



# Sexual risk orders as a tactic to counter sexual violence against women and girls

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## Abstract

**Research question** Sexual Risk Orders (SRO) have been advocated as a means to prevent Violence Against Women and Girls (VAWG). This is despite significant detriment to the fundamental rights of the legally innocent and a lack of empirical assessment that can speak to preventative efficacy. This study asks; do SROs serve to prevent sexual-harm?

**Data** The Police National Computer (PNC) was used to identify two samples of SRO subjects. Legal Services' data from the Metropolitan Police Service (MPS) was used to construct a counterfactual group, for whom SRO was considered but not obtained. PNC was used to identify arrests as a proxy for offending and a harm index applied.

**Methods** Before-after and between-group comparisons are used, along with an interrupted-time-series analysis, to assess the relationship between SRO and sexual-harm prevention. Rank-ordering of harm caused by alleged sexual-offenders in London enables an estimate of how precisely SROs are used against the highest-harm offenders.

**Findings** SROs are associated with a significant 84.5% reduction in sexual-harm. This increases to a 93.1% reduction in the case of high-harm offenders, controlling for time incarcerated. Despite this, SROs are rarely used and are not systematically targeted against the most harmful offenders.

**Conclusions** Within the limitations of the methodology we conclude that the evidence supports SRO use as a primary tactic to counter VAWG. Preventative impact may be maximised by increasing use, actively targeting SROs at the highest-harm offenders and considering use at an earlier stage of a subjects sexual-offending. A randomised trial is the next logical step to augment causal inference.

**Keywords** Sexual Risk Order · Sexual Harm · VAWG · Police

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## Introduction

### Law and practice

By amending the Sexual Offences Act (2003), the Anti-social Behaviour, Crime and Policing Act (2014) resulted in the introduction of Sexual Risk Orders (SRO) in March 2015. Section 122A(6) of the Sexual Offences Act (2003) specifies that in order to issue a SRO, the court must be satisfied ‘on the balance of probabilities’ that an individual has done an act of a sexual nature and a SRO is necessary to protect the public from harm. Importantly SROs are not predicated on criminal conviction. Further, the Sexual Offences Act (2003) makes clear that a SRO enables the imposition of both negative prohibitions and positive requirements and that breach is a criminal offence punishable by up to five years’ imprisonment. As such, SROs constitute ‘hybrid-orders’ as described by Kelly (2019): orders granted without conviction, to a civil burden of proof and rules of evidence, but breach attracts criminal sanction. Previous orders, in the realm of sexual-offending were narrowly construed. They only applied following conviction, related to a very niche form of sexual-harm or required specific qualifying criteria (see Sjölin, 2015; Craven et al., 2007). The SRO marked a seminal shift in the legal tools available to manage those perceived to pose a risk of sexual-harm.

Consequently police forces sought to use SROs by making applications to the Magistrates’ Court. There was limited guidance on the nature or form of this application. The following is a hypothetical case constructed to demonstrate the practical process that evolved and the consequences of SRO applications to the Magistrates’ Court. A subject accused of sexual assault on three occasions by three separate victims. On all occasions the subject befriended victims by approaching them in a public place. In two of the cases the victims withdrew their support for prosecution meaning there was insufficient evidence to prosecute. In the third case the subject was tried and acquitted. The subject had no other convictions of relevance.

A short structured application to the court would outline the ‘act of a sexual nature’ detailed above and advocate for conditions e.g. to prevent the subject being in the company of lone females in a public place. This would be supported by a primary officer statement. This may give significant detail of the allegations made, the subsequent investigation and why conviction did not follow. The officer might specify that this, coupled other information suggesting the subject had persisted in befriending lone females, meant that a SRO with the requested condition was necessary to prevent harm to the public. They would exhibit a range of relevant documentation to support the assertions made in their statement e.g. crime reports, interview transcripts, victim statements and a risk assessment etc. They would notify the force legal department to secure a legal assessment of viability and potentially technical legal assistance in compiling the court bundle, drafting hearsay notices and instructing a barrister to present the case to the court.

If, having heard the case, the Magistrates’ Court was satisfied that more likely than not an ‘act of a sexual nature’ had taken place and a SRO was necessary to

protect the public, they may issue an order with the conditions requested or alternatives. The legislation sets the minimum term that the court may issue the order for at two years and there is no maximum period. The median duration of SROs is 59.5 months, meaning that the courts on average impose orders for more than double the minimum period. A breach of the conditions set out in the order may see the subject convicted of the criminal offence of breaching the SRO.

## Relevance

The contemporary relevance of the SRO is grounded in the prevention of crimes that disproportionately affect women and girls, referred to as ‘Violence against Women and Girls’ (VAWG) (Home Office, 2022). Seminal incidents have brought VAWG to the forefront of public and political discourse (Brown and Horvarth, 2021; Stockl and Quigg, 2021). Policing nationally has noted the detrimental impact on public confidence (Hohl et al., 2022) of the perceived inability to counter sexual violence against women (HM Government, 2021; Myhill & Allen, 2002). Consequently, commitment to tackling VAWG has followed (HM Government, 2021), with recognition as a national threat (Home Office, 2023a). There has been a concerted effort to place prevention of future offending at the core of the policing response (HM Government, 2021; HMICFRS, 2021a). Central to this effort is the use of ‘protective and preventative orders’, including SROs, to prevent VAWG harm (HM Government, 2021; HMICFRS, 2021b; NPCC, 2023). Use of preventative orders to prevent sexual-harm have been encouraged and incentivised (College of Policing, 2022, 2023a; HMICFRS, 2021a).

## Contention

Whilst hybrid-orders have seen significant growth (Hendry, 2022), they are shrouded in controversy. Critics bemoan that severity of restrictions and limited demonstrable effectiveness render behaviour-orders punitive (Hudson & Henley, 2015). This study noted the presence of restrictions in current SROs that significantly infringe upon individual rights e.g. requirement to notify authorities of sexual partners and considerable police search powers. Such infringement lends weight to the argument that SROs are punitive, yet punishment is meted without affording the defendant the protections of longstanding criminal procedure e.g. inadmissibility of hearsay and burden of proof ‘beyond reasonable doubt’ (Bowers, 2023). As such, the criticism follows that such orders are “*illiberal but also contrary to the rule of law*” Hendry (2022, p.379).

## Current SRO use

The number of SROs obtained nationally in the two years to 2023 was 307. There was considerable variation in SRO use between forces having taken account of force area differences. Similarly, intra-force variation was apparent with differential levels of use by MPS local policing areas. MPS SRO subjects in 2021–2023 were all male.

Ethnicity reflected the London resident population. The youngest SRO recipient was 18 years of age and the eldest 73. The average age was mid to late 30 s. The MPS did not obtain any SROs for child subjects in this period. 78% of SROs are sought following a failed prosecution i.e. where the subject has not been prosecuted or has been prosecuted and acquitted. In 40% of SRO cases the subject has three or more failed prosecutions before SRO is sought. The decision to apply for SRO is predominantly based on professional judgement of individual officers on a case-by-case basis with no systematic attention paid to those subjects believed to have perpetrated the highest levels of harm. This will be covered in more detail in the discussion.

## Behaviour-orders and harm

Despite exponential growth, doctrinal controversy and claims of efficacy (Patel, 2021), the level of research on behaviour-orders is negligible (Brown, 2020). Research concentrates on, perception of various actors (Kirby & Edmondson, 2012), experience of professionals (Solanki et al., 2006) and small samples of self-reported criminality (Wain & Burney, 2007). Beyond Carr et al. (2017), there has been little published effort to discern the impact of behaviour-orders on harm. Consequently, there is limited understanding of whether behaviour-orders are associated with preventative efficacy. This lack of empiricism is also apparent in the case of sexual behaviour-orders (Justice, 2023). Previous research in this area constitutes the author's commentary on whether orders are just (Kingston & Thomas, 2018) and how they interact with established legal principles (Bowers, 2023).

Arguably, when police are granted powers that result in considerable derogation of individual rights, as is the case with SROs, they must be suitably tested and monitored to determine how they are used and whether they produce the desired outcome (HMICFRS, 2021a). Yet, the repeated insistence that a greater understanding of the preventative potential of behaviour-orders must be gleaned (Home Affairs Committee, 2005, Isal 2006), has not been realised. Importantly, there has been no empirical testing conducted to understand whether SROs serve to prevent sexual-harm. This is remiss as “*absence of robust empirical research means that much of what is written is dominated by anecdote, conjecture and rhetoric*” (Nixon, 2005, p22). Questions of balancing public security against individual freedoms cannot be settled whilst it is not known to what degree, if at all, SROs serve to prevent harm (HMICFRS, 2021a). Consequently, this study seeks to assess whether SROs prevent sexual-harm.

## Methods

### Data sources

- 1) Police National Computer (PNC)—It is mandated that SROs are recorded on the PNC (Home Office, 2023b). Therefore, in principle, all live SROs in England and Wales can be identified via PNC. This does not include SROs that have expired. Despite this, it was the most comprehensive dataset of SROs identified. In addi-

tion to identifying subjects with SROs, PNC was utilised to interrogate the records of those within the respective populations to establish arrests for the purposes of harm scoring.

- 2) Metropolitan Police Service (MPS) Department of Legal Services (DLS) data was obtained from the DLS case system. It was not feasible to review case-level detail. This did however provide a list of persons for whom SROs were considered. It was possible to identify PNC records from this data.

## Populations

All SROs were drawn from the PNC by searching against the ‘operational intelligence’ marker related to SROs. This constituted all active SROs in England and Wales ( $n = 591$ ). From this, subjects belonging to the first two populations were identified:

- 1) ‘2021–2023 MPS SRO population’- This study examines only the SROs obtained by the MPS with a start date in the period of September 2021–August 2023 ( $n = 50$ ). Given that SROs have a minimum term of two years, it can be said that this constitutes all SROs issued by Magistrates upon MPS request within this period.
- 2) ‘2015–2018 national population’- Questions of association between SRO and harm require longitudinal data for meaningful assessment. The 2021–2023 population wasn’t considered to enable optimal consideration of harm following the intervention, given the limited time post-SRO. To negate this limitation, subjects were drawn from the full PNC SRO data for the three-year period March 2015–March 2018 ( $n = 55$ ). This population is skewed towards orders of longer duration, perhaps indicative of perception by police and courts of elevated risk compared to average SRO subjects. There was no alternative mechanism to identify a population that provided suitable longevity.
- 3) ‘Counterfactual’- In the absence of random assignment of legally eligible cases to be treated with an SRO, this retrospective study was designed to use the closest matching case characteristics that those cases receiving an SRO had. That is the logic of the Level 3 design of the Maryland Scale of Scientific Methods (Sherman et al., 1998). Given the extra efforts required for detectives to comprehend and meet the requirements for submitting completed SRO applications for a rarely used tool to prevent offending, the MPS’s DLS received from investigators many more cases of *initial* registration than were ever completed so that an SRO could be sought and granted. Unfortunately, we cannot retrieve an exact count of the cases that were submitted by the MPS to a Magistrate, nor a count of those that were rejected by the Magistrate. Yet our understanding from DLS is that most of the attrition of initially registered cases that did *not* lead to an SRO was due to non-completion of the application file by the investigators—and not to rejection by a Magistrate of a completed SRO application. The difference between the completed and non-completed cases appears to have been due to randomly distributed causes such as the detectives’ workloads, transfer of case responsibility from

one officer to another, or the assignment to the same officer(s) of more pressing cases that disrupted the officer intentions to complete the SRO application. That is likely to mean that the main difference between the completed SROs and the uncompleted registrations is the SRO itself—and not a spurious third factor causing both SRO issuance and reductions in harm. That is likely, but not certain.

Our decision to use this counterfactual is therefore not without its limitations. We cannot rule out any possibility of third factors explaining away the difference in outcomes between registered cases with no SRO and those which did receive SROs. The level of causal inference needed to rule out that possibility would indeed require a randomised trial, which might still be conducted in future. By publishing the present results, we provide encouraging evidence that would provide stronger support for conducting a randomised trial. But we must be clear that using this less-certain comparison between those leading to SROs vs. those not resulting in SROs is indicative but not definitive. We proceed with this counterfactual as the best available method of providing some inference of the effects of the SRO itself on the subsequent behaviour of the subjects.

A further complication is that the cases registered with DLS that were *not* followed by an SRO were from a different time period than the totality of MPS cases that *were* followed by an SRO (the ‘2021-2023 MPS population’). This adds the further rival hypothesis that the nature of the cases, or of detection of harm, changed over time. By way of example, the tragic murder of Sarah Everard may have altered general practices in managing complaints of VAWG in the direction of a lower threshold for arrest (raising crime harm index levels). It might therefore *under*-estimate the impact of SROs in that later period compared to the years prior. Yet it is also possible that the SRO case registrations with DLS in the earlier period might have been for more serious cases than in the later period, when the threshold for seeking SROs may have been driven down by added efforts to combat VAWG offending. We have no means of resolving the presence or absence of those differences; the best we can do is to spell them out as limitations.

Taking these methodological issues of causal inference into account, we proceeded to collect the data for analysis as described below.

We used the MPS’ DLS case management system to identify all cases where officers approached the DLS with a view to obtaining a SRO in the calendar years 2015-2018. For each case the registration date with the DLS was determined, along with sufficient information to identify the individual’s PNC record. Cases were cross-checked against PNC and the force intelligence system ‘Crimint’ to identify those cases in which either an SRO was obtained, or where an alternative order on conviction, predominantly a Sexual Harm Prevention Order (‘SHPO’, an order with distinct similarities to a SRO but available on conviction only), was obtained. These were excluded, leaving a counterfactual ( $n=47$ ) where MPS police officers had initiated an SRO process but not completed it.

## Calculating sexual-harm before and after SRO

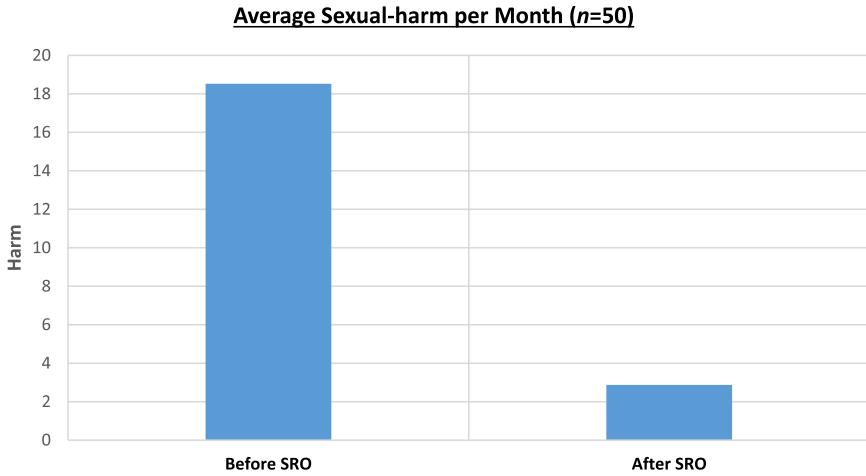
Offending was considered ‘sexual’ if it was an offence under the Sexual Offences Act (2003) or was ‘sexual’ as per Sect. 78 of the Act. Arrest for breach of SRO was excluded from calculations of harm, reflecting that SROs aim to prevent sexual-harm. Conditions are not otherwise criminal. To count them as such was considered likely to artificially skew levels of sexual-harm post-SRO. Arrest data from PNC was used to identify sexual-offending for which the subject had been arrested. In order to move from this crime-count to crime-harm, the Cambridge Crime Harm Index (CCHI) (Sherman et al., 2016) was used to attribute a harm-score to this ‘sexual’ arrest data for each subject during the ‘relevant period’ both pre and post SRO. The CCHI uses sentence starting points based on Sentencing Council guidelines, allocating number of days imprisonment to each offence. From this a harm-score per offence, subject and population was generated.

The ‘relevant period’ for each population was a decade prior to SRO up to the date data was drawn from PNC in 2023. The period post-SRO therefore differed for each subject dependent on when the SRO was granted. The populations with SRO granted (or considered- in the case of the counterfactual population) in 2015–2018 had a much longer period post-SRO enabling a more longitudinal consideration of harm. The 2021–2023 population whilst having a shorter period post-SRO constituted a more holistic picture of MPS SRO use. Each arrest for a sexual offence during the relevant period was assigned a CCHI score.

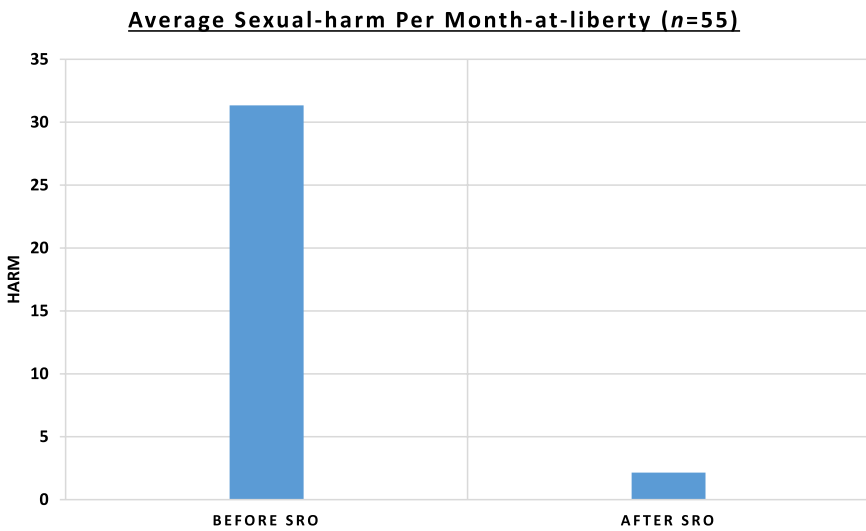
For each subject a sexual-harm-score before and after SRO was calculated. For the purposes of before/after comparison in the counterfactual population, the date the case was registered with the DLS was used to represent the point a SRO could have been obtained. For all subjects the CCHI score before and after SRO were divided by the relevant number of months to calculate a sexual-harm-score per-month before and after SRO. Additionally, for the 2015–2018 SRO population the amount of time that each subject spent in prison before and after SRO was also calculated using the Prison Intelligence Notification System. Crime harm was divided by the number of months at liberty. Wilcoxon Signed-Rank Test (Woolson, 2007) was utilised to test the null hypothesis that the median harm per-month before SRO was the same as median harm per-month after SRO. This is reported for 2021–2023 (Fig. 1), 2015–2018 (Fig. 2) and counterfactual (Fig. 3) populations. Subsequently, sexual-harm per month before and after SRO is visually compared for all three populations at Fig. 4.

## Interrupted time series

For the 2015–2018 population, an Interrupted Time Series (ITS) (Lewis-Beck et al., 2003) design was utilised. Sexual-harm was plotted based on when it occurred relative to the SRO being granted i.e. by year from ‘T1’ five years before SRO, to ‘T10’ five years after SRO. SRO was plotted as the point of intervention. ITS analysis was conducted using Python (Python Software Foundation, 2003). To manage significant



**Fig. 1** Average Sexual-harm per Month 2021–2023 MPS Population- Before v After Sexual Risk Order



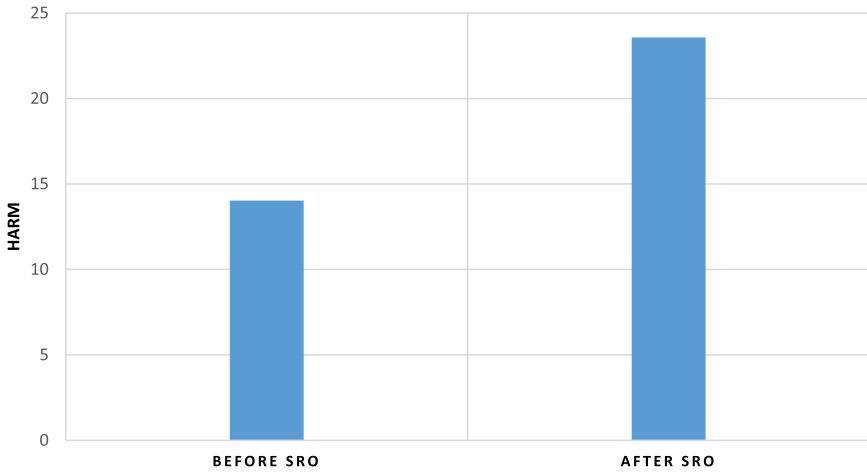
**Fig. 2** Average Sexual-harm per Month-at-liberty 2015–2018 Population- Before v After Sexual Risk Order

autocorrelation, Autoregressive Integrated Moving Average (ARIMA) modelling was utilised (Schaffer et al., 2021). Assumption testing is reported at Table 1. The model is at Fig. 5 and outputs at Table 2.

## Findings

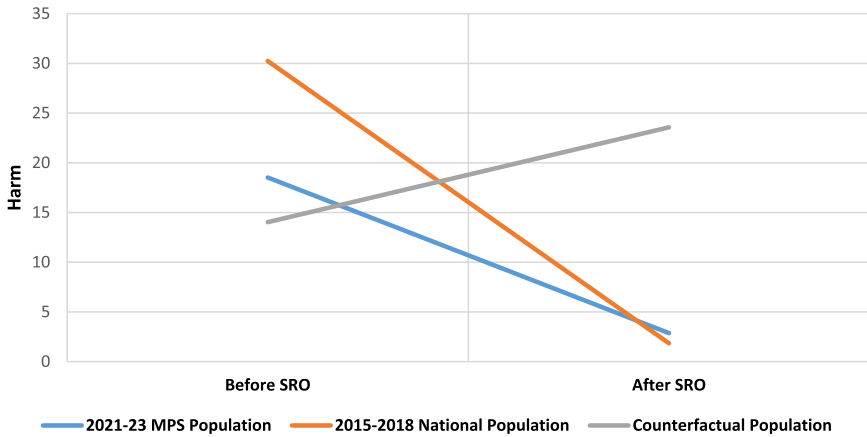
For the 2021–2023 population mean harm per month was 84.5% lower following SRO. This difference was significant ( $z = -5.15, p < 0.001$ ).

**Average Sexual-harm Per Month (n=47)**



**Fig. 3** Average Sexual-harm per Month- Counterfactual Population- Before v After Sexual Risk Order

**Sexual-harm Change Comparison**



**Fig. 4** Average Sexual-harm per Month Before v After Sexual Risk Order- Change Comparison

**Table 1** Autoregressive Integrated Moving Average (ARIMA) Assumption Testing

	Test	Test Statistic	P Value	Hypothesis Testing
Independence of Residuals (autocorrelation)	Ljung-Box	1.71	0.19	Null not rejected- no autocorrelation
Normality of Distribution	Jarque-Bera	0.75	0.69	Null not rejected- residuals normally distributed
Heteroscedasticity	White’s Test	0.44	0.52	Null not rejected- error residuals homoscedastic

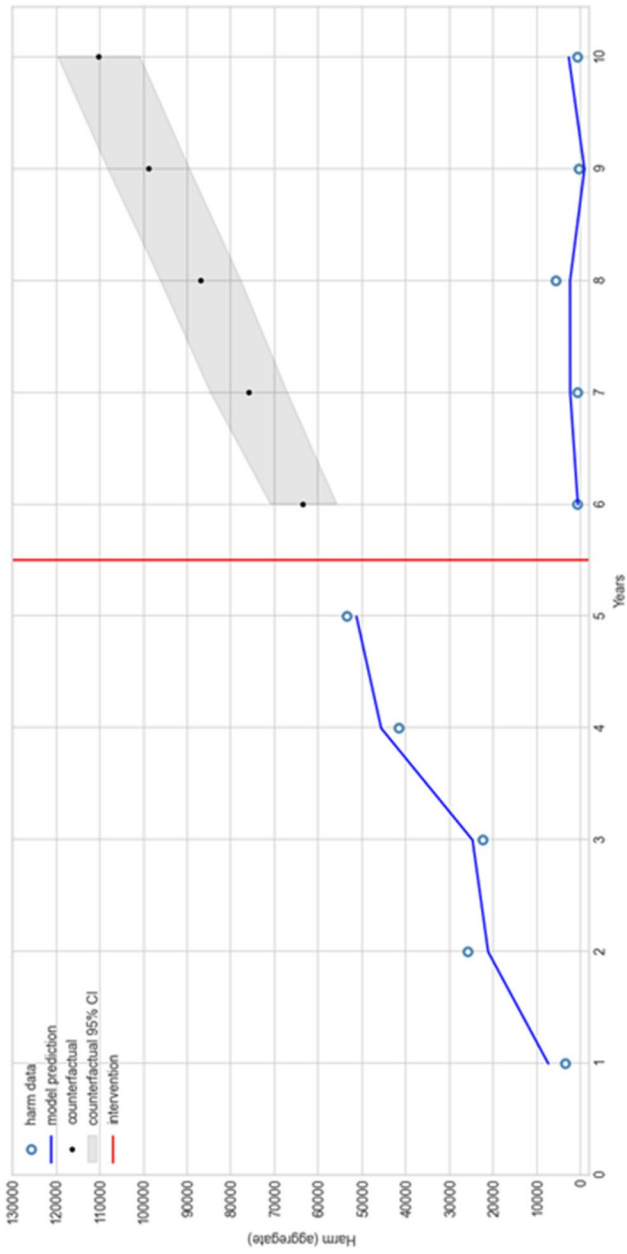


Fig. 5 Autoregressive Integrated Moving Average (ARIMA) Model - Sexual-Harm 2015–18 Population ( $n = 55$ )

**Table 2** Interrupted time series- sexual-harm 2015–18 population—results

	Coef	z	P Value
Time (T)	1.11e +04	20.83	$P < .001$
Step Change (D)	-5.02e +04	-14.99	$P < .001$
Slope Change (P)	-1.11e +04	-10.02	$P < .001$

For the 2015–2018 population mean harm per month-at-liberty was 93.1% lower following SRO. Wilcoxon Signed-Rank Test indicated that this was statistically significant ( $z = -5.85$ ,  $p < 0.001$ ).

Contrary to the drop in sexual-harm seen in the SRO populations, an increase was observed in the counterfactual population. In the counterfactual population mean sexual harm per-month was 68% higher following SRO, when compared with before SRO for the same population.

However, a Wilcoxon Signed-Rank Test indicated this was not statistically significant ( $z = -0.06$ ,  $p > 0.05$ ).

When average sexual-harm per month for the three populations is plotted together, the trajectories of both SRO populations diverge considerably from that of the counterfactual.

### Interrupted time series

Results indicate that there was a statistically significant reduction in harm immediately following SRO and that a significant downward trend was sustained.

## Discussion

### Harm prevention efficacy

Determining whether SROs are effective at preventing sexual-harm serves to facilitate evidence-informed policy and is vital to address the legitimate concern that SROs significantly infringe on individual rights without the justification of efficacy. This first empirical assessment of SROs indicates that orders are associated with significant reductions in sexual-harm. This is the converse of findings for the counterfactual whereby sexual-harm increased. Given that sexual-harm reduces immediately following SRO and reduction is significant (85–93%), it may be said that SROs are a demonstrably promising tactic to prevent sexual-VAWG where swift prosecution and associated risk management is not viable. This may have substantial implications for policy and practice, particularly given the contemporary determination to prevent sexual-VAWG. Forces may therefore consider that SROs offer a viable means to achieve the stated reduction in VAWG. Nationally, SRO use is limited with only 307 obtained in the last two years. The evidence generated in this study may lend logical support to arguments for increasing this number.

## Austere conditions, human rights and necessity

SROs are criticised for being unwarrantedly punitive. Findings in this study of preventative efficacy may ostensibly undermine this critique. However, a finding of instrumental effectiveness is unlikely to be definitive amongst a myriad of normative jurisprudential concerns. These relate to the importance of legal protocol and safeguards, and how far in principle the state should be able to infringe upon individual rights of the legally innocent (see Kelly, 2019 for full discussion). Whilst it is beyond this study to conclusively address jurisprudential contention surrounding SROs, it is considered that the findings have something to offer when considering how to strike the balance between protection of individual rights and broader preventative public policy aims in this area.

Clearly, SROs with austere restrictions, derogate the right to family and private life, freedom of expression and freedom of association (Human Rights Act, 1998). This is permissible in law only in pursuit of a 'legitimate aim'. In the case of SROs, this is to prevent harm. Any infringement on individual rights must be *necessary* to achieve this aim. This is why *necessity* features in the legal test for a court to grant a SRO (Sexual Offences Act 2003). Kelly and Picton (2020, p.415) considered that for an order "*to be necessary it must be effective*". The logic is appealing, how can something be said to be necessary to achieve an aim, without being shown to further said aim? Kelly and Picton (2020) also noted a distinct lack insight into whether behaviour-orders actually serve to prevent future offending. Striking any balance between the derogation of individual rights and future harm-prevention is not possible if information on the second half of this calculation is missing. As the first empirical assessment of SROs and harm this study seeks to inform the second half of the calculation. This paper finds that SROs may be extremely effective in reducing sexual-harm. In doing so it provides vital information on harm-prevention efficacy that informs consideration of the *necessity* in derogating individual rights. How precisely the balance between these rights and harm-prevention should be struck involves value judgements beyond this paper, but these findings do, at the least, serve to inform such vital considerations.

## Earlier intervention

It is noteworthy that many SROs are obtained only after multiple failed prosecutions. Arguably, if seeking to optimise any harm-reduction impact of SROs, consideration may be given to utilising them at an earlier stage. Avoiding sole reliance on prosecution, may be particularly pertinent given low charge rates and lengthy investigation timeframes for sexual offences (George & Ferguson, 2021; Murray, 2022). Just how early the legal test will be satisfied will vary on the specifics of each case. Nonetheless, from a policy perspective, a strategy that focuses on using SROs earlier, could move SROs from a tactic of last resort following multiple failed prosecutions, to one of effective early intervention.

There is nothing within the legislation to prohibit this approach. However, should SROs be used at an earlier stage the strain between individual rights and prevention

of harm may be more acute. In these cases, by their nature, there are unlikely to be multiple allegations. This may diminish the credibility of the assertion regarding the subject's behaviour. It may be sufficient precaution that the court take this context into consideration whilst applying the current legal test. Consequently, iterative case-law based precedent would likely develop. Critics may however argue that this isn't sufficient and use at an earlier stage than is currently the case warrants additional safeguards by way of primary legislation or codes of practice. The nature of such safeguards may be numerous and include qualifying conditions, double-lock authorisation processes, preclusion of certain restrictions or defined routes of appeal. Whilst these are all options they run contrary to recent primary legislation on SROs (Police, Crime, Sentencing and Courts Act 2022) that appears to signal that Parliamentary intent is to be expansive rather than restrictive in this area.

## Precision

Given promising findings of efficacy, those focused on harm prevention may consider how any harm-reduction potential can be optimised. At present subjects are identified for SRO application based on professional judgement alone. This is problematic given unsupported clinical decision-making is latently inaccurate (Sutherland & Mueller-Johnson, 2019). Consequently, the small number of highest-harm offenders (Liggins et al., 2019; Ratcliffe and Kikuchi, 2019) are unlikely to be identified for SRO. Of note, the much higher-harm 2015–18 population exhibited an elevated harm-reduction compared to the more representative 2021–23 population. It may be that SROs have a more acute, rather than a relative, impact on harm in the case of higher-harm subjects. This may provide insight into the potential preventative impact of SROs focused on the 'power few' (Sherman, 2007) offenders.

To explore this possibility, MPS subjects were rank-ordered based on harm caused by alleged sexual-offending, using the MPS' VAWG100 (Sweetland, 2023) approach. A review of the highest-harm sexual offenders from 2020–2023 confirms that a negligible number receive SROs. Of the 54 subjects accounting for the top 5% of sexual-harm in 2022, none subsequently had a SRO applied. This is despite a case-level review suggesting 26 of the 54 were likely eligible. If SROs had been obtained the harm reduction potential in focusing on this small cohort of high-harm subjects is equivalent to preventing 62–65 rape offences (based on findings for the two SRO populations). This makes a number of broad assumptions but seeks to demonstrate that even a relatively rudimentary data-driven approach, likely offers significant benefits for improving the preventative impact of SROs.

The significant implications of SROs for individual rights is discussed above. By focusing on the highest-harm offenders, SRO conditions, which if used in a less focused way may be branded oppressive, are proportionate and justifiable (Sherman, 2022). This may provide a sound basis on which to publically rationalise SRO use. Further, with diminishing resources (Fleetwood & Lea, 2022) and increasing demand (HMICFRS, 2022), efficient use of resources is essential. This study suggests that there are many more SRO eligible subjects than there are resources to apply for orders. Failure to use this finite resource to target SROs against the small

number of subjects causing disproportionate levels of harm may be difficult to justify in the context of austerity (Ludwig et al., 2017).

The strategic direction of UK policing enshrines data-driven targeting of the most harmful offenders (Rowley, 2023). The rank-ordering approach detailed above, sets out a rudimentary methodology detailing how SROs could be targeted in a manner consistent with this. This approach has been operationalised (Sweetland, 2023) which may speak to its operational viability and public acceptance (King, 2023). Given the relative methodological simplicity and political support (Labour Party, 2023) it may be realistic for other forces to replicate this based on their current crime reporting systems.

This rank-ordering approach is evidence-based and likely offers enhanced accuracy compared with unsupported practitioner judgement. However, there is limited consistency in the highest-harm offenders year-on-year (Liggins et al., 2019). This indicates that use of previous harm (rank-ordering) to predict future harm is sub-optimal. Barnes and Hyatt (2012) detail the challenges of this form of traditional predictive approach. A move to an actuarial approach may offer a solution. For example random forests machine learning (Breiman, 2001) has demonstrable predictive efficacy (Berk et al., 2009; Oswald et al., 2018). A similar approach as for targeting SROs is perhaps something that should be aspired to.

## Limitations

This study is primarily premised on comparison between populations where a SRO was obtained and a counterfactual population where it was not. Whilst steps, including ITS (Schaffer et al., 2021), aim to minimise bias and alternative explanations (Cahit, 2015) there remain a number of issues with drawing causal inference from this study. As discussed in the methods section, the design is level 3 on the Maryland Scale. Variables other than SRO may explain the differences in harm outcomes between SRO and counterfactual populations.

Those cases that receive SRO may be inherently different from those in the counterfactual. We must acknowledge limited insight into between-group differences. We do not understand for example, for each case in the counterfactual, when and how the decision was made not to proceed with the application. We cannot differentiate between an active police decision, a court decision or as appears to be the case in the majority of cases, officers not providing the documentation required to support an application. This lack of insight prevents a meaningful assessment of differences between SRO and counterfactual populations that may explain the difference in harm levels found. Indeed, this limitation is heightened by demonstrable differences in the population characteristics. Whilst the counterfactual population mirrors the gender make-up of the 2021–2023 population. Average age is 5 years younger and those of black and mixed heritage are more acutely represented. Further, owing to data availability, the time period and geography from which the two samples with SRO and the counterfactual are drawn differ.

Lack of randomisation and control requires acknowledgement of alternative explanations for the drop in post-SRO harm. One example may be the impact of

the criminal justice system itself. We know that prior to SRO subjects are exposed to arrest, processing and in some instances court cases and remand. Each of these elements may be correlated with SRO but exert a causal influence independent from the SRO itself. ITS analysis indicates that the drop in harm follows immediately after SRO and not the many previous interactions with the criminal justice system that this research suggests many subjects have prior to SRO. However, this does not wholly preclude a cumulative impact with criminal justice interaction reaching a 'tipping-point' for subject offending that happens to coincide with SRO application. Another alternative explanation may be the age-crime curve. The consistent criminological finding that offenders have a period in life when offending peaks and as they get older they have a tendency to desist. This may also be true of sex-offenders, albeit this curve peaks later in life (Crookes et al., 2022; Farmer et al., 2015). It is beyond the scope of this article to explore the age-crime curve as it applies to sexual-offending but the finding that average age of SRO recipients is mid-thirties does coincide with the age at which some of the relevant literature suggests that sexual-offending may begin to decline independent of SROs.

This study utilises an assessment of the before-after differences in harm within-subjects in all populations. Whilst the study finds that harm drops following SRO it is important to consider how this finding may be vulnerable to measurement error (Yu et al., 2011), the potential that findings do not reflect a true drop in harm. Without an absolute measure of harm, rather than arrest as a proxy, it is difficult to determine whether the reduction measured reflects an actual reduction in harm or some other factor that impacts on the volume or nature of police arrest activity. By way of example the prominence of the VAWG agenda may result in alteration in arrest practices e.g. arrests made more frequently and for more serious offences. This example is not consistent with a reduction in harm following the VAWG movement but does demonstrate how external factors may conceivably impact on the measure of harm.

Given that we have no means to resolve these differences between groups, possible alternative explanations or risk posed by measurement error, the most optimistic assessment is that the results are promising regarding the impact of SROs on sexual-harm. Only a randomised trial can achieve equivalence of both known and unknown factors and enable conclusive assertion of causation. The fact that this study suggests that forces have many more SRO eligible subjects than they do resources to apply for orders, may strengthen the ethical justification for a randomised trial, as it would still involve acquiring SROs at an enhanced level compared to the current rate.

## Conclusion

The findings of this study are of import. SROs significantly infringe on the fundamental rights of legally innocent persons, yet it is disputed whether they effectively prevent harm. Consequently, they are highly contentious. Despite this contention and lack of understanding, use of SROs is being encouraged and incentivised, driven by desire to prevent VAWG. In this context, the considerable gap in the knowledge-base regarding harm reduction efficacy seems wholly

unsatisfactory. The ‘preventative or punitive’ debate continues unabated and policy makers and practitioners have limited foundations on which to make informed decisions.

This study seeks to address this gap in the evidence-base. Subjects of SROs commit 84.5% less sexual-harm per month following SRO, compared to before SRO. For the highest-harm SRO subjects, accounting for time incarcerated, this reduction increases to approximately 93.1%. Conversely, a counterfactual population, of subjects for whom SROs were considered but applications were not completed, saw sexual-harm increase by 68.0%. ITS results demonstrate a statistically significant reduction in sexual-harm immediately following SRO and a sustained downward trend. SROs are not currently targeted against the highest-harm eligible subjects. It is considered that there is a simple, viable means to target SROs against those that cause greatest VAWG harm using a rank-ordering approach. If such an approach were adopted considerable harm prevention is projected. Consequently, some of the contention based on individual rights arguments may be quelled and policing resources could be more precisely applied, maximising harm prevention.

Reducing VAWG is a key political priority (HM Government, 2021; Elgot, 2023). The question then is ‘what tactics work to deliver these aims’? Whilst the limitations of this study cannot be overstated and a randomised trial is required to provide confidence in drawing causal inference, the sentiment of Carr et al (2017) is apt: the evidence for the effectiveness of SROs in reducing sexual-harm is stronger than the evidence-base for most police practices. The College of Policing (2023b) advocates practice based on the ‘best *available* evidence’. On this basis, the evidence from this study suggests that SROs should be considered a primary tactic for countering VAWG, as opposed to a rarely used tool of last resort.

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**Data availability** No datasets were generated or analysed during the current study.

## Declarations

**Competing interests** The authors declare no competing interests.

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