An Evaluation of the Impact of Australia's First Community Notification Scheme

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In 2012, one Australian state became the first jurisdiction in Australasia to introduce a scheme that allows information about registered sex offenders to be released to the public. This study seeks to better understand the impact of the scheme from the perspective of the police. An analysis of interviews with police officers responsible for the administration of the scheme is supplemented with an analysis of official data relevant to its implementation. The results provide little evidence that the concerns voiced by the police about the introduction of community notification have been realised. There is no consistent view that it has significantly increased the workload of the police responsible for its management, impacted adversely on offenders' psychological well-being, led to vigilantism or resulted in offenders' non-compliance with reporting obligations. The findings of this study may usefully inform the development of policy and practice in places that are considering introducing similar policies.

Keywords: community disclosure; community notification; Daniel's Law; Megan's Law; notification; public disclosure; public notification; sex offender register.

Introduction

In 1990 the Washington State Legislature enacted a bill introducing a raft of new measures targeting sex offenders. These include the provision to release information about known sex offenders to the general public, or what is termed 'community notification' (but popularly known as 'Megan's Law'; Lasher & McGrath, 2012; Meloy, Saleh, & Wolff, 2007). In quick succession, other states followed Washington's lead (Logan, 2011), often in response to community lobbying in the wake of high-profile sex crimes against children (Levenson, 2003; Petrunik, 2003; Thompson & Greek, 2010). Significant pressure to adopt community notification legislation was also applied at the federal level, with states being penalised

financially for failing to do so (Levenson, 2003; Meloy et al., 2007; Thompson & Greek, 2010). Since 2003 all states have been federally mandated to maintain a publicly accessible online sex offender register that feeds into a national register (Appelbaum, 2008; Levenson, D'Amora, & Hern, 2007). The information that is made available to the public varies from state to state but typically includes the offender's name, date of birth and address, details of past convictions, and a photograph and physical description at the very least (for a descriptive analysis of the content of state-based online sex offender registries, see Ackerman, Harris, Levenson, & Zgoba, 2011).

Other countries have been much slower to adopt these measures. Until recent years, the

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only country other than the United States to have implemented a community notification scheme was South Korea (Logan, 2011; Vess, Langskaill, Day, Powell, & Graffam, 2011).¹ In the United Kingdom, however, public campaigning for community notification gained significant momentum following the highly publicised abduction and murder of 8-year-old Sarah Payne committed by a convicted sex offender in 2000 (Dean, 2000; Logan, 2011). Although the home office resisted sustained media and community pressure to introduce a public sex offender register akin to those that exist in the United States, it did introduce a 'limited disclosure' scheme in 2010 (Kemshall & Wood, 2010; see also Kemshall, Kelly, & Wilkinson, 2012; Kemshall & Weaver, 2012). Shortly thereafter, the Scottish government followed suit, introducing an almost identical scheme (Chan, Homes, Murray, & Treanor, 2010). Under both schemes, parents and guardians² can enquire about a particular individual who has unsupervised contact with their child or children. If the subject of an application is found to be a registered sex offender, police are authorised to disclose this to the applicant.

In 2012, one Australian state became the first jurisdiction in Australasia to introduce community notification, fulfilling an election promise made in response to prolonged public outcry following the highly publicised 2006 sexual homicide of a 7-year-old girl (Trenwith, 2012). The scheme is broader than those implemented in the United Kingdom, but more limited and controlled than those that operate in the United States, comprising a 'three-tiered' scheme that incorporates elements of both. The first tier pertains to offenders who have failed to comply with their reporting obligations or who have provided false or misleading information, and whose whereabouts are unknown to police. Their name, gender and date of birth, along with a photograph and physical description, are published on an online register that can be viewed by anyone. The second tier allows members of the public to perform a search that will return the photographs of dangerous,

high-risk and recidivist offenders who reside in close proximity to them. The criteria are restricted and capture only a small proportion (less than 5%) of registered sex offenders. The third tier is modelled on the schemes introduced in the United Kingdom that allows parents and guardians to enquire whether a particular individual who has unsupervised contact with their child or children is a registered sex offender.

In one of the few analyses of this Australian initiative, Whitting, Day, and Powell (2016) conducted in-depth interviews with 21 specialist police officers employed in the squad responsible for managing the scheme shortly after it came into effect. Those interviewed voiced a wide range of concerns relating to the scheme's possible impact on the agency, offenders, victims and the broader community. They expressed concerns that the introduction of the scheme would significantly increase their workload, impact adversely on offenders' psychological well-being, lead to vigilantism, and potentially reduce offenders' compliance with reporting obligations. The current study seeks to understand better how police officers view the actual impact of the scheme and, more specifically, determine whether or not their major concerns have been realised. To contextualise and aid the interpretation of the analysis, descriptive data on the operation of the scheme are reported, including a demographic profile of those subjected to notification. The findings of this study may usefully inform the development of policy and practice in other jurisdictions that are considering introducing community notification schemes.

Method

Design and Procedure

A mixed methods design (see Creswell, 2014; Tashakkori & Teddlie, 2010) is used in this study. Interview data with police officers working in the squad responsible for managing the scheme are supplemented with quantitative and qualitative data recorded in police

databases. This design is deemed most appropriate, as some of the research questions lend themselves to a qualitative approach whereas others cannot be adequately addressed with qualitative data alone. Clearance for this project was received from a university human research ethics committee and from the police agency research unit.

Interviews

An email was sent to all staff within the squad, inviting them to take part in an interview. Prospective participants were encouraged to contact the first author to find out more about the study and arrange a suitable time to be interviewed. Managerial staff also informally identified particular individuals who they believed would be good candidates on account of their knowledge, experience, and/or interest in research, and these individuals were approached in person and invited to take part. All prospective participants were made aware that participation is voluntary and provided informed, written consent.

All interviews were conducted by the first author. Eighteen interviews were conducted in person at the participants' workplace during April 2013 (six months after the scheme came into effect), and three interviews were conducted via telephone in August 2013 (these participants were not available when the face-to-face interviews were conducted). The interviews were semi-structured. Broad open-ended questions were asked to elicit participants' perceptions of the scheme. A conversational style of interviewing was adopted which allowed the interviewer the freedom and flexibility to pursue any lines of inquiry that arose as a result of participants' comments (see Mason, 2002).

All interviews were audio-recorded and transcribed verbatim. After being double-checked for accuracy, the transcripts were imported into the software program QSR International's NVivo10, which was used to organise and interrogate the data. The six phases of thematic analysis delineated by

Braun and Clarke (2006) were followed. Quotations are provided to illustrate key themes that emerged from the data. Any details that could potentially lead to the identification of individual participants has been removed from quotations, and minor grammatical changes have been made where appropriate to improve readability.

Data Extraction

The police agency provided de-identified quantitative and qualitative data that are routinely collected as part of their usual data collection and reporting practices, in addition to data in relation to the community notification scheme that were specifically requested for this study. The data were extracted from various internal databases and Google Analytics (a web analytics tool that tracks website traffic). Data linkage and cleaning was initially performed in Excel. The data were provided in password-protected Excel files. The primary data set comprises 2047 of the 2426 offenders (84.38%) who committed an offence that resulted in them becoming a 'reportable offender'³ prior to 1 September 2013⁴ and contains demographic and offence-related variables for all recorded convictions between 1 January 1998 and 30 June 2014. The dataset originally contained 17,006 rows where each row represented an offence, although each offence could have multiple counts. The data were then manually imported into IBM SPSS v23 for the purposes of further data cleaning and analysis. The data were aggregated such that each row represents an offender, rather than an offence, which reduced the total number of rows to 2047.

Participants

Participants were drawn from a specialist police squad responsible for coordinating the ongoing management, registration, and monitoring of sex offenders residing in the community, as well as managing the community notification scheme. A total of 21 police

personnel (17 males) volunteered to take part in an interview, representing just over one third of the entire squad. The sample is heterogeneous and comprises of sworn officers of various ranks, as well as a few unsworn officers. Participants had between 3 and nearly 40 years' policing experience ($M = 18.07$ years, $SD = 12.00$). Tenure of employment within the squad ranged from 5 months to approximately 8 years (when the squad was formed). The majority of participants (81%) were frontline staff who had regular contact with sex offenders as part of their role. Half were compliance officers, a role that entails managing a caseload of offenders and ensuring that they comply with their reporting obligations. The rest of the sample comprises inquiry officers whose primary responsibility is to locate missing offenders, officers with the sole responsibility of managing those legally designated as 'Dangerous Sexual Offenders' (DSOs), an officer in a dedicated role responsible for managing the scheme, an intelligence analyst, and an administrator. Participants had experience of working with sex offenders ranging from 7 months to 11 years ($M = 4.61$ years, $SD = 3.09$).

Results

The results section is divided into five subsections. The first presents some basic descriptive data and a demographic profile of those who have been subjected to notification. The remaining subsections are centred around four key concerns reported by Whitting et al. (2016) about the impact of the introduction of the scheme on: the workload of the police; offenders' psychological well-being; vigilantism; and offenders' compliance with their reporting obligations.

What are the Characteristics of the Offenders Subjected to Notification?

In total, 39 offenders were subjected to tier one notification between 15 October 2012 (when the website went live) and 27 February 2015.⁵ Of these, 6 were subjected to tier one

notification on more than one occasion during this period (4 offenders were subjected to notification on two separate occasions and 2 offenders were subjected to notification on four occasions). As at 27 February 2015, 6 offenders remained on the missing offenders register (i.e., tier one).⁶ Excluding these offenders, those subjected to tier one notification were published on the register for between 1 day and 740 days ($M = 54.40$ days, $SD = 116.11$).

Within this same period, 86 offenders were deemed to meet the tier two criteria and thus were potentially subject to notification (as notification in this case is contingent upon a member of the public who resides in the same locality as the offender performing a local search).⁷ Of these, 5 were also subjected to tier one notification (which involves the release of more personal details about the offender) for a period of time. As at 27 February 2015, only 1 offender had been subjected to tier three notification (see the next section for further information).

Table 1 compares offenders subjected to notification (broken down by tier) with those not subjected to notification on a range of demographic variables: age, gender, Indigenous status,⁸ relationship status, DSO status,⁹ risk level according to the risk assessment tool used by the police agency (the Risk Matrix 2000 [RM2000]; Thornton et al., 2003), and the period of time that the offender must comply with legislative requirements governing registered reportable offenders (this is prescribed by legislation). Where appropriate, significance tests are reported comparing those subjected to tier one notification with those not subjected to notification of any kind, and those subjected to tier two notification with those not subjected to notification of any kind.¹⁰

Levene's test of homogeneity of variance indicates that the variances in age for the group subjected to tier one notification and the group not subjected to notification are unequal, $F(1, 1947) = 11.87$, $p < .001$. In light of this, a non-parametric Mann–

Table 1. Comparison of offenders subjected to notification and offenders not subjected to notification.

	Subjected		Not subjected
	Tier 1 (<i>n</i> = 39)	Tier 2 (<i>n</i> = 86)	(<i>n</i> = 1,927)
Mean age ^a	34.7***	44.3	44.1
Gender (% male)	100.0	98.8	98.3
Indigenous status (% Indigenous) ^b	56.4***	34.9***	15.5
Relationship status (% ever married/de facto) ^c	48.3	45.9	51.9
DSO status (% DSO)	0.0	30.2***	1.2 ^d
Risk level ^e			
Low (%)	5.1	1.2	28.8
Medium (%)	48.7	22.9	52.9
High (%)	25.6	37.3	14.6
Very High (%)	20.5	38.6	3.8
Mean registration length (years)	27.4***	66.7***	14.5

Note: *** $p < .001$; ^aAs at 27 February 2015; ^bDerived from the offender's stated ethnicity and their ethnic appearance recorded by police; ^cAt the time of sentencing, with the note that a substantial proportion of cases (30.09%) have missing data and as such these figures should be interpreted with caution; ^dThese individuals were not subjected to notification despite being DSOs because there was a suppression order in place or they were returned to custody; ^eMost current risk level according to the Risk Matrix 2000 (Thornton et al., 2003), the risk assessment tool used by the police agency. DSO = persons legally designated as Dangerous Sexual Offenders pursuant to relevant legislation.

Whitney test was conducted to test the relationship between age and tier one notification. This revealed that those subjected to tier one notification were significantly younger ($Mdn = 31.72$ years) than those not subjected to notification ($Mdn = 42.83$ years), $U = 25,268.00$, $z = -3.51$, $p < .001$, $r = -.08$. The assumption of homogeneity of variance was met for the comparison between the group subjected to tier two notification and the group not subjected to notification, $F(1, 1988) = 0.30$, $p = .583$. An independent-samples t -test revealed that there is no significant difference in age between those subjected to tier two notification ($M = 44.3$ years) and those not subjected to notification ($M = 44.4$ years), $t(2011) = -0.11$, $p = .913$.

The distribution of registration length violates the assumptions of normality¹¹ and homogeneity of variance.¹² As such, separate Mann–Whitney tests were conducted to test the significance of the relationship between registration length and notification. Offenders subjected to tier one notification were found to have a significantly longer period of

registration ($Mdn = 15.00$, $M = 27.05$ years) compared to those not subjected to notification ($Mdn = 15.00$, $M = 14.37$ years), $U = 27,566.00$, $z = -3.30$, $p < .001$, $r = -.07$, as is the case with offenders subjected to tier two notification ($Mdn = 100.00$, $M = 66.35$ years), $U = 26,465.00$, $z = -11.62$, $p < .001$, $r = -.26$.

Pearson's chi-square or Fisher's exact tests were performed, where appropriate, to test the significance of the relationship between each of the categorical variables and notification. The small number of females and DSOs resulted in a violation of the chi-square assumption that the expected frequency of each cell should be greater than 5 (Field, 2009). For both gender and DSO status, one cell of the 2×2 contingency table comparing those subjected to tier one notification with those not subjected to notification was below 1. As such, significance testing was not appropriate, as there is no test or correction that is suitable in instances where the expected frequency for a cell is less than 1 (Campbell, 2007). For both gender and DSO

status, all cells of the 2×2 contingency table comparing those subjected to tier two notification with those not subjected to notification were greater than 1. Campbell (2007) recommends Fisher's exact test when all cells have an expected frequency greater than 1 but at least one cell has an expected frequency below 5. For the analysis of gender, Fisher's exact test was not significant ($p = 1.00$), which indicates that the null hypothesis that gender and tier two notification are independent should be retained. However, for the analysis of DSO status, Fisher's exact test was significant ($p < .001$), indicating that there is a relationship between DSO status and tier two notification. Examination of the frequencies indicates that DSOs have an increased probability of being subjected to tier two notification. This is to be expected, given that all DSOs in the community are subject to tier two notification unless there is a suppression order in place.

Separate chi-square tests revealed that there is a significant association between Indigenous status and tier one notification, $\chi^2(1) = 46.71$, $p < .001$, $\phi = .16$, and between Indigenous status and tier two notification, $\chi^2(1) = 22.53$, $p < .001$, $\phi = .11$. Indigenous offenders are 6.91 times more likely to be subjected to tier one notification and 2.94 times more likely to be subjected to tier two notification than non-Indigenous offenders. In view of the fact that risk level can be considered an ordinal variable with four levels, the chi-square for linearity was computed by subtracting the ordinal (linear) chi-square value from the Pearson chi-square value (see Agresti, 2007, 2013; Howell, 2013). For both sets of comparisons (tier 1 vs no notification and tier 2 vs no notification), one cell (12.5%) had an expected frequency of less than 5; however, this was deemed to be acceptable given that the ordinal chi-square is less sensitive to the negative effects of having a small sample size (Agresti, 2007, 2013; Howell, 2013). Furthermore, it is generally considered 'acceptable in larger contingency tables to have up to 20% of expected

frequencies below 5' (Field, 2009, p. 692), provided that all expected frequencies are greater than 1, which is the case for both comparisons. The association between risk level and tier one notification is significant, $\chi^2(2) = 6.65$, $p < .05$, as is the association between risk level and tier two notification, $\chi^2(2) = 66.57$, $p < .001$. Offenders subjected to notification (be it tier one or tier two) are higher risk than those not subjected to notification. The effect sizes indicate that the relationship between risk and tier one notification is small, whilst the relationship between risk and tier two notification is moderate (Cramer's $V = .14$ and $.35$, respectively; J. Cohen, 1988).

It was deemed inappropriate to test the significance of the association between relationship status and notification in light of the substantial proportion of cases (30.09%) missing relationship status and the result of the Little's MCAR test indicating that the data are not missing completely at random, $\chi^2(74) = 1194.68$, $p < .001$.

Has the Introduction of the Scheme Significantly Increased the Workload of the Police Officers Who Are Responsible for Managing It?

The police officers interviewed who were directly involved in the implementation of the scheme reported that it created a fairly substantial amount of work in the development of new policies, processes, and procedures. The roll-out of tier two was identified as being particularly labour intensive on account of having to determine which offenders should be subjected to notification and seeking the necessary approval:

There's quite a lot of work that's got to be done to put a person on tier two [...]. It's quite an involved process to put [forward] the application for the AC [Assistant Commissioner] to sign, and we can't put anyone on there without the approval of the AC, and you have to go through that step with every single person. (P5)

Those involved in the scheme's implementation reported that they were inundated with enquiries when the website was launched, the vast majority of which related to the local search function (i.e., tier two). One participant who had oversight for the scheme's implementation reported that four to five staff were employed on a full-time basis during the implementation phase to manage the influx of enquiries. It was, however, noted that the workload associated with tier two was much reduced due to the streamlining and automation of processes, coupled with a significant decline in the volume of enquiries received. Similarly, the workload associated with tier three was noted to be considerably less than anticipated on account of the fact that so few applications had been received. According to P5, 'an influx' of up to 50 applications had been expected, but at the time the interviews were conducted, only 4 applications had been received, none of which had led to a disclosure:

We anticipated it would [increase our workload]. We anticipated that that's what would happen, and we got more staff to cater for that, but it just didn't eventuate because so much of it was going to be based upon the applications from the community to get the information on these people that have access to their kids, and that's just not working because it's too complicated, so we've had very few applications. (P19)

Indeed, underlying these observations was a perception that the scheme as a whole, but particularly the disclosure scheme (tier three), was under-utilised by the public. There was a divergence of opinion with respect to the extent to which this was viewed as a positive or negative outcome. On the one hand, participants expressed relief that the volume of enquiries and applications was significantly less than projected, insofar as their concerns regarding increased workload had not come to fruition. On the other hand, participants expressed disappointment in the public response, with some suggesting that

the scheme could be better promoted. The perceived low uptake of the scheme by the public led some to question whether the investment of resources was justified:

When [the website] was first launched in October last year, there were God knows how many 'hits' on the website; inundated on day one, and then day two there were still a lot, and day three not a lot – it was out of the news; it wasn't topical any more; it wasn't the thing of the moment. And then everything that we thought would come out of it actually dropped off, and people don't actually have that much interest in it any more. (P11)

I don't know how many people have actually looked at the public register, but I know the figures are quite low [...]. And it's been publicised through the media so I don't really know what more you can do [...]. It's only as good as the people that look at it, that's the unfortunate thing. (P17)

I think for the public it's a total waste of time [...]. I think the public really haven't shown that much interest in it. I don't really know but I don't think there's been a lot of searches on there, enough that warrant it to be, say, successful from that side of it. But [...] it's quite a good tool for us. (P14)

By the time the interviews were conducted, only two full-time staff remained in dedicated roles with a responsibility for managing the scheme. The introduction of the scheme was perceived to have had a minimal impact on the day-to-day workload of those not directly involved in its implementation or operation. The impacts most commonly cited by those without direct involvement were having to allay offenders' anxieties when it first came into effect, having to notify offenders subject to notification pursuant to tier two, and creating 'extraction plans' for these offenders to be enacted in the event of vigilantism.

It has caused a little bit extra work, but not as much as I actually thought it would do [...]. Initially, when it first came out we had

quite a few [offenders] who were going on to the tier two as part of our team, so we had to, I had to work with a couple of extraction plans, just the paperwork side of it, that sort of stuff. It just caused a little more work, but nothing overly hard. (P15)

I don't know that it's really had any [impact] at all. No, I mean, at first they thought it would create a lot of work but it hasn't. (P20)

The data provided by the police agency indicates that there were 182,475 hits on the community notification website between 15 October 2012 (when it went live) and 27 February 2015. Over this period, 36,837 tier two searches were performed¹³ and 892 enquiries or requests for assistance were received (542 via the website and 350 via email), the vast majority of which were in relation to tier two. It is not known how many telephone enquiries were received, as no record is kept of these. Unfortunately, as only the total number of hits, searches, and enquiries were provided, it is not possible to examine trends in usage over time.

Ten tier three applications had been received as at 27 February 2015; however, two of these were duplicates of previously submitted applications and one was withdrawn because the applicant discovered

through other means that the person of interest (an associate of her ex-husband) is a convicted sex offender. As can be seen from Table 2, the seven applications that proceeded took between 1 and 13 days to finalise ($M = 5.86$ days, $SD = 5.30$). Only one of the persons of interest was found to be a reportable offender, and this was disclosed to the applicant in writing.

Overall, whilst the scheme was evidently resource-intensive to implement, with the exception of two staff members in dedicated roles it does not appear to have had a significant impact on the day-to-day workload of staff. The impact being less than anticipated may be explained by the apparent low uptake of the scheme and, in particular, the small number of tier three applications received.

Has the Scheme Adversely Impacted on Offenders' Psychological Well-being?

The introduction of the scheme was evidently anxiety-provoking for many offenders, with participants reporting that they were 'inundated' with enquiries from distressed offenders when the scheme first came into effect. Several participants remarked that the offenders who seemed most anxious about it

Table 2. Tier three applications received as at 27 February 2015.

Applicant's relationship to child	Applicant's relationship to person of interest (POI)	Outcome of application	Time taken to finalise
Mother	Ex-husband's brother (i.e., ex-brother-in-law)	Not an RO	1 day
Father	Current partner of applicant's mother	Not an RO	1 day
Mother	Applicant's father	Not an RO	3 days
Not a parent/ guardian ^a	Unrelated (POI was a scout leader)	Not an RO	2 days
Mother	An associate of ex-husband	Withdrawn	N/A
Mother	Ex-partner	Not an RO	12 days
Father	Ex-wife's current husband	Not an RO	9 days
Father	Ex-wife's father (i.e., ex-father-in-law)	POI was an RO, disclosure made	13 days

Note: ^aThis person was not eligible to make an application due to not being the parent or guardian of a child or children. RO = reportable offender.

were those who were *not* subjected to notification (at least not tiers one or two).

There were a lot of questions from offenders when it was being talked about. They all thought they were going to be on [the public register]. That caused a lot of panic amongst them. The ones who'd been reporting for 6 to 7 years, never had an issue, never offended since, they were all getting in a bit of a panic. But we knew pretty early [on] it wasn't going to be that vast; it was going to be a narrow group of people. (P1)

Psychologically, it's had an impact on the offenders because they were all very concerned leading up to the introduction of it. I know they were very concerned and we were getting inundated with phone calls, but that was through ignorance on their behalf as to what was actually going to happen. But it was having a big impact on them. There were people talking about [committing suicide or] moving interstate. (P6)

It would appear that the distress and anxiety reportedly experienced by offenders was produced – or exacerbated – by misinformation surrounding the scheme and uncertainty on the part of offenders regarding how the scheme would affect them. It emerged from the interviews that there was a widely-held misconception among offenders (and indeed among members of the general public) that the scheme was akin to those that exist in the United States. Participants speculated that media misreporting created and perpetuated this misconception, which led to offenders wrongly assuming that they would be identified on the public register. Participants reported that providing offenders with a full explanation of the scheme, responding to their queries, and, where appropriate, providing reassurance that the scheme was unlikely to affect them, often allayed their anxieties:

A lot of offenders lost sleep prior to being [told] what it was all about because there's always a media misconception. Once most of them had it explained to them they were like, 'Yeah cool, I'm not going on it'. That

was the biggest issue for most who weren't going on it; the thought they may do. (P15)

I think initially a lot of them thought, 'Oh, we're straight going to be published, our picture is going to be out there, everyone is going to know where we live'. But once it's explained how they can end up there, either by whereabouts unknown or reoffending, then I think they're quite fine with it, a lot of them, because they know that [...] they won't end up on there. (P7)

The way that it's been set up, the offenders that have gone on the register are the ones that don't comply with the legislation and have committed further sex offences. So 90% of the people that we meet, they're not affected by it. The offenders that aren't on it are really relieved that they're not. The lower-grade offenders are the ones that were really, really worried about being on there. A lot of them are fathers or they've got what you'd call a 'family lifestyle' and the shame of having their face published on a website saying that they're a child sex offender would've [...] been too much for some of them. I think a lot of them would've been at risk of suicide and those sorts of things. (P10)

The longer-term impact of the scheme on offenders' psychological well-being was generally perceived to be limited. A key theme that emerged from the analysis was that the introduction of the scheme had not resulted in many of the adverse consequences that the police had anticipated. It is probable that their expectations were founded on the evidence from the United States, where community notification is much more widespread and intrusive. A consistent finding of this body of research is that community notification adversely impacts offenders' psychological well-being (for a review, see Whitting, Day, & Powell, 2014). The perception that the scheme has had a limited long-term impact on offenders appeared to challenge some participants' preconceived notions about the scheme:

[The impact on offenders] wasn't as bad as I envisaged. It destabilised them, without a

doubt. A lot of them were almost panic-struck. A lot of them were starting to go into depression, and [that's] a precursor [to offending]. It did have that effect. But now that it's up and running and it hasn't had the impact upon them that they thought – that we thought as well – I'll have to reassess [...]. It definitely did increase their risk. But now that it sort of seems to have blown over, it wasn't as bad, I suppose, as what we thought – as I thought. (P19)

To the knowledge of participants, no offenders had followed through with threats of suicide and none of those who were apparently planning to close their businesses down went ahead with this (although it is unclear if any of these offenders were actually subjected to notification). As predicted, a small number of offenders reportedly did move interstate around the time of the scheme's introduction, although by all accounts this appeared to be pre-emptive rather than reactive, and many who voiced an intention to move prior to the implementation of the scheme did not follow through with this:

[The impact on offenders] was nothing like what I first anticipated [...]. We had two or three [offenders] in a row headed off [interstate] but they were between medium- and low-risk offenders anyway – they were unlikely to have been published on the public sex offender register; they were just a bit paranoid about it. But those who have been published, I've been quite surprised that even though some of them probably keep to themselves a little bit more, the frantic changing of addresses and going underground, changing their names and God only knows what else, just didn't eventuate. (P19)

One rather obvious explanation for the impact on offenders being less than anticipated is that so few offenders are in fact subjected to notification under the current scheme. However, there was a perception that even those subjected to notification are either 'quite accepting of it' (P15) or seemingly apathetic towards it. As P10 puts it, those subjected to notification 'kind of

shrugged it off'. This sentiment is echoed by another participant:

I think some of them are quite blasé about it [...]. As the time has gone on, the ones that are on the register seem to have just relaxed and gotten into the flow and not really given it a second thought. (P18)

From the perspective of the police, the scheme has had on the whole a limited long-term impact on offenders. It would appear that the distress and anxiety experienced by offenders prior to the scheme's implementation arose from misinformation and misconceptions about the nature of the scheme and largely dissipated following its implementation.

Have There Been Any Incidents of Vigilantism Linked to the Scheme?

From the perspective of the police officers interviewed, a major source of offenders' anxiety surrounding the introduction of the scheme was a fear of vigilantism, a concern shared by the police. Some offenders reportedly drastically changed their appearance around the time the scheme came into effect, presumably out of fear they would be targeted by vigilantes. However, contrary to both police and offender expectations, no one was charged with vigilantism within the first 10 months of the scheme's operation (at the time that the final interviews were conducted).

All but two of the officers interviewed were not aware of any instances of vigilantism linked to the scheme. These participants viewed the fact that there had not (to their knowledge) been any incidents of vigilantism as evidence that the safeguards that had been put in place to minimise the risk of vigilantism were effective. These safeguards include: the enactment of legislation criminalising vigilantism and the creation of two different vigilante offences; the requirement that one must verify their identity in order to perform a local search; the watermarking of digital photographs of offenders with the full

name of the citizen who performed the search (enabling the source of illegally reproduced photographs to be traced); and ensuring that all offenders subjected to notification pursuant to tier two have an 'extraction plan' in place, to be followed in the event of a vigilante attack.

P21 reported that an offender who was subjected to notification pursuant to tier two was forced to relocate as local residents were 'making an issue' outside his house and 'got a bit carried away', while P15 recalled that an associate of an offender discovered a letter addressed to the offender notifying him that he would be subjected to notification and subsequently disseminated material to local residents informing them of such. It should be noted, however, that neither of these alleged incidents of vigilantism led to any charges being laid and, as such, it was not possible to verify these accounts.

A subsequent search of the agency's internal evidence briefing system revealed that only one individual had been charged with a vigilante offence as at 27 February 2015. This followed an investigation into two people who allegedly posted photographs that were obtained through performing a local search to a public Facebook page. Charges were subsequently laid against one person who was originally charged with engaging in conduct *intended* to create, promote or increase animosity towards, or harassment of, an identified offender – the more serious of the two available vigilante offences, carrying a maximum penalty of ten years' imprisonment. However, this charge was downgraded to the lesser offence at the trial and the person was found guilty of engaging in conduct that is *likely* to create, promote or increase animosity towards, or harassment of, an identified offender, which carries a maximum penalty of two years' imprisonment.

In summary, it would appear that the safeguards that were put in place to minimise the risk of vigilantism have been effective, as only one person was charged with vigilantism in the first 29 months of the scheme's operation.

Has the Introduction of the Scheme Had an Impact on Offenders' Compliance with Their Reporting Obligations?

A key concern reported by Whitting et al. (2016) was that the introduction of the scheme would lead to offenders going underground. This concern does not appear to have come to fruition. On the contrary, there was a perception among those interviewed that the introduction of the scheme had improved compliance, at least among some offenders. A few offenders who had failed to report and whose whereabouts were unknown reportedly 'surrendered' themselves to police upon being published on the missing offenders register. It emerged that many officers have capitalised on offenders' apparent fear of notification by using the threat of notification as a means of ensuring compliance. Anecdotal evidence was cited suggesting that the mere threat of publishing offenders' details on the register encourages them to report to the police. For example, one participant recalled that an offender who had failed to report and whose whereabouts was unknown telephoned the police within half an hour of his mother being advised that his details would be published on the register:

It has developed into a tool that we have manipulated to be able to be useful to us. We have offenders [...] that are not being managed because they've gone underground, and those people will return to their normal way of life, which is high risk because they offended under those circumstances before. They've been identified. Some of them because they've been named, have come and handed themselves in. Any offender that is brought back [into] the fold is an advantage to the community. (P19)

It's not that you use it as a threat, but it's a fact that you can say [to offenders], 'Well, if you don't take [your obligations] seriously there is a chance you could end up on [the public register]'. And that's the reality; it's not an inducement or anything like that [...]. So they're definitely wary. (P12)

It was, however, noted that this approach was not effective in securing compliance among all offenders, such as Indigenous offenders living in remote areas without Internet access, those with intellectual disabilities or substance abuse problems, and those evading the police because they have outstanding warrants for their arrest.

The primary data set was interrogated in order to analyse compliance for the purposes of methodological triangulation (see Denzin, 1978; Patton, 1999). An independent-samples approach was considered to have fewer limitations than a paired-samples approach (see below for a discussion of the limitations of the chosen approach). The first cohort consists of all those who became a reportable offender between 14 October 2007 and 14 October 2009 ($n = 414$), whilst the second cohort comprises all those who became a reportable offender between 14 October 2010 and 14 October 2012 ($n = 454$). The proportion of offenders in each cohort convicted of failing to comply with their reporting obligations¹⁴ in the 18-month period commencing 15 October 2009 (pre-notification group) or 15 October 2012 (post-notification group) was compared. Those in the pre-notification group had been registered as a reportable offender for, on average, 382 days, whilst those in the post-notification group had been registered for an average of 379 days at the

commencement of the relevant period. This difference is not statistically significant.

Of those in the pre-notification group, 9.18% had at least one violation ($M = 0.16$, $SD = 0.60$, range = 5.00), whereas 13.44% of those in the post-notification group had at least one violation ($M = 0.28$, $SD = 0.98$, range = 11.00). Table 3 provides the distribution of violations for each group. A Mann–Whitney test was conducted in order to investigate whether or not the difference between the groups is significant. The Mann–Whitney test was selected on the basis that Levene’s test of homogeneity of variance indicates that the variances are unequal, $F(1, 866) = 16.86$, $p < .001$. This revealed that the post-notification group has a significantly greater number of violations than the pre-notification group, $U = 89,868.50$, $z = -2.02$, $p = .043$, $r = -.07$.

The evidence in relation to the scheme’s impact on offenders’ compliance is mixed. The police perceived that the scheme had led to improved compliance, at least among some offenders. However, the quantitative analysis of compliance reveals a slight overall increase in non-compliance following the scheme’s implementation, although the effect size is small.

Discussion

Taken together, the findings of this study suggest that the major concerns expressed by the

Table 3. Frequency (%) of violations for each group.

Number of violations	Pre-notification group ($n = 414$)	Post-notification group ($n = 454$)
0	376 (90.8%)	393 (86.6%)
1	22 (5.3%)	31 (6.8%)
2	10 (2.4%)	14 (3.1%)
3	1 (0.2%)	9 (2.0%)
4	4 (1.0%)	3 (0.7%)
5	1 (0.2%)	2 (0.4%)
9	—	1 (0.2%)
11	—	1 (0.2%)
$M(SD)$	0.16 (0.60)	0.28 (0.98)
Mdn	0.00	0.00

police officers responsible for administering the notification scheme have not, for the most part, come to fruition. One of the key concerns reported by Whitting et al. (2016) was that the scheme would significantly increase the workload of police. Whilst it was evidently resource-intensive to implement, the workload associated with the ongoing operation of the scheme is now considered manageable. With the exception of two staff members in dedicated roles, the scheme appears to have had a minimal impact on the day-to-day workload of the police officers.

The scheme also does not appear to have had the adverse impact on offenders that was anticipated, although it is important to acknowledge that this conclusion is only based on the perspectives of those police officers who were interviewed. It is possible that this group was either not aware of the full extent of the impact of the scheme on offenders or minimised its impact. Furthermore, it should be borne in mind that no tier three disclosures had been made at the time the interviews were conducted. Examination of the tier three applications that had been received revealed that in six of the eight cases, the person of interest was an immediate or extended family member. A disclosure made under such circumstances would be likely to have a significant impact on the offender and could foreseeably result in the breakdown of relationships, loss of contact with the child or children concerned, and potentially a change in living arrangements. The impact of the scheme on offenders who are the subject of a tier three disclosure remains to be seen and should be carefully monitored.

Offenders' perceptions of the impact of the scheme were not considered in this study, and this would be a useful direction for future research. Such a study could reveal, for example, that the true incidence of vigilantism is higher than that reported here. At the time of writing, only one person had been charged with vigilantism and it is quite possible that many such occurrences go unreported

or do not proceed to the investigation or prosecution stages. Indeed, the fact that two participants were aware of two separate incidents of vigilantism, neither of which resulted in charges being laid, suggests that the incidence of vigilantism is indeed higher than is reflected in official records.

One explanation that could account for the scheme's impact being smaller than anticipated is that participants' expectations were shaped by the experience in the United States, where notification is much more widespread and intrusive. Although the United States laws were originally intended to target high-risk sex offenders, the purpose and scope of these laws has expanded over time and the number of offenders subjected to notification has grown exponentially (Appelbaum, 2008; Center for Sex Offender Management, 2008; Logan, 2011; Thompson & Greek, 2010). Indeed, a common criticism of community notification laws, and indeed other legislative measures targeting sex offenders, is that they are overly inclusive, and many commentators have argued that restricting these laws to higher-risk offenders – as was the original intent – would be a more efficient use of limited resources and at the same time mitigate some of the negative consequences experienced by lower-risk offenders (M. Cohen & Jeglic, 2007; Duwe & Donnay, 2008; Lasher & McGrath, 2012; Levenson & Cotter, 2005; Levenson et al., 2007; Prescott & Rockoff, 2011; Vess et al., 2011).

Evaluations of tiered notification systems which discriminate on the basis of risk have generally reported more favourable outcomes than evaluations of systems that operate within a 'one size fits all' framework (Barnoski, 2005; Lasher & McGrath, 2012). In one of only a few studies to have concluded that notification has a specific deterrent effect, Duwe and Donnay (2008) used two separate matched control groups to compare the recidivism rate of a sample of offenders subjected to notification in Minnesota where offenders are assigned a risk level prior to their release from prison and only those

deemed to be high risk are subjected to broad public notification, with two separate matched control groups. They concluded that notification significantly reduced sexual recidivism but cautioned against subjecting low- and moderate-risk offenders to broad notification, asserting that doing so 'would not likely produce an appreciable reduction in sexual recidivism given that the baseline rate for these offenders is already relatively low' (Duwe & Donnay, 2008, p. 443). It is also of interest that offenders have themselves suggested that public sex offender registers would be more effective if they differentiated between different types of offenders and the relative risk they pose (Tewksbury & Lees, 2007).

The tier two eligibility criteria specifically target those legally designated as DSOs, along with recidivist offenders and those who have committed a serious offence and are deemed to pose a risk to the community (this third category is assessed on a case-by-case basis and requires ministerial approval). At the time of writing, less than 5% of all reportable offenders had been subjected to any form of notification. The analysis indicates that those subjected to notification were higher risk than those not subjected to notification, as evidenced by higher levels of risk according to the RM2000 (Thornton et al., 2003) and a longer length of registration, which can be considered a proxy for risk given that more serious classes of offences and recidivistic offences attract longer registration periods. Although this finding suggests that the scheme is focused on high-risk offenders, it should be noted that a sizeable proportion of those subjected to notification – over half of those subjected to tier one and almost one quarter of those subjected to tier two notification – were classified as low or moderate risk.

The analysis also reveals that Indigenous offenders are more likely to be subjected to both tier one and tier two notification. This finding is of significance, particularly when considered in the context of the police

perception that the threat of notification is less effective for Indigenous offenders living in rural and remote areas. Further to this, it is noteworthy that participants perceived that the introduction of the scheme had improved compliance among some offenders but not others. It is possible that a decrease in compliance among a subset of offenders masked an improvement in compliance among another subset of offenders. Unfortunately, it was not feasible to compare subgroups of offenders due to the relatively low number of offenders with violations. Furthermore, there are several caveats that deserve mention that limit the conclusions that can be drawn from the analysis.

Firstly, it is not possible to study compliance over a longer period due to the fact that the scheme had only been in effect for less than two years at the time of the data extraction. Secondly, it is probable that some violations committed in the post-notification period did not have a court outcome at the time the data were extracted, which was approximately four months after the cut-off for the relevant period (15 October 2012 to 15 April 2014), and thus would not have been captured in the data set. As such, it is likely that the post-notification group committed a greater number of violations than that reported. However, this would not change the direction of the relationship, but rather strengthen the finding that notification is associated with an overall decrease in compliance. Thirdly, there is no way of identifying in the data set if an offender was reincarcerated during the relevant period. As such, it is not possible to control for opportunity to commit violations (as only those under community supervision can be charged with such offences). Finally, perhaps the most significant limitation is that the approach taken does not allow inferences to be drawn regarding causation and the possibility cannot be excluded that the observed decrease in compliance is attributable to unmeasured differences between the two groups or changes in policy or practice that are unrelated to the introduction of the scheme.

Notwithstanding these caveats, this study represents the first attempt to analyse the impact of the scheme. There is a clear need for further research and more nuanced analysis that attempts to identify the conditions under which notification is or is not effective, as global statements regarding the effectiveness of the scheme are unlikely to be all that informative. Indeed, the findings tentatively suggest that a 'one size fits all' approach may limit the effectiveness of the policy, and point to the need for more individualised responses and a more flexible application of the policy. Although the results of this study are somewhat encouraging insofar as they indicate that the introduction of the scheme has not resulted in many of the negative consequences anticipated, they also do not provide compelling evidence that it has had any observable positive effects. In light of this and the evident costs involved – both fiscal and human – in implementing such schemes, it would perhaps be prudent for other jurisdictions to consider carefully their overall benefits before proceeding further.

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Notes

1. A few Canadian provinces practise community notification but the federal government has thus far resisted pressure to enact federal legislation authorising community notification (Logan, 2011; Petrunik, 2003; Vess et al., 2011).
2. The scheme was later expanded in England and Wales to allow anyone with caretaking responsibilities for a child to make an application.
3. A 'reportable offender' is a person whom a court sentences for a reportable offence. The list of reportable offences includes sexual and other serious offences against children, as well as select serious sexual offences against adults and serious non-sexual offences against adults if the person has prior convictions of a similar nature. Reportable offenders are required to register their personal details with the police within seven days of their release into the community from custody or court, report to the police at regular intervals, and update the police with any changes in their personal circumstances, including change of address, employment and relationship status, club memberships, vehicle registration, carriage service providers, email addresses, and online user profiles. See Vess et al. (2011) for a more detailed explanation of reporting requirements.
4. Data were not available for 379 offenders.
5. The actual number of offenders subjected to tier one notification may be slightly higher on account of the fact that the data set only includes those who became a reportable offender prior to 1 September 2013. It is possible that a small number of individuals who became reportable offenders after this date were subjected to tier one notification as well.
6. As per the previous note, the data set from which this figure was derived only includes those who became a reportable offender prior to 1 September 2013.
7. As per note 5 above, the actual number of offenders subjected to tier two notification may be slightly higher on account of the fact that the data set only includes those who became a reportable offender prior to 1 September 2013.
8. Derived from each offender's stated ethnicity and his or her ethnic appearance as recorded by the police.
9. A person whom a court has found poses a serious danger to the community as per relevant legislation.
10. It is not possible to compare those subjected to tier one notification with those subjected to tier two notification due to the fact that this would violate the assumption of independence (as five offenders were subjected to both tier one and tier two notification).
11. Separate Kolmogorov–Smirnov tests were conducted to test the assumption of normality. As this test is known to be highly sensitive, a probability value of $p < .001$ was used. The distribution of registration length

was non-normal for those subjected to tier one notification, $D(39) = 0.43$, $p < .001$ ($Z_{\text{skewness}} = 3.62$, $p < .001$, $Z_{\text{kurtosis}} = 4.02$, $p < .001$), those subjected to tier two notification, $D(80) = 0.38$, $p < .001$ ($Z_{\text{skewness}} = 1.60$, $p = \text{ns}$, $Z_{\text{kurtosis}} = -1.65$, $p = \text{ns}$), and those not subjected to notification, $D(1910) = 0.41$, $p < .001$ (skewness = 6.57, kurtosis = 45.79).

12. The variances in registration length were unequal for the group subjected to tier one notification, $F(1, 1947) = 109.58$, $p < .001$, and the group subjected to tier two notification, $F(1, 1988) = 915.42$, $p < .001$.
13. A further 11,913 searches were initiated but not completed.
14. There are in fact four different offence types that relate to failure to comply with the legislative requirements pertaining to reportable offenders. However, due to the low overall number of violations, these four offence types were combined for the purposes of data analysis, and only the totals are provided.

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