, which has a much lower population density but similar police organisational structure. While a cost model is not provided, it is implied that this intervention is costly, with suspects being offered large sums of money for their involvement.

Summary

This review covers robust impact evaluations of policing interventions to address seven social and crime problems in Auckland. We identified a dearth of robust impact evaluation evaluations in Westminster nations that have similar populations to NZ, although several policing approaches may be effective for addressing the problems facing Tamaki Makauru. When considering the transportability of interventions to the Auckland context, the following factors are important considerations: human and physical resources, the availability and amount of funding, legal and regulatory frameworks, and training for police and other practitioners.

Acknowledgements

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# Policing child sex offenders and offending: A rapid review of the evaluation literature

**Author:** Elizabeth Eggins, Lorelei Hine, & Lorraine Mazerolle

## Introduction

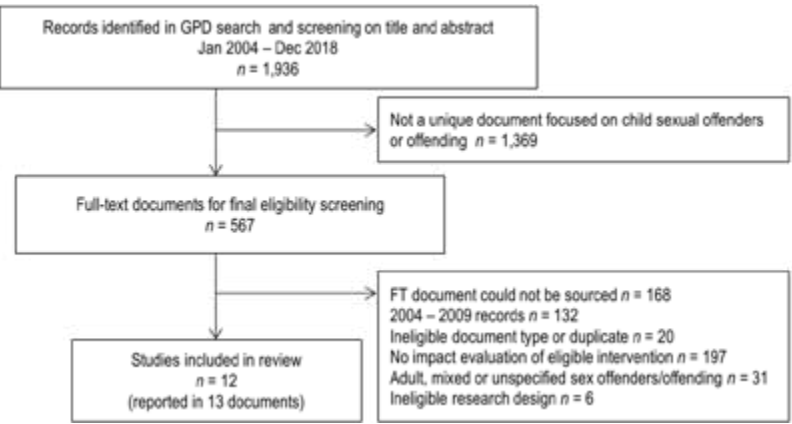
This article provides a systematic rapid review of the evidence-base for policing approaches for child sex offenders and offending. The review had two inter-related aims. First, to ascertain and synthesise the evidence-base for risk management of child sex offenders by police. Second, to synthesise studies that assess the impact of any type of policing approach for child sex offenders and offending, with no limit on the outcomes used to evaluate the intervention.

## Methods

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022).

The results of the eligibility screening, after extraction from the Global Policing Database (GPD) are presented in the PRISMA flowchart in Figure 1 (Moher et al., 2009). The final corpus of 12 eligible studies (reported in 13 documents) is comprised of no randomised controlled trials (RCTs), 2 reviews with or without meta-analyses, and 10 robust quasi-experiments.

Figure 1: PRISMA flow diagram



## Results

This rapid review provides a comprehensive preliminary understanding of the impact of policing responses for child sex offenders/offending on a range of policy and practice outcomes. The 12 eligible studies were predominantly conducted in the United States, however, a range of developing and developed countries were also represented in the corpus of studies. It is notable that there were no standalone impact evaluations of risk assessment approaches and none of the included interventions contained a risk assessment component. The studies consider the impact of collaborative policing responses for child sex offenders/offending, as well as training, investigative, and legislative/regulatory approaches.

## Training

Four studies examined the impact of police training in the area of child sex offenders/offending, represented by one systematic review and two quasi-experiments. The systematic review of school-based education programs for preventing child sexual abuse by Walsh et al. (2015) included one study that integrated police as part of the intervention. This study was an RCT and compared a live performance with a DVD recording and a control group. Children in both intervention groups reported higher scores on knowledge of self-protective skills (e.g., getting help, rejecting unwanted touch) than the control group.

The three quasi-experimental studies involved training initiatives for police officers to improve their performance when interviewing child victims. Studies showed promising results in terms of promoting more frequent and effective use of important interview techniques (e.g., use of open-ended questions; Yii et al., 2014) and, in turn, allowing for more successful interviews with child victims of sexual abuse (Cyr et al., 2012) as well as improving the quality and frequency of interview techniques (e.g., promoting free recall, directive utterances; Cederborg et al., 2013). Notably,

## Investigative approaches

Three quasi-experimental studies were impact evaluations of investigative approaches or techniques in the area of child sex offenders/offending. Two of these examined the efficacy of different interview questions for police interviews with child witnesses (Feltis et al., 2010) and adolescent sex trafficking victims (Lindholm et al., 2014). Both examined whether open-ended questions elicited more detailed accounts than specific closed or option-posing questions. Results indicate that open-ended question types produce greater detail and more story grammar elements (i.e., the components that make the witness's account logical/easy to follow).

Johnson et al. (2014) examined whether setting of the police investigative interview with children affected mock juror perceptions of interview quality, prior opinions about children's eyewitness abilities, credibility of child victim, or guilt decisions. Results showed no significant difference in mock juror perceptions between interviews described as having been conducted in a Child Advocacy Centre versus a traditional police setting.

## Regulatory or legislative approaches

A single study provided evidence around regulatory or legislative approaches. The quasi-experimental time series analysis by Merken (2015) evaluated the impact of Megan's Law and associated residency restrictions for convicted child sex offenders on monthly arrest rates for rape in Alabama and Oklahoma (United States) from 1984 to 2012. Residency restriction laws mandate that released sex offenders' residential address (usually recorded with

a law enforcement agency) needs to be more than 2,000 feet from places where children congregate. The rates of arrest for rape slightly decreased following the legislation implementation but began increasing shortly thereafter. The authors concluded that the legislation had no notable impact on arrests for rape or robbery. It is important to note that child-specific offenses were not analysed in this study and the rape arrest outcome measure included offenses committed against victims of all ages. As such, any benefits of child sex offender residency restrictions for preventing reoffending specifically against children could not be assessed in this study.

## Collaborative approaches

Four studies examined the impact of collaborative or multiagency approaches in the area of child sex offenders/offending, represented by one systematic review and three quasi-experiments. A systematic review by Nwogu et al. (2015) evaluated the impact of Child Advocacy Centres and multidisciplinary teams on the likelihood of prosecution and caregiver satisfaction in cases of child sexual abuse. The authors concluded that collaboration between child victim advocates, law enforcement and multidisciplinary teams in child sexual abuse investigations may benefit case outcomes by increasing the satisfaction in non-offending caregivers of victims and the likelihood of successfully prosecuting child sex offenders. The quasi-experiments also noted benefits of multiagency teams around prosecution acceptance (Bracewell 2015, 2018), increasing rates of arrest, and reporting in CSA cases (Bailey et al).

## Summary

Overall, very little high-quality evaluation evidence exists to help inform evidence-based approaches in the area of child sex offending/offenders. Limited evidence presented shows promise across a range of outcomes for investigative, training and multiagency approaches. For example, Child Advocacy Centres that involve multi-agency collaboration are likely to benefit case outcomes by increasing the satisfaction in non-offending caregivers of victims and the likelihood of successfully prosecuting child sex offenders. We did not find any studies that reported outcome measures (such as re-offending against children) relevant to child-specific offenses for child sex offender residency restrictions. Although there is a vast amount of literature examining the psychometric qualities of various risk assessment tools, the review did not identify any police-focused impact evaluations of these tools. Rigorous impact evaluations of police use of risk management strategies in the field - including risk assessment tools – are required to understand their effectiveness in the context of for child sex offending.

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# Mental health co-response models: A rapid review of the evaluation literature

Author: Elizabeth Eggins, Lorelei Hine, & Lorraine Mazerolle

## Introduction

This article provides a systematic rapid review of the evidence base for mental health co-response (MHCR) models. These models partner mental health services and relevant practitioners with police to facilitate referrals to treatment for individuals with mental health issues who come in contact with police. This approach takes a range of forms, including:

- Co-location of police and mental health practitioners to facilitate onsite collaboration and support for individuals with mental health issues
- Active collaborative or linkages between police and mental health services, in the absence of physical co-location
- Crisis Intervention Teams (CIT) and other training-focused studies where there is an explicit partnership with other mental health services in developing or delivering the training.

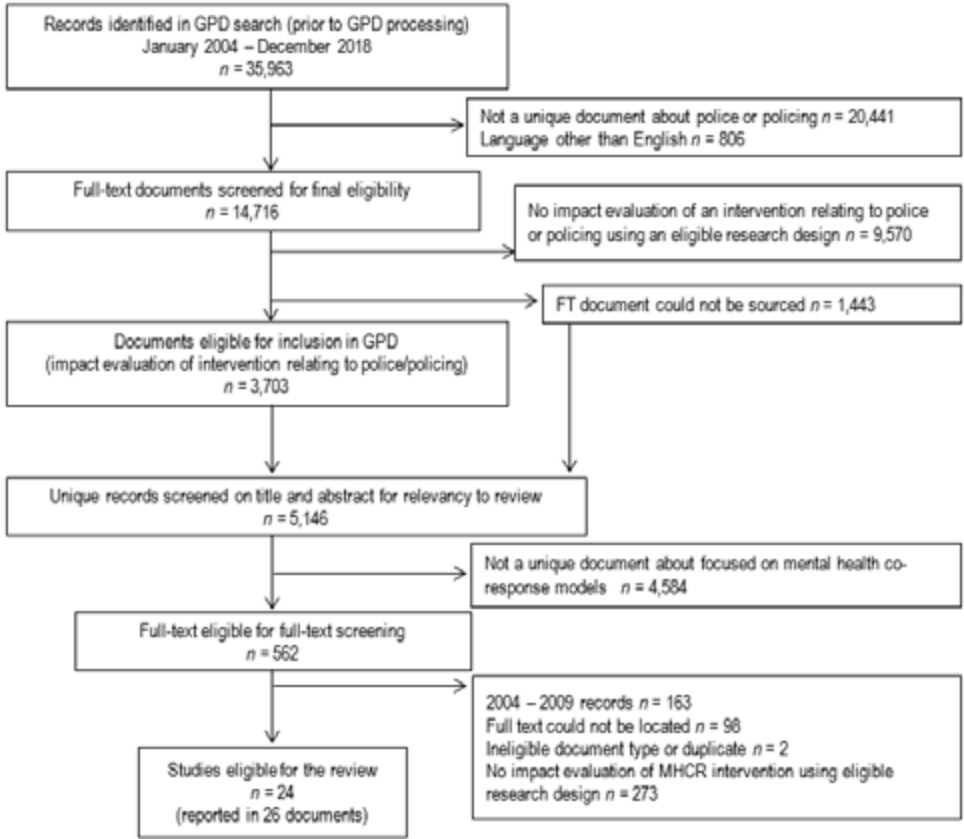
## Methods

The full methods are described in the introductory article to our suite of rapid reviews published in this issue of Police Science (Eggins, Hine & Mazerolle, 2022). The PRISMA flowchart (Moher et al., 2009) in Figure 1 shows the screening process and attrition for this review. The initial search was conducted within the Global Policing Database and identified 5,146 potentially eligible citations. Of these, 562 were screened as potentially being about MHCR models based on their title and abstract. The full-text of these eligible documents published between 2010 – 2018 were screened for final eligibility. Of these 301 documents, 26 were deemed to meet full inclusion criteria for the review (representing 24 studies).

## Results

The 24 eligible studies were predominantly conducted in the United States, however, other countries represented include: United Kingdom, Canada, and Australia. This corpus of studies is comprised of one randomised controlled trial (RCT), six reviews with or without meta-analyses, and 16 robust quasi-experiments. Almost three-quarters of the studies consider the impact of mental health co-response models on criminal justice related outcomes. Results from this review are presented by outcome category in the following subsections.

Figure 1: PRISMA flow diagram



### Criminal justice outcomes

A total of 15 studies were impact evaluations or reviews including impact evaluations of MHCR models for criminal justice outcomes. Due to there being no RCTs using criminal justice measures as the outcome, we drew on six reviews of eligible interventions and nine quasi-experimental evaluations to provide depth to the synthesis. Traditional MHCR approaches may reduce rates of arrest for mental health calls (Shapiro et al., 2015) and result in fewer detentions in police custody (Puntis et al., 2018). A Post-Crisis Assistance Program (PCAP) involving collaboration between police and the Mental Health Association of Nebraska reduced arrest rates for individuals experiencing a mental health crisis (Bonkiewicz et al., 2014, 2018). A meta-analysis found that CIT had no significant impact on arrests of individuals with mental illness, although the results across the studies varied (Taheri, 2016).

### Referral to services

Six studies examined the impact of MHCR models on referrals to services, comprised of three reviews of eligible interventions and three quasi-experimental evaluations. There is some evidence suggesting that traditional MHCR approaches may lead fewer individuals to be referred to hospital emergency departments and may also reduce the length of stay in hospital emergency departments for those who are referred (Shapiro et al., 2015). Under CIT approaches, individual experiencing mental illness may be more frequently referred to mental

health services without arrest (Watson et al., 2010) and police officers may demonstrate better referral decisions than officers no trained in CIT (Compton et al., 2014).

### Resource use and demand

Nine studies, including one RCT and three systematic reviews, evaluated the impact of MHCR approaches on the use of agency resources. The RCT by Stantlebury and colleagues (2017) involved a training program for police officers developed collaboratively with the National Health Service (UK). The authors found that the specialised training and routine training police stations did not differ 6-months after the intervention in terms of the number of police incidents referred to the central control room or number of individuals with a warning marker for mental health. However, the number of incidences with a generic marker (tag) for mental health was significantly higher in the experimental police stations. The authors conclude that although the training did not appear to reduce the incident-level demand, it may improve the way police record data about individuals they have contact with who display symptoms of mental illness.

Evidence from the reviews and quasi-experimental studies also suggest MCHR models have some effect on the time spent at mental health calls (Lamanna et al., 2018; Shapiro et al., 2015) and may lower calls-for-service and admittance into emergency protective custody (Bonkiewicz et al., 2014).

### Perceptions of police

One quasi-experimental study by Furness et al. (2017) evaluated the impact of a MHCR model on perceptions of police. The Northern Police Clinician Response (NPACER) is an initiative whereby a police officer and senior mental health practitioner attend the scene of a mental health crisis in a 'diversional van' after initial police response. Participants who received the co-response intervention (n = 18) believed their interaction with the NPACER to be more procedurally just than participants who interacted with police only (n = 25), although the difference in raw mean scores was small (3.0 for NPACER group and 2.9 for police-only group, measured on a 1-4 point Likert scale).

### Practitioner perceptions of MHCR models

One quasi-experimental impact evaluation and one systematic review reported on impact evaluations using outcomes around practitioner perceptions of the MHCR approach. Results show that participating in a MHCR or CIT intervention can increase an officer's perceptions of intervention effectiveness (Shapiro et al., 2015), but not perceptions of intervention desirability (Morabito et al., 2013).

### Practitioner knowledge, perceptions, and attitudes about mental illness

Three studies – one review and two quasi-experiments – examined the impact of MHCR models on practitioner perceptions of, knowledge about, or attitudes about mental illness or individuals with mental illness. Abbott (2011) found that officers involved in a multiagency Jail Diversion Program were less authoritarian, equally benevolent, more socially restrictive, and less community mental health oriented. Compton et al. (2014) found that, compared to

untrained officers, CIT trained officers demonstrated higher levels of knowledge, more diverse attitudes about mental illnesses and their treatments, higher self-efficacy for interacting with someone with psychosis or suicidality, and less preference to distance themselves from people with mental illness (social distance stigma).

### Adverse events

A total of five studies, including two reviews, were evaluations or reviews including evaluations summarising the impact of MHCR models on adverse events. One of the reviews focused on CIT approaches and included studies using use of force and injury outcomes and the other review included a range of MHCR models and included studies with use of force outcomes. Results showed that MHCR models may lead to fewer use-of-force complaints filed against police (Shapiro et al., 2015), but CIT had no significant impact on use of force (Taheri 2016).

## Summary

Mental Health Co-Responder models, oftentimes led by police, aim to reduce repeat contact with police by facilitating appropriate referrals to treatment for individuals with mental health issues who come in contact with police. The approach includes co-location of police and mental health practitioners, active collaborative or linkages between police and mental health services and Crisis Intervention Teams (CIT). Overall, we find that MHCR-like models appear promising for increasing referrals for mental health services, reducing time spent responding to mental health incidents, improving practitioners' knowledge, perceptions, and attitudes towards mental illness, and changing citizen's perception of police. Yet the co-responder models appear to have mixed evidence for reducing arrests for individuals with mental illness and reducing use of force.

We conclude that there is a significant lack of randomised control trials for MHCR models. There is also a significant gap in evaluation evidence for broader outcomes beyond those focused on criminal justice (e.g., perceptions of police).

## Acknowledgements

This article summarises findings from a report prepared in April 2020. The review was funded by research grant awarded to Lorraine Mazerolle, Sarah Bennett, and Elizabeth Eggins by the New Zealand Evidence-Based Policing Centre. The authors gratefully acknowledge the research assistance provided by xxxxx.

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# Reducing alcohol-related harm in the night-time economy: A rapid review of the evaluation literature

**Author:** Elizabeth Eggins, Lorelei Hine, & Lorraine Mazerolle

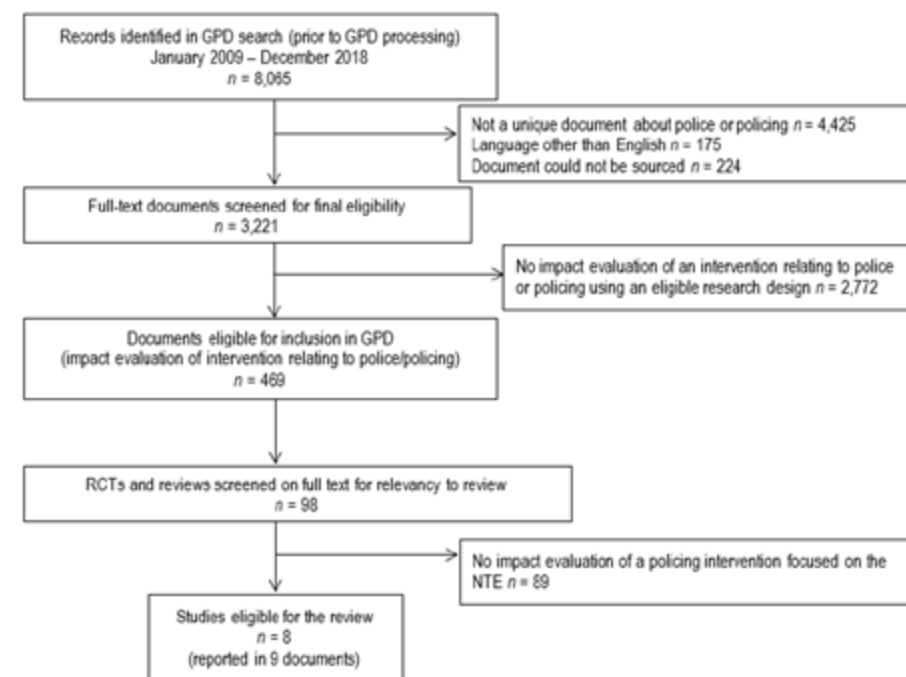
## Introduction

Alcohol-fuelled violence in entertainment precincts poses many challenges for policing. The night-time economy (NTE) – defined as any public activity, space, or establishment that operates after work hours that may or may not serve alcohol – offers a rich part of inner-city life yet, at the same time requires careful controls. The NTE establishments include night clubs, pubs, bars, music/theatre venues, entertainment, or leisure precincts (including transport services). This article describes a systematic rapid review of the evidence base for (a) policing approaches in the context of the NTE; and (b) four specific strategies related to reducing alcohol-related harm in the context of the NTE (one-way door policies, bringing forward closing times, alcohol outlet density, and ensuring readily accessible transport home).

## Methods

In addition to the standard methods described in the introductory article to our suite of rapid reviews published in this issue of *Police Science* (Eggins, Hine & Mazerolle, 2022), this review incorporated supplementary searches across several criminal justice and multidisciplinary sources to capture studies evaluating one-way door policies, adjusting establishment closing times, alcohol outlet densities, or readily accessible transport home from NTE precincts.

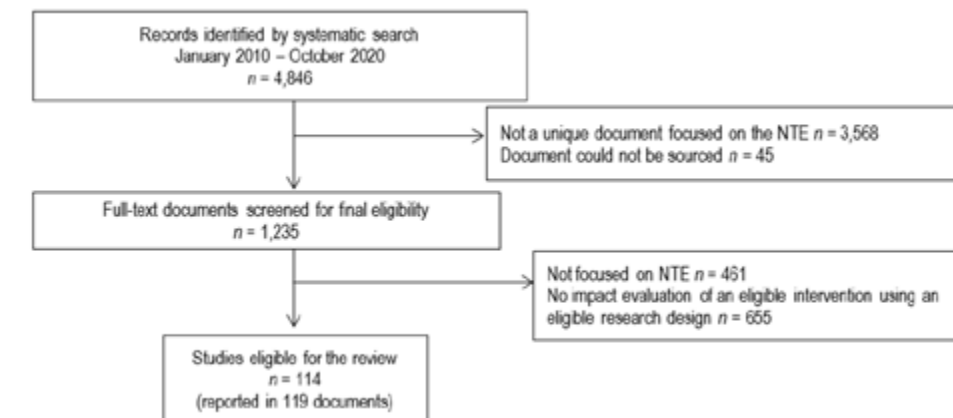
Figure 1: PRISMA flow diagram for GPD search



The PRISMA flowcharts in Figures 1 and 2 (Moher et al., 2009) display the attrition of identified records for the Global Policing Database (GPD) processing and supplementary searches. Combined, the searches identified 12,911 records (citations) which were assessed

for eligibility in a series of systematic screening stages. A total of eight studies were deemed eligible for the policing component of the review and 114 studies were deemed eligible for the component of the review focused on specific alcohol-harm reduction strategies.

Figure 2: PRISMA flow diagram for supplementary data



## Results

The eligible studies were predominantly conducted in Australia and the United States, however, other countries represented include New Zealand, United Kingdom, and Europe (e.g., Switzerland, Netherlands). The studies consider the impact of eligible interventions on a range of alcohol-related harm outcomes, with most considering violence and aggression. The effectiveness of the interventions was mixed, with some showing promising effects and others showing less equivocal results.

### Policing in the NTE

Eight studies – comprised of four randomised controlled trials (RCTs) and four reviews – were evaluations of interventions relating to police or policing. The included studies covered a range of different outcomes for measuring the effectiveness of the four intervention types (auditing and problem-oriented policing, police activity, motivational interviewing, and compliance checks).

Auditing and problem-oriented policing at high-risk establishments may not produce changes in alcohol intoxication, but may reduce violence at premises (Moore et al., 2012).

Increasing licensee awareness and police activity may be effective for reducing alcohol-related sexual offences on problematic weekends and reducing alcohol-related violence on non-problematic weekends, with noted cost-effectiveness (Navarro et al., 2013).

*Continued on next page*

**Community and police –  
together making our communities safe!**



**LOCK**

Lock up (cars and property)

Out of Sight (valuables and money)

Contact Police (crime or information)

Keep a Look Out (community awareness)

**CrimeStoppers.com.au 1800 333 000**



Implementing motivational interviewing when individuals are in police custody may reduce holistic measures of alcohol dependence (Tobutt & Milani, 2010), although these results should be interpreted with caution due to the study's small sample sizes and the homogeneity of the sample demographics.

Police-enforcement and compliance checks at party venues on university/college campuses may reduce incidents related to intoxication both on- and off-campus, with little displacement to other settings (Saltz et al., 2010).

One-way door policies

We identified six impact evaluations (reported in nine documents) and one systematic review of one-way door policies in the context of the NTE. Many of these studies implemented this intervention alongside changes in closing times or other policies. One-way or 'lock-out' door policies show mixed effects on alcohol-related harm outcomes, yet this is based on less rigorous quasi-experimental research (e.g., Taylor et al., 2018; Cameron et al., 2018; Kypri & Livingston, 2020; Menéndez et al. 2015, 2017; Miller et al., 2017).

Changing closing times

We identified 20 quasi-experimental evaluations of varying adjustments to business hours in the NTE (reported in 22 documents). Additionally, we identified six reviews that included findings around adjustments to business hours. These studies suggest that reducing business hours for NTE premises may reduce alcohol-related harms (e.g., Sherk et al., 2018; Wilkinson et al., 2016; Taylor et al., 2018; Nepal et al., 2020), yet it should be noted that this is based on less rigorous quasi-experimental research.

Alcohol outlet density

We identified 69 quasi-experimental studies and eight reviews that examined outlet density. While some authors suggest that the effect of density may be context-specific or depend on the outlet type (e.g., Gmel et al., 2016), overall, higher alcohol outlet density is generally associated with greater alcohol-related harms, although this conclusion is drawn from a large body of heterogeneous less rigorous quasi-experimental evidence (e.g., Quigg et al., 2020; Roche et al., 2015; Taylor et al., 2018).

Transport home

We identified two RCTs and two quasi-experimental studies that assessed the impact of transport options home from the NTE. Of the four studies, three were conducted in Australia and the fourth was conducted in the United States. Interventions captured within this section include taxi stands (Rivara et al., 2012), accreditation programs for community sporting clubs that require clubs to implement safe transport strategies (Rowland et al., 2012; Kingsland et al., 2015), and designated driver programs (Rowland et al., 2015). There is very little evidence examining the impact of safe transport options home on alcohol-related harms. The studies included in this review suggest that designated driver programs may reduce drink driving and increase the likelihood of patrons selecting a safe transport option home.

Summary

This review provided a preliminary understanding of the range and impact of policing strategies in the NTE. We identified a number of interventions that met our criteria, including one-way door policies, reducing business hours, alcohol outlet density, and safe transport options home. We found that reducing business hours for NTE premises may reduce alcohol-related harms, increasing licensee awareness can reduce alcohol-related sexual offences on problematic weekends (with noted cost-effectiveness) and that designated driver programs may reduce drink driving and increase the likelihood of patrons selecting a safe transport option home. Our results show that one-way or 'lock-out' door policies show mixed effects on alcohol-related harm outcomes and that problem-oriented policing at high-risk establishments may not produce changes in alcohol intoxication but may reduce violence at premises. Overall, we conclude that there is a significant lack of randomised control trials across this review, which speaks to the dearth of high-quality impact evaluation research into the NTE.

Acknowledgements

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# The relationship between changing product-specific reward and stealing counts against the backdrop of decreasing reward of property crime overall

**Author:** Mr Liam Quinn and Dr Joseph Clare

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## Abstract

The majority of burglars commit their offences due to an economic motivation to gain cash, often to fund drug use. Given this, it is reasonable to think that burglars are suitably attuned to stolen goods market dynamics, such as the changing prices and demand for different stolen goods. Offender decision-making models such as the rational choice perspective and offender domain-specific expertise reflect this sensitivity to stolen goods market dynamics. There is recent evidence to demonstrate a close relationship between product-specific prices and demand with product-specific stealing counts. There is also indication that the reward of committing burglaries has been decreasing overall and that this is partially responsible for the property ‘crime drop’ experienced in Western market-based countries such as Australia and New Zealand over the last two decades. The present article provides a brief literature review on relevant offender interview research and offender decision-making models, before discussing recent developments in the research on product-specific reward and stealing counts, as well as research on the changing reward of property crime offences more broadly.

## Background

Offender interview research has consistently demonstrated that the majority of burglars steal goods to be converted into cash (or steal cash directly), often to fund drug use (for examples, see Cromwell et al., 1991, Ferrante and Clare, 2006, Stevenson et al., 2001). Given this economic motivation to offend, it is reasonable to hypothesise that burglars are attuned to the changing reward of stealing specific goods, and that their target selection behaviour is responsive to this changing reward. Both of these hypotheses imply that offenders are operating with at least some degree of rationality. The rational choice perspective in criminology stipulates that offenders

engage in purposive behaviour that they believe will benefit them in some way (Cornish and Clarke, 2014). Indeed, recent research suggests that the time and effort taken by some offenders during the course of their offences increases as the perceived reward increases (Addis et al., 2021). This is consistent with the rational choice notion of offenders making decisions to maximise the reward of a crime (Cornish and Clarke, 2017). The rational choice perspective also recognises that offenders gain expertise with increasing experience (Cornish and Clarke, 2014). In practice, this ‘offender domain-specific expertise’ might mean that experienced burglars more accurately assess the reward for stealing specific goods than non-offenders. A recent study by Nee et al. (2019) using a virtual burglary scenario demonstrated that experienced burglars expertly discriminated between more valuable and less valuable goods to optimise the value of their haul while taking into account removability and other considerations. In contrast, non-offenders stole haphazardly and came away with a less valuable haul (Nee et al., 2019). The decision-making process of burglars during target selection is also reflected in ‘CRAVED’: a heuristic framework developed to demarcate attributes of goods that are most stolen by offenders (Clarke, 1999). The attributes of such ‘hot products’ are concealable, removable, available, valuable, enjoyable, and disposable. Importantly, Clarke (1999) suggested that disposability (converting the stolen goods into cash or drugs) is the attribute most closely related to the amount a specific good is stolen (Clarke, 1999).

With respect to the notion that a burglar’s future behaviour is responsive to the changing reward of a specific good, crime scripts (Cornish, 1994) offer a useful conceptual lens. A crime script is the step-by-step breakdown of a specific offence that becomes increasingly automated and efficient the more experienced the burglar becomes, in line with offender domain-

specific expertise (Cornish, 1994, Nee et al., 2019). The crime script can also be modified in the event of a burglar having difficulty disposing of a particular good due to its reduced value or demand (reward) (Cornish, 1994). In this instance, the crime script might be revised such that the good is no longer stolen and/or different goods with greater reward to the offender are targeted. This fits with research showing that offenders have an ever-changing hierarchy of goods that they target (Sutton, 2010), and that ease of disposability is the most common reason cited by offenders for stealing particular goods (see Nelson et al., 2003, Schneider, 2005, Stevenson et al., 2001).

## Product-specific reward and stealing counts over time

With this background in mind, we recently conducted a systematic review and series of meta-regressions to determine if there is a statistically significant and meaningful relationship between longitudinal changes in product-specific prices and theft rates, as well as identify differences in the magnitude of this relationship according to type of good and other variables (Quinn et al., in press). The systematic search process returned 1,717 unique documents once duplicates were removed, and 16 studies were ultimately included in the review after screening was completed. The majority of the 16 studies included in the review reported a quantitative analysis of the price-theft relationship for metals ( $n = 13$ ), two reported an analysis for petrol, one reported an analysis for jewellery, and four reported an analysis for consumer goods.

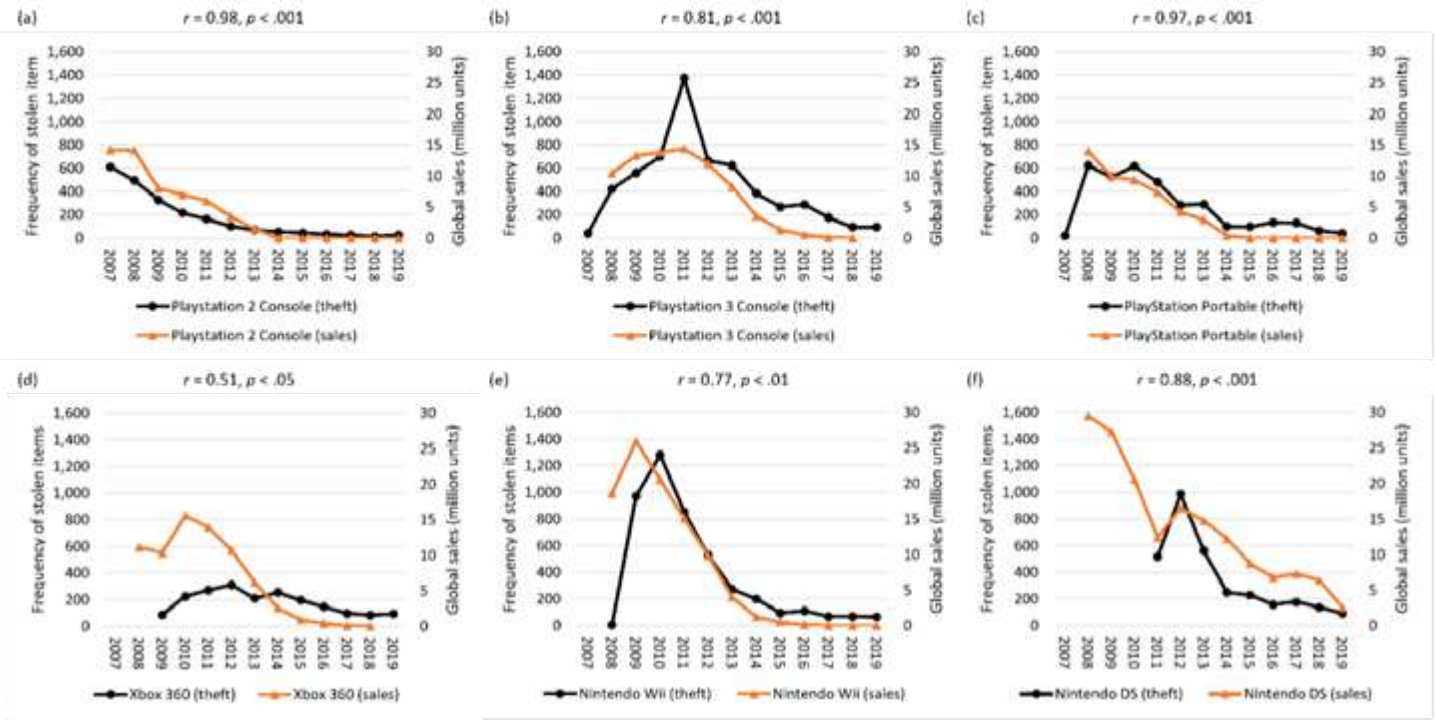
The results of the review showed a statistically significant and meaningful relationship between good-specific prices and theft rates over time. Taking the more robust price-theft elasticity estimates, we found that, on average, across all studies reporting price-theft elasticity estimates,

## The relationship between changing product-specific reward and stealing counts against the backdrop of decreasing reward of property crime overall

a 1% change in the price of a good is associated with a 1.2% change in theft of that good. Another important result of the review was that the strength of price-theft relationships varied across type of goods, with the price-theft elasticity value for copper (1% change in copper prices is associated with a 1.67% change in the theft of copper) less than the steel price-theft elasticity value and more than the (significant and meaningful) price-theft elasticity values for consumer goods, jewellery, and petrol.

correlational analyses were conducted on the changing desirability of specific makes and models of gaming consoles with their corresponding stealing counts between 2007 and 2019 in Western Australia. We found statistically significant and large correlations between sales units and stealing counts of six of the eight gaming consoles analysed (see Figure 1).

**Figure 1.**



Counter to the large statistically significant and positive coefficients of other consumer goods, three of the consumer goods (televisions, DVD players, and gaming consoles) analysed exhibited non-significant and/or negative price-theft relationships. This finding was discussed in the context of partial product life cycles (Shaw et al., 2015, Thompson, 2017, Wellsmith and Burrell, 2005), the reality that specific makes and models of electronic consumer goods undergo their own lifecycles involving stages of product introduction, growth, maturity, and decline (Cao and Folan, 2012).

In a recent follow-up article, we presented a preliminary analysis of the relationship between one of these product-specific factors, demand, with product-specific stealing counts in the context of partial product life cycles (specific makes and models) of gaming consoles (Quinn and Clare, 2021b). Specifically, a series of

Figure 1. (a) Number of PlayStation 2 consoles sold globally (in millions) and theft counts of PlayStation 2 consoles in Western Australia between 2007 and 2019. (b) Number of PlayStation 3 consoles sold globally (in millions) and theft counts of PlayStation 3 consoles in Western Australia between 2007 and 2019. (c) Number of PlayStation Portable consoles sold globally (in millions) and theft counts of PlayStation Portable consoles in Western Australia between 2007 and 2019. (d) Number of Xbox 360 consoles sold globally (in millions) and theft counts of Xbox 360 consoles in Western Australia between 2007 and 2019. (e) Number of Nintendo Wii consoles sold globally (in millions) and theft counts of Nintendo Wii consoles in Western Australia between 2007 and 2019. (f) Number of Nintendo DS consoles sold globally (in millions) and theft counts of Nintendo DS consoles in Western Australia between 2007 and 2019.

Importantly, we can state with reasonable assurance that it was the decline in desirability rather than a decline in availability of the consoles that was associated with the decrease in stealing counts. This is because changes in stealing counts closely followed changes in unit sales at the same time manufacturers were still producing and selling the console in large quantities, and the cumulative stock of the console in the population continued to grow.

Another interesting finding to emerge from the Quinn and Clare (2021b) study was that cumulative sales units for all consoles trended sharply downwards from 2011 to 2015, before plateauing, with cumulative stealing counts of all consoles lagging behind this. This provides some credence to the notion that changes in the disposability of electronic consumer goods might impact theft-related property crime rates at a higher level. Another contribution of the study was to propose an additional reward-factor that might partially account for the property crime drop: the decreasing availability of cash. Indeed, there was a statistically significant and large correlation between decreasing Australia-wide cash usage estimates and decreasing stolen cash rates between 2007 and 2019 (Quinn and Clare, 2021b).

*Continued on next page*



Changing reward of  
property crime overall

So far in this article we have largely dealt with product-specific reward factors that provide useful information about which goods are ‘hot’ at any given time, and therefore which goods manufacturers, retailers, and consumers should be most vigilant about protecting. However, to reach our objective of reducing aggregate property crime rates (and avoiding target displacement), the collective disposability of a potential haul of stolen goods has to be sufficiently lowered such that offenders see little utility in taking risks for a haul they are unable to dispose of. Importantly, this may result in novice offenders that fail to convert stolen goods to cash or drugs desisting from crime (Sutton, 1998), or discourage a cohort of offenders from committing a crime in the first place (Payne et al., 2018).

In another of our recent articles, we propose that longitudinal variations in the reward of electronic consumer goods provide a complementary account to the role of improved security in explaining burglary and theft offence rates in Western market-based countries in the years prior to and during the property crime drop (Quinn and Clare, 2021a). We explain that the relationship between changing prices of electronic consumer goods and burglary and theft offence rates makes sense in the context of steep increases in prices of consumer goods in the 1960s, with prices peaking in the early 1980s, at the same time property crime rates did (Rosenfeld, 2014). This was also the time period that saw the introduction of the first televisions, videocassette recorders, computers, and mobile phones to the market among other high-value electronic consumer goods. Furthermore, prices of consumer goods have also broadly been decreasing since the early 1990s when property crime rates have also decreased (Rosenfeld, 2014). Data from the United States (US) and United Kingdom (UK) both demonstrate strong relationships between the values for electronic consumer goods and burglary rates prior to and during the crime drop (see Quinn and Clare, 2021a).

While similar data are not available for Australia, we also experienced a similar property crime drop to the US and UK (ABS, 2020a, ABS, 2020b). Additionally,

Australia exhibited some of the same trends in specific property crime offences that the US and UK did. Importantly, these trends are consistent with the changing reward hypothesis playing a major role in the property crime drop, but not the improved security hypothesis. For example, consistent with the changing reward hypothesis, the proportion of domestic burglaries in which offenders entered a dwelling but did not steal anything increased in Australia and the UK over the years of the crime drop (the same data are not available for the US). In a forthcoming manuscript (Clare et al., forthcoming), we also present evidence from seven iterations of the Drug Use Monitoring in Australia (DUMA) program survey showing that Australian property crime offenders appear to have shifted away from stealing increasingly devalued electronic consumer goods for resale purposes, and toward stealing increasingly expensive food and clothing for personal consumption.

Conclusion

Recent evidence suggests that there is a close relationship between product-specific prices and demand with product-specific stealing counts (Quinn and Clare, 2021b, Quinn et al., in press), and that the decreasing reward of domestic burglary overall has played a major role in the property crime drop across Western market-based countries such as Australia (Quinn and Clare, 2021a, Quinn et al., forthcoming). This is consistent with a degree of rationality to the offender's decision-making process for these crimes, in terms of maximising the reward (Cornish and Clarke, 2017). It is also consistent with offender interview research indicating that many burglars focus more on the prospective reward of crime, rather than the risks or effort involved (Carroll and Weaver, 2014, Cromwell et al., 1991, Wright and Decker, 1996). Importantly, the research also suggests that property crime offenders, on aggregate, are attuned to changing stolen goods market dynamics (such as changing prices and demand), consistent with offender domain expertise (Nee et al., 2019).

There are a number of applied implications of this research. The research supports the continuation of designing in-built properties of goods to disrupt their disposability in

the market for stolen goods. A step further would be to enact government policy requiring manufacturers of consumer goods to be more socially responsible in designing out crime, much like policies to limit carbon pollution among major corporations exist. The research also supports utilising a market reduction approach (Sutton, 1998) to disrupt the sale of stolen goods. For example, recent evidence suggests that making it harder to dispose of stolen metals in scrapyards, by virtue of increasing the regulatory oversight, significantly reduces metal theft in the affected area (Kirchmaier et al., 2020, Mares and Blackburn, 2017). Finally, a greater understanding of the influence of market forces and stolen goods market dynamics on theft rates of specific goods will enable identification of the specific goods and time periods that warrant greater resource allocation for protection, as well as focussing consumer vigilance on these goods and time windows.

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# Whariki Haumaru: Partnering with Maori Wardens to reduce Warrants to Arrest

**Author:** Kaori Takenaka, Matthew Davies, Mahinarangi Hakaraia, Caitlin Spence ; and Lance Tebbutt

## Abstract

Failing to appear at court (FTA) leads to a cascade of negative consequences for individuals, their whanau and the criminal justice system. The problem is particularly marked in the east coast of New Zealand's North Island, where 13.7% of events in Napier District Court and 11.9% of events in Hastings District Court resulted in a Warrant to Arrest (WTA) (compared to around 10% across the country). To address this, New Zealand Police's Eastern District and the Ministry of Justice worked with Ahuriri Maori Wardens to develop a new intervention named Whariki Haumaru. The wardens made phone calls to people with active WTAs, using a script that was designed based on a combination of behavioural science and Te Ao Maori principles. This article presents results from a five-month trial to evaluate the impact of the initiative. We find encouraging evidence that wardens were able to contact over a quarter of participants. Further, we find statistically significant evidence that those who were successfully contacted by the wardens were 29 percentage points more likely to make a voluntary appearance compared to those who were not contacted. While further analyses and other research using experimental designs will provide clearer evidence about the impact of Whariki Haumaru, there is promising evidence that this Te Ao Maori and behaviourally informed intervention can increase voluntary appearances at court.

We strongly recommend that New Zealand Police roll out Whariki Haumaru in different districts in Aotearoa, and that they use every opportunity to explore the additional research questions referenced in this discussion. Conducting further research will enable New Zealand Police to make design improvements that bring even greater benefits to the justice system and, more importantly, its participants.

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## Background

Failing to appear at court (FTA) leads to a cascade of negative consequences for individuals, their whanau and the criminal justice system. Every time someone fails to appear at court, there is a high likelihood that a Warrant to Arrest (WTA) is issued for that person. This leads to issues for the justice sector due to new court events being created (costing the courts approximately \$1.5 million per year) and police time spent on processing, transportation and paperwork relating to WTAs. There are also significant costs to defendants and their whanau, as those with active WTA are more likely to be arrested, experience stress and anxiety, risk a reduction of benefit payments

and experience disruption to employment.

Across New Zealand, the FTA rate increased from around 8% in 2014 to 10% in 2020, although rates vary between courts. The problem is particularly marked in the Eastern District, where 13.7% of events in Napier District Court and 11.9% of events in Hastings District Court resulted in a WTA (for events in cases disposed between 1 March 2019 and 29 February 2020). Eastern District Police are estimated to spend between 1,600 and 2,500 hours a year dealing with WTAs .

The easiest way for defendants to clear their warrant is to make a voluntary appearance at court. For most cases, this enables the court to set a new date and to remove the active warrant from the defendant's record. However, defendants may not make voluntary appearances for a range of reasons, including a lack of awareness that they have an outstanding warrant for their arrest and fear about what might happen to them at court. To address this issue, Eastern District Police have been exploring innovative evidence-based solutions.

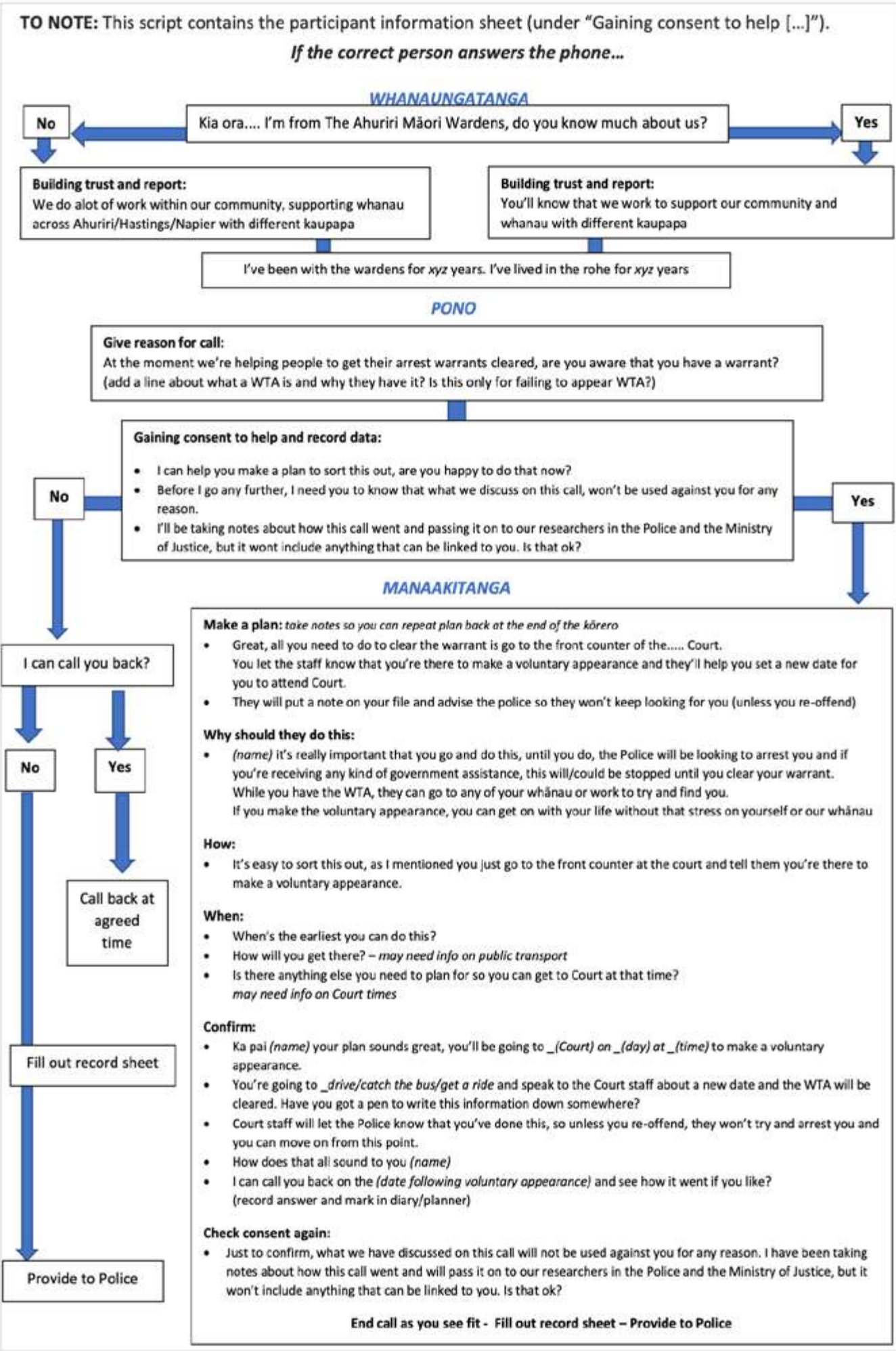
## The intervention

The Eastern District population has a higher proportion of Maori than the overall national average (33% compared to 17% across New Zealand), so New Zealand Police (New Zealand Police) were keen to design a solution that meets the needs of its community. The police developed a new intervention called Whariki Haumaru, working with Ahuriri Maori Wardens and the Behavioural Science Aotearoa (BSA) team based in the Ministry of Justice.

In this intervention, two Maori Wardens were based at a local police station in the Eastern District for one day a week. They made phone-calls to people with active WTAs that had been issued from within the Hawkes Bay area. Using a specially designed script, the wardens encouraged defendants to go to court to clear their warrants. As part of their usual role, the same wardens also attended Napier District Court two days a week, and supported people at court if they made a voluntary appearance.

The script (figure 1) was developed using a combination of behavioural science and Te Ao Maori based principles and was designed to enable the wardens to build rapport with the defendants in a culturally appropriate way. The script is based around the principles of whanaungatanga, pono and manaakitanga, and includes elements of procedural justice and implementation intentions .

Figure 1. The script used by Maori Wardens was informed by behavioural science and Te Ao Maori principles





## Method

The purpose of the research was to determine:

1. The impact of the intervention on the proportion of defendants with active WTAs who voluntarily appear at court to clear their warrant

*We expected that the intervention would increase the proportion of defendants who make a voluntary appearance, and that Maori defendants would particularly benefit from the intervention.*

2. The impact of intervention on the proportion of defendants with active WTAs who are arrested

*We expected that those receiving the calls would be less likely to be arrested as they were more likely to have cleared their warrants, and that Maori defendants would particularly benefit from the intervention.*

The intervention was trialled for five months, starting in March 2021. Each week, the wardens were provided with a list of people with active WTAs, including their name and phone number. Using the specially designed script, the wardens first sought consent before continuing with the call. For all calls, wardens recorded which people they called, how many attempts they made, whether they successfully spoke with the defendant, and whether consent was given to take part in research. If consent was given, details of the conversation (including intention to make a voluntary appearance) were recorded. If consent was not given, the call was ended.

Every week, the wardens wrote qualitative reflections and stories based on the calls they made and subsequent voluntary appearances. A local police officer supporting the wardens also contributed some qualitative accounts.

Voluntary appearances were recorded by court staff via the usual court processes. Personal data was removed from the dataset and then made available to BSA to be analysed for the purpose of this research.

## Analysis

We used a non-experimental design where we compared outcomes between those who were successfully contacted against those who were called but could not be reached. For each person, we found all WTA which were active at the time they were first called. We then compared the outcomes of these warrants in the two weeks after they were first called (if the person was not contacted) or first contacted (if contact was made). Key outcome measures were whether the person made a voluntary appearance (signified in the data as “WTA withdrawn”) or was arrested (signified in the data as “WTA executed”).

With this quasi-experimental approach, it is possible that there are some systematic differences between the group that was successfully contacted and the group that could not be reached, which may also impact their likelihood of making a voluntary appearance. This could potentially introduce bias into our results (see Limitations). Although preferable, a randomised controlled trial (RCT) was not feasible for this trial due to reasons of practicality and a small sample size.

To add context and richness to the quantitative findings, we also analysed the qualitative reflections and stories from the wardens and local police officer using thematic analysis.

## Results

### Quantitative findings

Over the first 5 months of the trial, the wardens called 374 people, of whom 76% were Maori, 17% were European, 4% were Pacific and ethnicity was unknown for 2%. 37% of those called were female, and 62% male. Gender was unknown for 1%. Twenty two percent were under 25 years old.

Of the 374 people that were called, the wardens successfully contacted 27% of them (100 people). For around 40% of those who were successfully contacted, contact was made after more than one attempt.



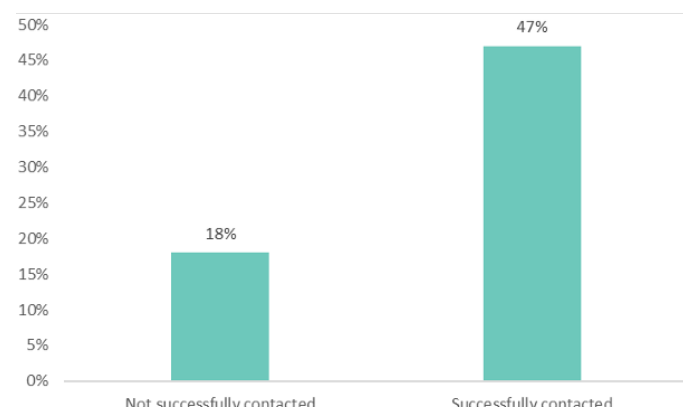
**Figure 1. Proportion of people who were called, contacted and subsequently made a voluntary appearance at court**

It appears that contact was less likely to be made with people who were Maori (24% contacted) compared with people who were non-Maori (35% contacted). This difference approaches significance.

### Finding 1: voluntary appearances

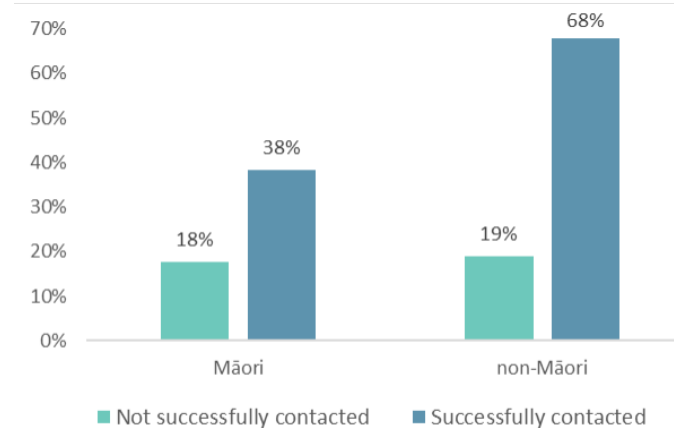
To answer research question 1, we compared voluntary appearance rates between those who were called but not successfully contacted (n=274) and those who were called and successfully contacted (n=100).

We found that for people who were successfully contacted, 47% (48 people) made a voluntary appearance within 2 weeks of being contacted. This was 29 percentage points higher than people who were not contacted (18%; 50 people). This difference is strongly statistically significant ( $p < 0.0001$ ), meaning it is very unlikely to have occurred by chance alone.



**Figure 2. Graph showing the percentage of people who made a voluntary appearance within 2 weeks of being called. This difference is statistically significant ( $p < 0.0001$ ).**

When comparing the voluntary appearance rates by ethnicity, we found that for Maori defendants, there was a 20 percentage-point increase in the rate of voluntary appearances within 2 weeks for people successfully contacted (38%), compared to those who were not contacted (18%). For non-Maori, this increase was higher (49 percentage-points; 68% compared to 19%). The difference between Maori and non-Maori defendants is statistically significant.



**Figure 4. Graph showing the percentage of people who made a voluntary appearance within 2 weeks of being called, comparing Maori defendants with non-Maori defendants. This difference is statistically significant.**

### Finding 2: Arrests

To answer research question 2, we compared arrest rates between those who were and were not successfully contacted.

We found that 8% of people who were successfully contacted by the wardens were arrested within two weeks of the call (8 people), compared to 14% of people who were not successfully contacted (38 people). While this difference is in the right direction, it is not statistically significant ( $p = 0.1081$ ), meaning we cannot rule out that it occurred by chance.

Of the eight people who were arrested within two weeks of being contacted, five did not make a voluntary appearance and three people did make a voluntary appearance at court but do not appear to have had their warrant cleared on the day.

Sample sizes were not large enough to compare arrest rates between Maori and non-Maori.

## Qualitative findings

During the trial, the wardens and local police officer wrote accounts of their phone calls and interactions with people at court. In total, 55 separate accounts were recorded between 25 March 2021 and 11 August 2021. The following key themes emerged through the process of thematic analysis.

### The experience of the defendant in relation to the wardens

#### THE WARDENS' PHONE CALLS WERE RECEIVED POSITIVELY BY MOST PEOPLE

In most cases, the defendant appeared to have either a neutral or positive experience when speaking with the wardens. Wardens reported that defendants were often “very happy with the phone call”. In a very small number of cases, the call was received less positively, but the wardens were often able to turn the conversation around:

“He was not aware of a WTA, sounded a bit angry asked why a Maori Warden was ringing him, I explained our kaupapa, then told him what to do so he said he would do a voluntary appearance at the Napier Courts straight after work today.”

#### PEOPLE FEEL SUPPORTED BY THE WARDENS' MANAAKITANGA

The wardens' accounts showed that they expressed manaakitanga in various ways. This included reassuring people when scared, offering ideas for seeking support for drug addiction, explaining the process and answering questions. They often appeared to go “above and beyond” when offering support (in one example they helped connect a defendant with a potential employer). The wardens reported that people felt reassured, thankful and at ease after speaking with them.

“One of the clients that I was able to contact last week made a voluntary appearance yesterday at our Napier Courts. She was so afraid that she would get arrested. We awhi-ed her, Zita took her to see a Duty Solicitor and when she came out she could not thank us enough and commented that she appreciated for helping our people.”

“My delivery to her made her feel worthy, putting her mind at ease and hopefully a positive outcome for her. A new court appearance has been set. She was so grateful to have the call and it gave her strength to turn up, without police arrest.”

*Continued on next page*



**MAORI WARDENS ARE TRUSTED BY PEOPLE IN THE COMMUNITY, SO THEY CAN INFLUENCE PEOPLE THAT POLICE STRUGGLE TO REACH**

Several accounts showed that defendants and their whanau have trust in the Maori Wardens. In some cases, defendants demonstrated their trust by sharing personal details about their lives with the wardens:

“I mentioned to her that there is still an outstanding WTA and it must be sorted, her reply she is aware, she has admitted that she has drug addiction and has decided to forego treatment, she simply don’t think her problem is bad enough to hit rock bottom.”

In some cases, people responded more positively once they found out that the caller was a warden:

“On the first call he hung up on me. Second call he was totally different after I told him I was a Maori Warden and the reason for my call. He was aware of a WTA, then went on to say that he was going to the Hastings Police Station for another mater and then he will pop into the Courts to make a Voluntary Appearance.”

A police officer's account shows that the wardens were able to influence people who police have found difficult to reach:

“One of the people contacted by Josie has an extensive criminal history with police and in the past has evaded police at every opportunity, which resulted in many police resources being utilised to apprehend him. When contacted he advised Josie that he would head into the Napier courts to sort his warrant out. On checking this morning, this person made a voluntary appearance yesterday arvo as per his agreement with Josie. This is a great outcome and prevented a potential risk to the community. In addition, also demonstrates the trust and confidence that our community have in the Maori Wardens. Good story to share with all.”

**The intervention's function  
SOME PEOPLE WERE ALREADY AWARE THAT THEY HAD A WARRANT TO ARREST, BUT THE PHONE CALL REMINDED THEM TO GO TO COURT AND FILLED GAPS IN THEIR UNDERSTANDING OF THE PROCESS**

Many defendants were aware of their warrant to arrest, but the warden’s phone call explained that they had to go to court. Some defendants were grateful for the explanation and reminder:

“She was aware of a WTA but unsure what to do, she was very thankful for the reminder and said that she would go straight away to make a Voluntary Appearance at the Hastings Courthouse... and thanked me again.”

**IN OTHER CASES, PEOPLE FOUND OUT ABOUT THEIR WARRANT TO ARREST THROUGH THE PHONE CALLS**

Around one in six defendants did not know there was an active warrant for their arrest before speaking with the warden. In most of these cases, they were aware of the charge but there was some confusion around the process. For example, one person said that a police officer had told her that she wouldn’t need to go to court if she paid her bill. Another said that their son (the defendant) had been to the police station recently and the police had not mentioned the warrant.

**THE WARDENS’ PRESENCE AT COURT WAS VALUABLE TO DEFENDANTS MAKING VOLUNTARY APPEARANCES**

The wardens accounts sometimes focused on interactions they had with people whilst carrying out their usual roles in court. Often, the wardens’ physical presence was important e.g. when they “awhi-ed her” or “held her hand”. It seems people responded positively to seeing them in court:

“[She] approached Josie and I upstairs at the Napier courts, she was so excited to speak to us about making the volunteer appearance”

**WHANAU CAN HELP DEFENDANTS TO MAKE VOLUNTARY APPEARANCES**

In some cases, wardens spoke with whanau members (often mothers) who expressed concern for the defendant and offered to support them to make a voluntary appearance. However not all whanau members have the best interests of defendants in mind – in one example, the defendant said that his ex-girlfriend didn’t pass on the warrant that was issued for him.

**Wider impact  
NEWS ABOUT THE WARDENS’ PHONE CALLS IS SPREADING WITHIN THE COMMUNITY**

There appears to have been a diffusion of benefits (also known as a positive spillover effect) in Whariki Haumaru i.e. the effects of the intervention are not limited to just those who were directly contacted.

The wardens and local police recorded two separate cases where a defendant made a voluntary appearance at court after speaking to whanau who had received a phone call from the wardens. Local police staff note:

“It’s clear the benefits of Whariki Haumaru are being spoken about in the community. It demonstrates that others not called by the Maori Wardens are hearing about this Kaupapa, therefore getting WTA resolved.”

This could suggest that many defendants in the community need more information and communication about warrants to arrest – not just those that were included in this pilot.

**THE TRIAL HAS STARTED TO INFLUENCE WIDER POLICE CULTURE AND PRACTICE**

Local police staff told a story that shows how the wardens’ phone calls have started to change how police think about resolving issues on the frontline. In this case, frontline officers who had heard about Whariki Haumaru called the officer working with the wardens, hoping to find an alternative to making an arrest. The officer then chose to help the man to get to court, likely due to his involvement in the trial and understanding the importance of going to court:

“I was contacted by frontline staff who were dealing with a male who had an outstanding warrant. The warrant was low level and the male responded very well to attending officers. In addition, the PST [public safety team] staff had a backlog of incidents to respond to and an arrest of the male would’ve tied them up for a few hours, once they travelled to and from Hastings. The officers were aware of Whariki Haumaru and called me for my advice before arresting the male. I advised the officers to obtain his details and I will contact him, they did this, forwarded his details to me and were able to come free to attend more urgent matters.

By dealing with the incident in this way, kept PST response in Napier at full strength and didn’t apply any further pressure on staff. The male avoided arrest, overnight stay in the cells, having to find travel back from Hastings and returned to his whanau. The male also works part time (late shift) at the hospital so would’ve missed his shift, potentially losing his job.

I called the male the following morning and he told me that he had some mental health issues and couldn’t get a hold of his case worker to provide transport to the courts. I decided to uplift him and take him to the courts. [...]

On a staff perspective, the two Constables were pleased and appreciative that an holistic approach was an option for them and spoke very highly to other staff about the pilot.”

**Discussion**

*Summary of findings*

This study has found encouraging evidence that phone calls from Maori Wardens can increase the likelihood of defendants making a voluntary appearance to clear their warrant at court. Whilst this positive finding applies to all defendant groups, the intervention appears to be somewhat less effective for Maori defendants compared to others. This is an important finding that requires further investigation. The study has also found that the intervention has promise to reduce arrests, but more research is needed to establish whether there is a statistically significant impact. Qualitative analysis supports the quantitative results and indicates manaakitanga and trust as possible reasons for why the wardens could be having a positive impact. Finally, the qualitative accounts also indicate further potential for the intervention; for example it could help shift police culture and spread positive perceptions of the justice system via word-of-mouth in communities.

*Limitations*

As aforementioned, an RCT would have been the most appropriate method to robustly evaluate the impact of this intervention. However, when planning the operationalisation of the trial it was important that no further complications were introduced. It also became apparent that active and accurate phone numbers would only be available for a small proportion of people with active WTAs, and randomising would reduce the number of people that we could contact.



This trial therefore used a non-experimental design where we compared people that could be contacted by the Maori Wardens against people who couldn't be reached. This means that the effect we found cannot be directly attributed to the intervention, as there are likely to be underlying factors which contribute to both a person's likelihood of being able to be contacted and likelihood of making a voluntary appearance. For example, people who could be contacted may have more stable employment and income, which could also make it easier for them to make a voluntary appearance.

Another limitation with this research is that the 5-month period included in the analysis yielded a relatively small sample size of people who were successfully contacted (n=100). This means it was not possible to compare between some sub-groups based on age, gender or ethnicity with enough power to find statistically significant results. Future research using larger sample sizes will enable this analysis.

Finally, it should be noted that findings regarding ethnicity should be treated with caution as we relied on ethnicity data captured within police systems. Police ethnicity data is often based on officer-reported ethnicity rather than being self-reported by defendants themselves.

Recommended next steps

Test Whariki Haumaru with a wider audience using experimental methods

Given the promising findings from this study, we recommend testing the intervention in different districts across Aotearoa. This would provide a larger sample size, allowing the intervention to be tested using experimental methods e.g. a randomised control trial. This would allow additional research questions to be explored, such as:

- How effective are phone calls from Maori Wardens compared to others e.g. police officers or other community figures?
- Can we establish causation between the intervention and voluntary appearances? Or is it simply that people who are contactable by phone have more trust in authorities (resulting in them picking up the phone), which also makes it more likely for them to go to court voluntarily?
- What impact does the intervention have on arrests? (This was explored in this study but a larger sample size is required).

Examine differences by demographics, particularly ethnicity

Whariki Haumaru was designed specifically with Maori defendants in mind. However, although we found the intervention had positive impacts for all defendants, the effects were weaker for Maori participants. The reasons for this are unknown, but possible reasons include greater challenges in making contact, and greater systemic barriers to attending court e.g. income, employment, transport. Further research, both quantitative and qualitative, is strongly recommended to examine this in more detail and inform the design of the intervention so it is as effective as possible for Maori defendants.

Test whether the intervention could encourage court appearances before WTAs are issued

Most of the defendants in this trial had active WTAs because they missed a previous court appearance. Whariki Haumaru could be used to help avoid people avoid WTAs in the first place by encouraging initial court attendance. We recommend testing this intervention at an earlier stage in the defendant's experience of the justice system, as this could have meaningful benefits for the person and the justice system.

Consider involving whanau members

Our qualitative analysis has provided some evidence that whanau members can be instrumental in encouraging defendants to go to court. This suggests that there could be potential to encourage attendance via whanau members, particularly if the defendant cannot be contacted directly. The ethicality and legality of contacting whanau members should be explored by New Zealand Police.

Conclusion

While police have a long history of partnering with local organisations to support the community, this study adds value by focusing specifically on Maori Wardens and voluntary appearances, which has not been examined before. It also highlights the potential benefits of aligning procedural justice concepts with Te Ao Maori principles by establishing a partnership between police, central government and the Maori community. We hope this study encourages others to consider this approach when designing interventions in the criminal justice system.

This study provides the first evidence that Maori Wardens can play a role in encouraging defendants to clear their WTA by voluntarily appearing at court. We strongly recommend that New Zealand Police roll out Whariki Haumaru in different districts in Aotearoa, and that they use every opportunity to explore the additional research questions referenced in this discussion. Conducting further research will enable New Zealand Police to make design improvements that bring even greater benefits to the justice system and, more importantly, its participants.

Bilateral Electronic Monitoring of High-Risk Family Violence Perpetrators in an Australian jurisdiction

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Abstract

*This study describes an evaluation of a two-year trial of bi-lateral (perpetrator and victim) electronic monitoring (EM) of high-risk family violence (FV) perpetrators in an Australian jurisdiction. This project was a multiagency collaboration between Police and the Department of Justice and involved the creation of a locally based monitoring centre. Observations of key activities, such as fitting of devices, court proceedings, and multiagency meetings, were conducted throughout the project to assess progress. Semi structured interviews (n=49) were conducted with key stakeholders and a sample of victims and offenders. Key themes emerging from the analysis were*

1. Local monitoring is working well
2. Offenders were largely compliant
3. There was a reduction in both frequency and seriousness of offending
4. Victims reported feeling safer
5. Both offenders and victims needed short term support services in conjunction with EM

*However, offenders expressed a preference for custodial options and whilst short term offending has been positive, a longer-term study is required to monitor enduring behaviour change.*

Introduction

Criminal justice systems around the world have been using electronic monitoring (EM) as a means of surveillance for offenders since first introduced in the USA in the 1980s (Erez, Ibarra & Lurie, 2004). EM usually serves as an alternative to a full-time custodial sanction, or as a requirement of parole, and allows for the monitoring of an individual via an electronic ankle tag (Black & Smith, 2003; Hucklesby et al., 2016; Padgett, Bales & Blomberg, 2006). EM was first introduced in Australia as part of promoting community-based sanctions, to decrease prison overcrowding, decrease prison building costs, and increase the chance of successful reintegration upon release (Bartels & Martinovic, 2017; Ibarra, 2005).

The most common tracking systems in EM are radio frequency (RF) and global positioning system (GPS) using satellites. RF is considerably cheaper than GPS, which tends to be used for higher risk offenders (Hucklesby et al, 2016). GPS technology enables the tracking of individuals either in real time or retrospectively and provides concrete evidence of breaching, enabling offender accountability. EM alleviates prison overcrowding without compromising public safety and allows offenders to maintain their lives in the community (Ibarra, 2005). However, EM is unable to completely prevent individuals absconding or offending. EM programs are often described as unilateral (UEM), which monitors the offender only, or bilateral (BEM), which provides monitoring for specific victims.

There are more published evaluations on UEM than BEM (Ibarra, 2005). Evaluation studies have focused on EM's value in reducing recidivism; its cost effectiveness relative to imprisonment; and legal concerns associated with implementation in different components of criminal justice (Renzema & Mayo-Wilson, 2005; Mainprize, 1992; Gibbs & King, 2003; Gies et al, 2013) – rarely entailing field observations or intensive interviewing which can obscure how EM works in specific contexts or how the context shapes implementation (Ibarra, 2005).

Electronic monitoring of family violence offenders

In circumstances of FV, EM is used for the additional purpose of victim protection, as distinct from general public safety. EM can also be used when existing options for protection orders have been exhausted – as is the case when the offender has a history of violent offences (Erez et al., 2004, Nancarrow & Modini, 2018). In FV cases, EM is beneficial as a pre-trial option as this is a volatile period in domestic violence cases when offenders frequently engage in further abuse, intimidation, and manipulation of the witness (Erez et al., 2012). Intimate relationships are a unique environment for providing opportunity for further violence and abuse.

The offender is well versed in the victim's routines and personal and social networks. They know their place of employment, the children's school, phone numbers, as well as common travel routes. This knowledge provides the abuser with a plethora of opportunities to harass, stalk, intimidate, abuse, or assault the victim in violation of protection orders. Advance warning of a violation gives a victim better chance to escape or secure her location and enables faster police response.

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The success of family violence interventions is generally measured by a decrease in subsequent physical and non-physical abuse (Holt et al., 2002). However, research advises that the measure of success should not solely be based on decreased violence, as victims consider the coercive control and emotional, financial, and psychological abuse to be more harmful than physical abuse (Westmarland, Kelly & Chalder-Mills, 2010).

It is thus imperative to include victims’ feelings of safety, sense of renewed control over their own lives, and plans for the future, as measures of success. Studies indicate that offenders enrolled in BEM programs are less likely to contact victims, and that participating victims felt an overall increased sense of safety during participation (Erez et al., 2004; Ibarra & Erez, 2005).

There are a number of published studies that informed our research. For example, the comparison study of EM in the Midwest of the US, which used RF EM that sounded an alarm if offender approached within 500ft of the victim’s address (Erez et al., 2004). The researchers found that the system was not sensitive to all encounters e.g., at court, phone calls, chance meetings, contacts by proxy, mail, florist delivery etc. There were also technical issues such as false alarms and power outages. Victims reported satisfaction with EM but expressed the need for a victim support group and a handbook that covered how the equipment worked, and the program rules that the offender must observe as sometimes they found it hard to remember the details.

Victims were allocated either a pager, duress pendant or a mobile phone pre-programmed with contacts for emergency services. The victim also had the option to carry a field monitoring device outside the home. Erez and colleagues found that many offenders will conform to the orders because they know they are monitored electronically.

Malone (2012) looked at GPS monitoring in Tennessee used as a condition of bail or after violating a protection order (with offenders categorised as seriously dangerous). The GPS is programmed with exclusion zones designated by the protection order and the victim can also have an alert device. One benefit of EM is that it creates a record that provides proof of violations. However, this was not found to be foolproof, in situations such as rural areas or commercial buildings,

signal strength can be weak, and victim remains reliant on prompt response from police for safety. Malone’s argument is that GPS should be available for offenders other than the seriously dangerous – e.g., used in conjunction with civil protection orders together with a risk assessment tool in order to make serious inroads to the domestic violence problem.

In 2016, Hucklesby and colleagues looked at five jurisdictions in Europe (Belgium, England and Wales, Germany, the Netherlands, and Scotland) in a comparative study of EM. The Belgian system uses GPS, England, Wales and Scotland use RF, and the Netherlands uses both. Belgium and the Netherlands also use EM as replacement for prison, while Germany uses it post-release. All jurisdictions reported considering broader use of GPS because of the greater flexibility and freedom for individuals while being able to monitor 24/7.

Common criticisms of GPS were short battery life and weak or inconsistent signal strength in some locations (Hucklesby et al., 2016). In the Anglo model (England, Scotland &Wales) the private sector runs all EM (procurement, installation, removal and monitoring by telephone or home visits, control rooms, reporting breaches etc) in the Euro model the private sector is responsible for procurement, software, and technical support only. This study reported that all jurisdictions were considering using BEM for FV cases.

Background

EM was introduced in this jurisdiction as part of Australia’s Women’s Safety Package -Technology Trials. Called Project Vigilance, the initiative involved the trialling of up to 100 GPS devices to track and monitor repeat, high-risk, family violence offenders. Victims, subject to eligibility criteria, could nominate to participate in the trial. BEM is in use elsewhere, for example in the UK during the bail stage (Gaskarth, 2016), and in NSW as a back-end custodial sanction for offenders with a history of FV being released into home detention following imprisonment. This trial, however, specifically targets FV offenders and utilises EM as a front-end option to accompany a court-issued Family Violence Order (FVO) and is therefore not an alternative sentencing option.

Its objectives were to increase safety to victims and their children subjected to FV; to increase perpetrator accountability; and to reduce the impacts of FV on victim and children.

Project Vigilance went live in November 2018 and finished 30 June 2020. The jurisdiction in which this research is based is considered a regional area, with limited and inconsistent cellular coverage. In some parts of the state the population is quite dense, whereas in others, people are isolated. Selecting participants who did not reside within the same suburb/township was crucial for the selection process. As EM had not previously been used in this jurisdiction, the introduction required amendments to the Family Violence Act (2004) to add electronic monitoring to existing police powers.

Perpetrators are deemed eligible for EM by Tasmania Police Family Violence Units (FVUs) across the state using selection criteria and monitored by the Department of Justice’s Monitoring and Compliance Centre (MCU). Once an FVO has been applied for by Tasmania Police, and the participant deemed suitable by the FVUs, a magistrate can order that an offender be fitted with an EM device (EMD) for the duration of their order. Victims are ‘managed’ jointly by Family Violence Counselling and Support Services (FVCSS) in the South and the FVUs in Northern and Western districts.

Methods

The evaluation employed a mixed-methods approach, using both quantitative and qualitative methods to address the overall objectives of the trial. This included observations of key activities, such as fitting of devices, court proceedings, multiagency steering committee meetings, as well as semi-structured interviews with stakeholders (n= 40), perpetrators (n=4) and victims (n=5). Quantitative data, such as breaches, offending, and victim data, was provided to the research team by the Safe Families Co-ordination Unit (SFCU) in-house analyst. Ethics approval was obtained from the University of Tasmania Human Resources Ethics Committee (Social Sciences).

A unique aspect of this evaluation was the embedding of a research assistant in the project team for the duration of the trial. The research assistant conducted weekly observations with the project team, and monthly observations with the monitoring unit once established. These observations enabled the analysis of weekly operations, interactions between project members, and discussions regarding implementation processes.

The members of the evaluation team also consulted a range of stakeholders (n=40) through semi-structured interviews, which provided rich qualitative data (Berg & Lune, 2017), about the implementation of the trial and operational strengths and weaknesses. Semi-structured interviews were also conducted with participating FV perpetrators and victims to document their experiences of EM, victims’ sense of safety, whether they viewed their participation in the program as successful or not, and any suggestions for improvements from a perpetrator and victim perspective.

Interviews were conducted between February 2018 and November 2020, and ranged from 13 to 58 minutes for stakeholders, and eight to 20 minutes for perpetrator and victim participants. Interviews were audio-recorded, transcribed, and analysed using thematic analysis (Braun & Clarke, 2013).

(See Table 1)

Table 1: Stakeholder interviews

Department	South	North	West	Total
Police	25	3	1	29
Department of Justice	2			2
Community Corrections	4			4
Victim Support	1		1	2
Prosecutions	1			1
Total	33	3	2	38

Stakeholder recruitment was facilitated by the key stakeholder, who provided names and contact details for potential interviewees. Initial contact was made via email to set up a time and place for face-to-face interviews. Purposively targeting persons with specialised knowledge (Berg & Lune, 2017),

was supplemented with snowball sampling with stakeholders nominating others who might be interested in participating in the research.

(See Table 2)

Table 2: Participant interviews

Participant type	Number of contacts provided	Contact	Interviews concluded	Percentage interviewed
Perpetrator	11	11	4	36%
Victim	11	11	5	45%
Total	22	22	9	41%

One victim was interviewed at two discrete time points

Offender and victim participants were also recruited by police, who explained the purpose of the research and obtained consent. Consent was given by eleven offenders and eleven victims. This, however, did not translate into participation in interviews with the research team, with participants not responding to attempts to schedule a telephone interview or being absent at arranged interview times.

Telephone interviews can be particularly useful when discussing sensitive topics as it provides a level of anonymity that allows participants to disclose emotional experiences without the discomfort of face-to-face interaction (Block & Erskine, 2012). It also enabled involvement from participants in locations further from the research team.

Results

A total of 76 perpetrators participated in the program with 49 perpetrators completing their EM order during the trial period (November 2018 to June 2020). Perpetrator and victim devices were active across all Police geographical districts (Southern, Northern, Western). Perpetrator participants are assessed and fitted by the FVUs and

victim participants by the FVUs in northern and western district, and by FVCSS in the south. All perpetrator participants were male. Two thirds of perpetrator participants resided in the south. The average age of perpetrators was 33 years, with ages ranging from 19 years to 56 years. Participants in the north were older on average, while those in the western region tended to be younger on average.

(See Table 3)

Table 3: Offender profile

Perpetrators	South	North	West	Total
Number	40	18	18	76
Average Age	33	38	28	33
Age Range	19-56	21-55	20-53	19-56
Completed	26	12	11	49
Current	14	6	7	27

There have been 27 victims on the program, all females. Victim participation was evenly spread across the three police districts. Eleven victims completed their involvement with EM during the trial period.

(See Table 4)

Table 4: Victim profile

Victims	South	North	West	Total
Completed	4	4	3	11
Current	6	4	6	16
Total	10	8	9	27

The challenges in recruiting perpetrator and

victim interviewees were expected and can be attributed to the ‘vulnerable’ status of those subjected to sanctions resulting from arrested and subjected to abuse respectively and is further discussed in the limitations section.

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### Incident data

An analysis of 39 perpetrators, fitted with EM for at least 6 months and still on the trial, comparing breach data across two periods: 12 months prior to EM; and the ‘trial period’ (from fitting until 30 June 2020 or when EMD was removed) indicated an overall reduction in violent incidents, particularly high-risk incidents (76%). Most incidents while on the EM program involved breaches only, such as failing to be contactable or charge the device. Violent incidents decreased by 81%; assault by 75%; psychological abuse by 81%; property damage by 74%; emotional abuse was reduced by 87%; and a 100% decrease in stalking. Nine perpetrators committed no FV incidents at all, and only 12 were involved in violent incidents.

Analysis of post-trial offending was undertaken on 26 perpetrators. On average, their EMD had been removed for 330 days, ranging from 185 to 734 days. A total of 32 FV reports had been received for twelve participants (46%), compared to 81 reports in the previous 12 months. The most common type of incident was breach of an order. There were nine instances of assault post-trial; six instances of threats, coercion, intimidation, or verbal abuse; two instances of stalking, and one instance of property damage.

### Stakeholder interview results

Successful implementation of EM programs require communication between agencies and planning with clear objectives, guidelines, and expectations. Goals and objectives, as well as roles and responsibilities, need to be well thought out and communicated to guide the process (Belur et al., 2020).

Feedback was sought from stakeholders from several agencies with experience of the EM trial, around the establishment and implementation of EM as well as day-to-day activities, such as fitting devices and communicating with perpetrators, victims, and the monitoring provider. Stakeholders agreed that using EM as a condition of an FV order, as distinct from bail or a sentencing option, is advantageous in the context of FV, as it allows for continuous monitoring from the time of the alleged crime until the end of the order, even if the victim retracts their complaint, and removes the capacity for offenders to intimidate victims to drop charges.

It was argued that using EM as a bail condition would limit the ability to control the length of monitoring, as bail provision is dependent on the crime and the victim continuing with criminal justice proceedings. Using EM as a sentencing option meant that the offender would not be monitored between the alleged crime and trial, which would carry a heightened risk for victims. The decision to attach EM as a condition of an FVO further allows for monitoring prior, during, and after court proceedings.

Interviewees reported that the project planning phase, which had included consultations with subject matter experts; market research both interstate and overseas; as well as inter- and intra-agency communication, provided valuable insights that ensured a smooth implementation process. These consultations informed decision making in relation to monitoring, response protocols, breach protocols, and eligibility criteria.

In June 2017, the three main vendors presented their products, and the devices were worn and tested by members of the project team to determine cellular coverage and quality of GPS tracking. This process enabled some of the challenges with the use of EM in the geographical context to be identified and taken into consideration in the development of response policies and protocols.

### Technology and monitoring

Stakeholders recognised the advantage that a local monitoring unit offered as it allows organisations to take responsibility for all aspects of the monitoring to ensure accountability and oversight to meet community expectations. Prior research suggest that it is preferable for governments to retain overall control over EM offender management rather than engage private enterprise due to ethical, privacy, and quality control issues that are sensitive to dilution and expansion in for-profit structures (Bartels & Martinovic, 2017; Nancarrow & Modini, 2018).

Initial monitoring, from November 2018 to April 2019, was undertaken by the vendor in the United Kingdom until the establishment of the MCU in April 2019. The implementation of a local monitoring unit in a jurisdiction without experience in EM and in an organisation that had not previously undertaken 24/7 operation was a learning process.

This included building security, such as lighting and CCTV, rostering and resourcing for shift work, as well as staff adjusting to shift work routines. Interviewees also indicated that the implementation of the Monitoring and Compliance Unit (MCU) was resource intense from a financial, human resources and management impact, which had temporary flow-on effects for the organisation.

Blackspots in GPS coverage were flagged as a potential challenge for the local geography, due to being a regional area with relatively limited and inconsistent cellular coverage, but stakeholders agree that coverage has been good overall. Loss of EM signals can affect the functioning of GPS which can cause problems for offenders (Bales et al., 2010; Baumer et al., 2008) and may result in monitoring complacency due to false alerts (Gies et al., 2013).

Blackspots were recognised as a major risk for non-compliant or high-risk perpetrators, however, lack of coverage was addressed and mitigated through risk assessment around perpetrator locations and those residing in areas with poor coverage are not deemed suitable for participation. Interviewees report that monitoring is effective and monitoring staff are willing to assist, receptive to feedback, have a good understanding of what their role entails, take pride in their work, and strive for continuous improvement.

Monitoring staff are concerned for the safety of victims, and thus appreciate feedback from police regarding outcomes from alerts. There is also a sense of pride when monitoring operators stop perpetrator behaviour. There is a solid collaborative relationship between the MCU and the project team, with regular communication between agencies. Potential concerns can be discussed and resolved quickly, and requests and information are provided promptly.

Overall, perpetrators have been compliant and look after their equipment. Interviews indicate that EM works well for perpetrators by creating accountability and an opportunity to change their behaviour, while providing victims with a breathing space, allowing them to make clear decisions that are not forced, or pressured, by perpetrators.

For example, EM facilitated the break between one victim and perpetrator, enabling the victim to recover from drug misuse, relocate, regain custody of their child, and find employment. This is consistent with research arguing that EM provides offenders with ‘time out’ to reflect (Hucklesby, 2008) and victims with an opportunity to regain control over their lives and plan for future (Erez et al., 2004; Westmarland, Kelly & Chalder-Mills, 2010).

Interviewees identified the need for support for both perpetrators and victims and raised some concerns regarding a lack thereof. Support and early intervention were recognised as imperative to change behaviour and interviewees argued that EM would be best coupled with intensive support for perpetrators and suggested a range of strategies, such as the implementation of a halfway house for FV perpetrators to receive support: counselling; support for alcohol, drugs, and mental health; short term accommodation; and food.

This is particularly important in this jurisdiction as – in practice – there is no dedicated emergency housing for FV perpetrators. Research has long recognised that sanctions work best when coupled with adequate support services for perpetrators, including rehabilitative support to change offending behaviour (Baldry et al., 2006; Borzycki & Baldry, 2003; Cullen & Gendrau, 2000; Lowenkamp & Latessa, 2005; Martinovic, 2010; Maruna & LeBel, 2003; Przybylski, 2008; Willis, 2018).

For an enduring reduction in recidivism, EM needs to be combined with treatment and social support services. Marklund and Holmberg (2009) found that the three-year recidivism rate was 26 percent for offenders subjected to RF monitoring in combination with treatment and support, compared with 28 percent for the control group (stand-alone RF). This is further corroborated by Schaefer (2019), who argues that rehabilitative, and meaningful, support and supervision is required alongside EM to alter offending behaviour.

Furthermore, interviewees acknowledged the need for additional support for victims and the benefits of involving FVCSS, who do provide support to victims, more closely as the FVUs are designed to prioritise high-risk perpetrators, rather than victims.

There was recognition that victims may not be willing to cooperate with police, due to past experiences, and that more intensive victim support services would provide better outcomes for victims. It was noted that a proportion of victims were reluctant to return their devices when the offenders EM was removed, as they had become reliant on the additional security provided. As EM protects victim’s physical safety and does not address the psychological or emotional abuse, nor cyber stalking or being approached by third parties, additional support is crucial, particularly prior to the expiration of an FVO.

### Court experience with EM

The main themes emerging from the analysis of court proceedings were that EM is working both as a surveillance measure and reducing prison populations and that inconsistencies persist in the level of understanding of EM in the court context. In the court environment, EM is frequently used as an argument by both prosecution and defence for increased surveillance.

*‘The good thing about the ankle device is that it gives me comfort that he is not going to breach it. Of course, if he takes it off it will be immediately alerted to the police, but at least I know that police are keeping an eye on him and are able to keep an eye on him. It is good for his bail application’ (Southern Magistrate, proceeding 6)*

While this indicates a positive attitude, it is important to note that EM was not intended to be used as a surety for bail in this jurisdiction, only an additional option if bail was already likely to be granted. It is possible that the intent was not widely understood by magistrates. This possibility is further evidenced by some of the inconsistencies around magistrate knowledge across districts and proceedings, that it is taking some time to achieve universal understanding of how EM works. Understandably, some magistrates had limited knowledge/experience of EM early in the trial, as evident in remarks made November 2018 to May 2019, where the magistrate asks for clarification of the situation when EMD is imposed, and bail granted:

*‘How does it practically work if it is imposed and bail is granted? Do they remain in custody until...? What would the order would be: in custody until fitted – 30-60 minutes? ... ‘How would he know if he was entering an exclusion zone if he doesn’t know the address (of victim)? He would be in breach of the order’ (Southern Magistrate, proceeding 6,)*

At times, prosecution or police officers asked for missing conditions, for example a case in May 2019 where police pointed out the inclusion of the condition to be ‘fitted prior to being released from custody’, the magistrate apologising and asking where that condition can be found (Northern Magistrate, proceeding 5) and prosecution answering, ‘it’s the first condition’. Prosecution can be seen in several proceedings to ‘educate’ both magistrates and defence as to how EM works, such as in December 2018 where the prosecution explains how the device is charged. However, some more recent recordings from January 2021 find magistrates still unsure about some aspects of EMD:

*‘Now what are the normal conditions?’ (Southern Magistrate, proceeding 13)*

While magistrates demonstrate understanding that EM can mitigate the concerns around the safety, wellbeing and interests of an affected person, there remained some perceived inconsistencies in the delivery of conditions and foundational knowledge of how EMD works, which is alleviated by prosecutors’ willingness to educate magistrates and defence barristers. As the number of perpetrators being subjected to EM is below 100 at the time of writing, it is likely that any inconsistency stems from lack of exposure to FVOs with EM conditions which can be remedied with additional training for court members.

*Continued on next page*



Offender experience

Our results suggest that some perpetrators do not fully grasp the extent of the impact of electronic monitoring. For example, at the beginning of the trial, the project team would receive phone calls from participants seeking clarification on various aspects of the program (such as further instructions on how to charge the device) despite having received verbal and written information during fitting of the EM device.

Fitting staff suggested a likely link to a heightened emotional state, predominantly excitement, at the prospect of avoiding incarceration. Some perpetrators did not comprehend the 24/7 nature of monitoring until they were intercepted by police or called by the project team where conversations about their whereabouts ensued. Poor understanding of the program was addressed in mid-2019 by implementing follow-up phone calls to ensure that participants understood instructions and to see if they had any questions.

Apart from confusion about the program the other common theme was frustration about keeping the device charged. They were critical about erratic charging times and accelerating draining when in a low range location:

*I'm constantly hounded cos it's flat. I'm living in an area where coverage isn't good. I can't get a signal so constantly hounded. I got approval from the Court to move here but this has meant constant harassment with phone and text messages. It drives me nuts. Once I get back into the coverage zone, it downloads the data and the phone goes off. I get harassed for not charging when I've got the charger on. I've got to the point where I don't want to leave the house (P3)*

Participants also reported finding the EM device to be cumbersome and somewhat stigmatising to wear:

*It's easy to conceal but it could be smaller. When you're training, it rubs. Rubbed all the hair off my ankle. Feels like a ball and chain (P2)*

*You have to hide it from your employer (P4)*

The interviewees accepted the exclusion zone on the whole but commented that the lack of flexibility of movement impacted on their life outside their relationship with the victim:

*It doesn't restrict me. But my ex is no longer in [name of suburb] but I can't go and see family there cos it's excluded and I've told them but they've not amended it.... Said they would look into it but it hasn't happened (P1)*

*I went inside the zone and nearly breached it. I was working, packing up a house, and the police walked down the drive and "you've just breached", and I lost the job over it (P2)*

Three of the four interviewees stressed they would not opt for a monitoring device in the future:

*No way (would he go on the program again), I'd sooner go to jail (P3)*

*I wouldn't do it again. I've actually lost my job over it (P2)*

*It's not worth it. I'd rather go to jail. It took me 3-4 months to get used to it, now I'm completely over it (P1)*

However, P1 goes on to say:

*It's actually quietened me down a lot. I know what I've done wrong. I know I've created the issue. I'm trying to get help, counselling. I hit the drugs pretty hard and I've been to a couple of places but it's just so hard to get in. I've rung all these places but I can't get in. I thought I was starting one but he didn't get back to me. I want to get all the help I can. The Court wants me to do them but I can't get in (P1)*

Another reflected on his experience by commenting:

*It's made me a lot stronger, to be able to relate to bail conditions and stuff like that. It's been a help to me. It's better than prison and proves you can change (to the Court) (P4)*

A number of men interviewed mentioned they would like more support to understand their use of violence and skills to cease their behaviour. Increased access to programs is seen as a worthy value-add to electronic monitoring:

*I would need programs, help, and support. You get depressed when you're on curfew for 12 months (P2)*

It was notable that the participants with family support e.g., a parent, seemed to cope better with EM, including encouragement to use the time to change their behaviour. Socially and geographically isolated participants were more anxious and fractious during interview.

Victim experience

Overall, they found their device easy to use, although they had the same issues as offenders regarding charging and retaining charge in that the further they were from the mast, the more quickly it drained. They all discussed their experience with the offender's testing of boundaries. However, they all saw how quickly police responded and felt much more supported by police because the offender was being monitored:

*So, [the police sergeant] said don't feel safe with the device, please still be alert, ... because I've been watching this device and what's been going on and she said I believe he's [testing] his boundaries, that's why I felt safe with it. .... I could go out and they'll let me know if he's nearby. When she said that, that scared me and if I didn't have it, I wouldn't have known [that] he could have been stalking me and I'd have no idea. So, it did help me to do my job, you know (V1).*

They all felt safer and appreciated being able to live a more normal life:

*at least I know like we're safe. He can't just walk up to us now because I'd be notified before sort of it got to that, that he couldn't walk up and just take [my child] or anything like that anymore (V3).*

But they all said that EM was not an end in itself and that offenders needed more support in order to change their behaviour in the long term:

*He's very sneaky, so I have no doubt that once it's off, he'll go back to what he was doing before... That's what I'm most nervous about, is when that thing comes off, then I don't know where he is (V3).*

*It appears that that's [the previous behaviour has] slowly crept back in and it happened quite quickly. So, quite quickly, just he's hanging around on the fringes, or turning up when he knows I'm at certain places, that sort of thing. I guess that's the big change, is that sort of we've had to go back to that really keeping good records, watching where we are, that sort of stuff again (V2).*

Limitations of the study

This study was affected by the following limitations: small number of victims and offenders agreeing to participate in the study; lack of data from the Magistrates Court; and challenges due to the Covid-19 pandemic.

Challenges in recruiting perpetrator and victim interviewees are not unique to this project. Victims and perpetrators of family violence are considered 'vulnerable populations', in part due to having been subjected to abuse and being subject to sanctions resulting from arrest respectively (Dutton et al., 2003. Participants, having agreed to participate in the research when enquiries were made by Police, declined to participate when approached by the research team.

This could be due to participant investment in the police perception of compliance. Dutton et al. (2003) identify several problems with engaging vulnerable participants in research including physical, social, psychological, and other health-related issues preventing participation; safety issues; and traumatic/emotional stress post-abuse. There are many benefits gained from sharing experiences with an interested listener, including therapeutic benefits and a sense of empowerment from having their voices heard (Alexander et al., 2018).

However, the knowledge that the interview will be about a sensitive topic may be a barrier to engaging in the research.

Discussing experience of past family violence has the potential to elicit powerful emotional responses such as anger, sadness, shame or embarrassment, stigma, fear or anxiety. The tendency of males to feel shame in the presence of other males in particular may have impacted on perpetrators' willingness to be interviewed by male researchers (Gainey & Payne, 2000; Gibbs & King, 2003; Vanhaelemesch et al., 2014).

A further barrier to participation is that the request for interview may be interpreted as a further means of surveillance. Participants may feel that they are being scrutinised and thus are not comfortable in discussing their experience to researchers. All these barriers illustrate why informed consent is so important for the ethical conduct of research. The research team chose to use telephone interviews because the technique provided participants with the opportunity to disclose experiences without the discomfort of the close proximity of another person; it also allowed involvement from trial participants in areas distant from the research team. However, it was clear that many potential participants had not understood that the interview would be via telephone. It is unclear whether stronger emphasis on the mode of participation would have improved uptake, but this warrants consideration for further research with these groups.

It was expected that the evaluation would be informed by data from the Magistrates Court (and interviews with Magistrates). However, the type of information we were interested in was not available in accessible format and so the option of listening and transcribing recordings of proceedings where magistrates commented on their decision to use EMD as part of bail conditions was enlisted.

The research was impacted by COVID-19. Observations were put on hold from mid-March 2020 and resumed in June 2020. During this time, the project team updated the research team through monthly Webex/ phone meetings. Prior to lockdown, weekly observations were undertaken at the Business Improvement Unit (BIU) alongside monthly observations at the Monitoring and Compliance Unit (MCU). COVID-19 has thus had a significant impact on both observations and interviews.

We might also speculate that the uncertainty relating to COVID-19 may also have increased participant stress levels and anxiety about participating in interviews.

Conclusion

The present study represents an evaluation of BEM in Australia which included establishment of a government-led monitoring service. Key findings included general enthusiasm toward the program from project stakeholders, as well as increases in victims' confidence and feelings of safety in their social activities and community participation. Offenders were less satisfied with BEM, noting stigma and that electronic monitoring was more onerous than incarceration. However, offending was significantly reduced during the EM program. The evaluation found that while resource intensive, the introduction of EM for high-risk family violence offenders showed evidence of success. Further investments were required for governance of EM within the lead agency and also for support mechanisms to facilitate behaviour change with offenders and offer victims ongoing support. This project concentrated on short term outcomes and so further quantitative work with a larger sample of both male and female victims may strengthen conclusions regarding effectiveness and extent of the capacity of EM to improve the safety of adult and child victims.

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**Ron Frey (PhD)** is a developmental psychologist who lectured on developmental psychology, trauma, human sexuality, and the psychology of gender for 30 years in the School of Psychology and Counselling at the Queensland University). Since re-locating to Tasmania in 2017, he has written a training manual for men who use violence on the impact of DFV on children as part of a project with TILES and the Salvation Army (Start Today Again, 2018), and co-authored with Dr. Romy Winter, a workshop on Working with Men Who Use Violence for the DV-Alert series of workshops under the National Plan to Reduce Violence Against Women and Children.

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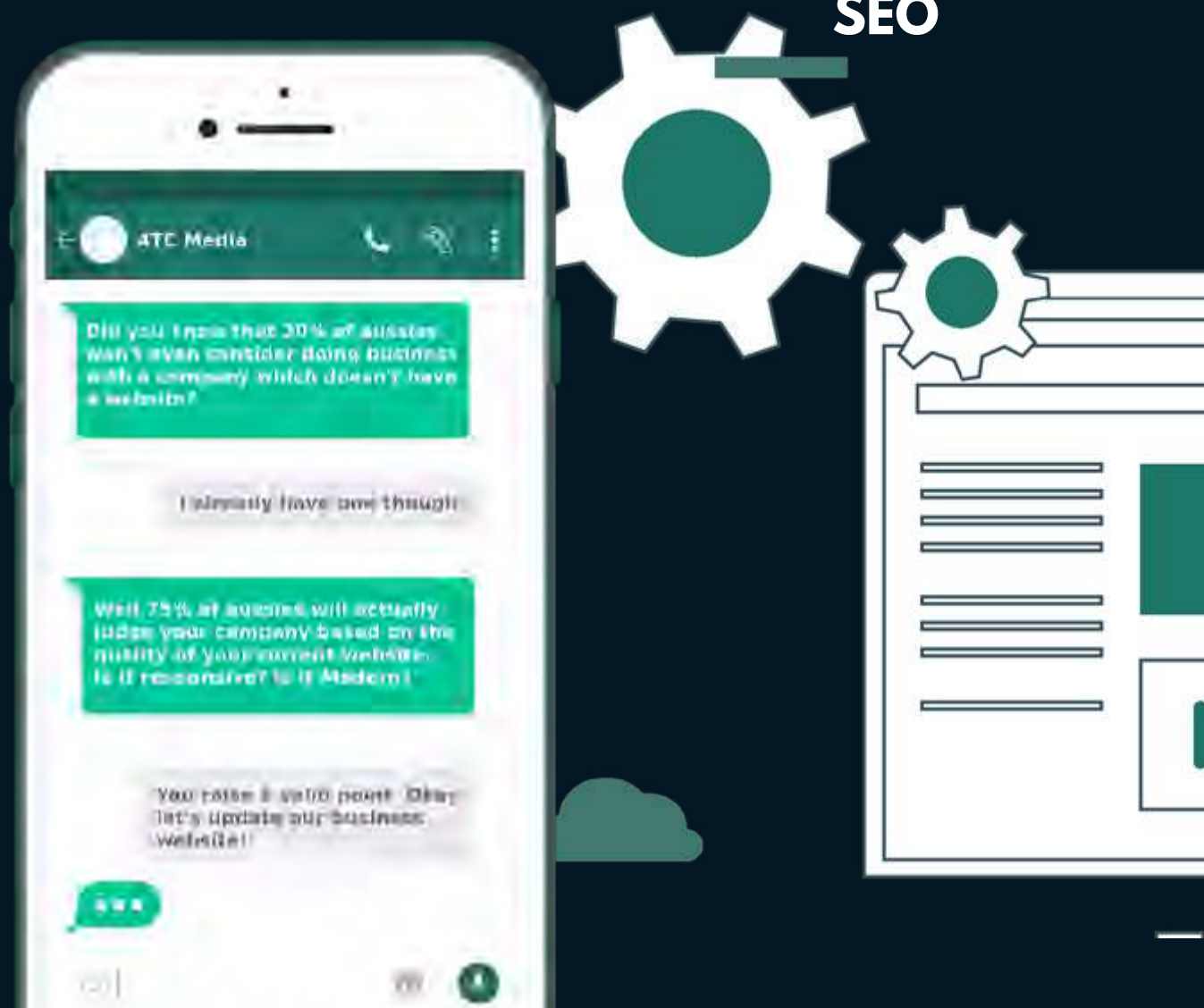


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