

Do Sanctions Affect Undetected Sexual Offending?



Sharon M. Kelley, Psy.D.

Safer Society Foundation – Free Live Webinar

September 20, 2023

Kelley, S. M., Kahn, R. E., Mundt, J. C., & Barahal, R. M. (2023). Do sanctions affect undetected sexual offending? *Sexual Abuse, 35*(5), 624-248.

Learning objectives

Learners will be able to:

1. Describe how the detection rate for sexual offenses may be affected by prior criminal sanctions.
2. Identify the detection rate for sexual offenses for a significantly high risk committed sample.
3. Use credible data in probability models to estimate the true risk for future sexual offending.

Why is this important?

- Estimated recidivism rates from actuarial tools rely on official criminal databases
- Developers of these tools acknowledge the estimated rates do not account for undetected sexual offending (Thornton et al., 2021)

Why is this important?

- Evaluators have an obligation to describe this in court (Scurich & John, 2019)
- Some SVP laws require the court to consider the likelihood an individual will “commit future acts of sexual violence, irrespective of whether he might be apprehended for, or convicted of, such crimes” (Wisconsin v. Stephenson, 2020)

What is the rate of undetected sexual offending?

Depends on:

- How you define it
- What you are measuring
- How you are measuring it
- Where you are drawing your data

Current study

- Probabilistic models require credible data to use as parameters
- For this study, we were interested in whether an event changes the future probability for detection
- Do sanctions for sexual offenses increase the detection rate for future sexual offending behavior?

Current study

- Formal sanctions are intended to deter further criminal behavior (Mears & Cochran, 2018)
- Effectiveness of sanctions to mitigate reoffending has been mixed for general reoffending (Villettaz et al., 2015) as well as sexual offending (Moss et al., 2022)
- Prior sanctions may account for why previously incarcerated individuals have less undetected sexual offending than community samples (e.g., Falshaw et al., 2003)

Current study

- Actuarial tools are developed for, and require use with, men who have at least one formal charge or conviction
- Estimates of undetected offending should also come from a sample who have a history of charges and sanctions
- Ideally, the sample should have shared characteristics with an SVP population

Current study

Thus, the goal should be:

- determining how much does the actuarial underestimate sexual reoffense risk (i.e., what is the *true* risk for future sexually violent acts?)

Hypotheses and aims

The proportion of detected victims prior to the first release for a sexual offense will be lower than the proportion of victims detected after the first release.

The proportion of victims detected following each successive sanction will increase incrementally.

Time at risk in the community will decrease following each successive sanction.

When time at risk in the community is accounted for, the average number of total victims per year will be constant.

Definitions

- Detected: Anything that counts towards the Static-99R (detained, arrested, charged, convicted)
- Detected sexual offenses: Defined to be consistent with Category A and B sexual offenses per Static-99R (Must be 12+ years old)
- Detected victim: Victim characteristics were only coded when there was a contact sexual offense

Definitions

Undetected sexual offenses:

illegal contact sexual acts that could have led to a charge/conviction if detected (must be 12+ years old)

Undetected victim:

identifiable victim of an illegal contact sexual act that could have led to a charge/conviction if detected

May have been investigated but was never arrested, detained, etc.

Subjects ($N = 200$)

- Ages when last in community: 14 – 64 ($M = 31.95$, $SD = 9.54$)
 - 4.5% < age 18
- Last Static-99R: $M = 6.52$ ($SD = 1.92$)
- Offense profile:
 - Children only: 56.0%
 - Adults only: 9.5%
 - Children and adults: 34.5%

Sample characteristics ($N = 200$)

Ethnicity

Indigenous American	3.0%
Black	25.5%
Latino	2.0%
White	69.5%

Diagnosis

Pedophilic D/O	49.5%
Other Specified Paraphilia - Coercive	13.5%
Other Specified - Hebephilia	10.5%
Sexual Sadism D/O	14.0%
ASPD	55.5%
Substance Use D/O	49.5%
Major Mental Illness	8.5%

Note. Cases can have >1 diagnosis

Measures

- Sexual History Disclosure Questionnaires (regarding offenses against adults and/or children)
 - Self-report of detected and undetected sexual contact with children and adults
 - Instructs individuals to include their age at time of offense, victim's age at time of offense, gender of victim, relationship to the victim, and type of sexual act (e.g., force; grooming)
 - Truthful polygraph validating questionnaire
- 2001 - 2016

Procedures

Criminal charges, sentencing dates, custody time, release dates, and current diagnoses obtained from criminal and treatment records

Timeline created to track custody and release periods following each sanction for a sex offense

Offenses coded for victim characteristics (e.g., gender; relationship) and level of community supervision (none, bail, probation, parole, custody).

Interrater Reliability ($n = 20$)

ICC single measure estimates

$\geq .75$ Excellent

Cicchetti, 1994

Total undetected victims ICC = 0.97

Undetected victims prior to first arrest ICC = 0.99

Undetected victims following first arrest ICC = 0.81

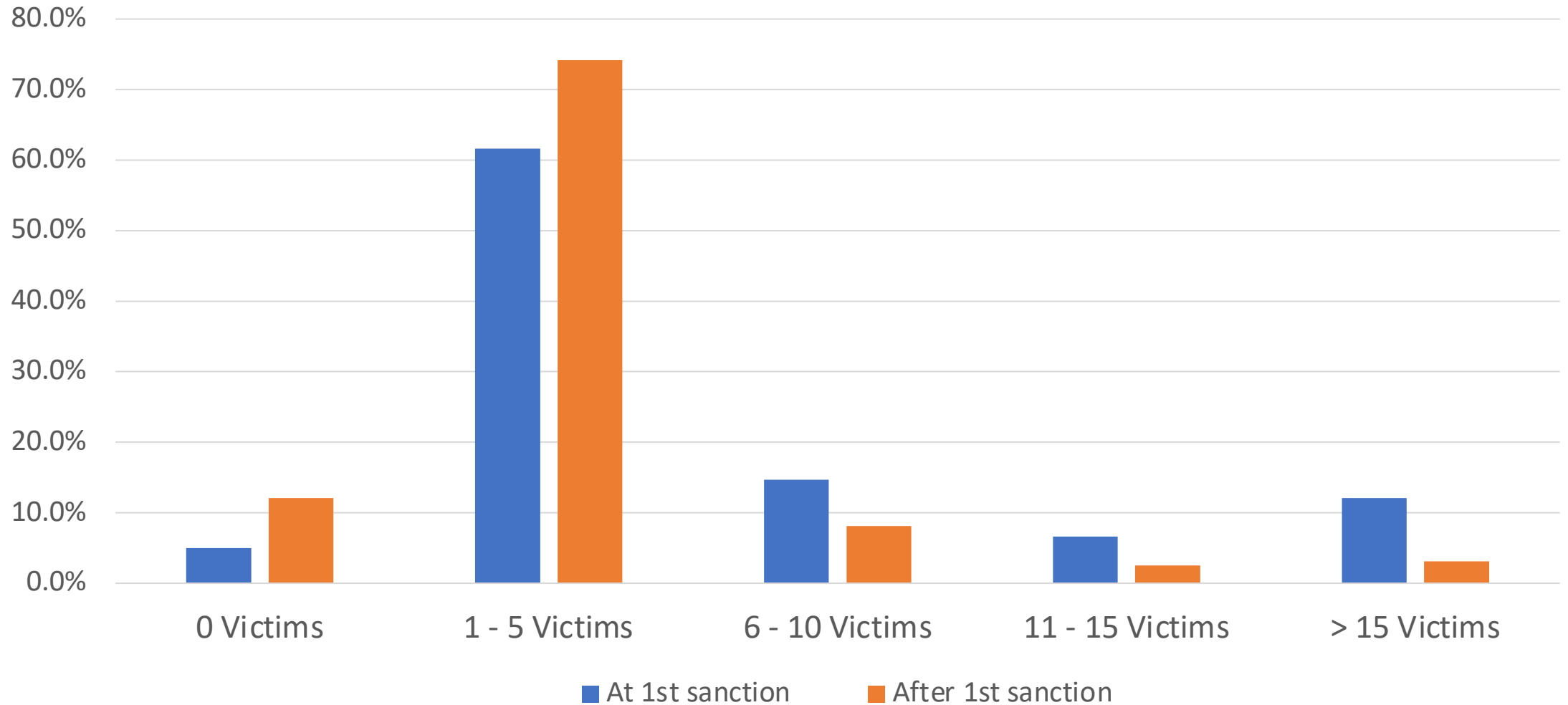
Static-99R at 1st release ICC = .88

Static-99R at last sanction ICC = .87



Results

Distribution of total *undetected* and *detected* victims prior to and after first sanction per release period (N = 200)



Cases with releases

- Of the 200 cases, seven were found SVP following 1st sanction
- An additional four cases were not released until after their 2nd sanction (sexually reoffended in prison/jail)
- $n = 189$ cases were released immediately following their first sanction/prison time whereas $n = 193$ were released at least once at some point following a sanction
 - $n = 193$ used for demographic analysis
 - $n = 189$ used to test the four hypotheses in the current study

H1 The proportion of detected victims prior to the first release for a sexual offense will be lower than the proportion of victims detected after the first release.

- $n = 189$ individuals released following 1st sanction
- A chi-square test of independence examining the relation between victim type (undetected versus detected) prior to and after the first sanction was significant, $\chi^2 (1) = 45.70, p < .001$, Cramer's $V = .130$.
 - Proportion of victims detected at first arrest was 22.6%
 - Proportion of victims detected after was 34.6%

H2 The proportion of victims detected following each successive sanction will increase incrementally.

Releases	N	Type of Victim	Before/At 1 st Arrest	1 st Release Period	2 nd Release Period	3 rd Release Period	Chi square test
1	189	Not Detected	868	409			X ² (1) = 37.95, <i>p</i> < .001, Cramer's V = .147
		Detected	253 (22.6%) ^a	232 (36.2%) ^b			
2	142	Not Detected	589	304	311		X ² (2) = 29.86, <i>p</i> < .001 Cramer's V = .133
		Detected	172 (23.0%) ^a	171 (36.0%) ^b	153 (33.0%) ^b		
3	75	Not Detected	315	168	204	208	X ² (3) = 5.72, <i>p</i> = .13 Cramer's V = .069
		Detected	98 (23.7%) ^a	75 (31.0%) ^b	82 (28.7%) ^{ab}	65 (23.8%) ^{ab}	

H3 Time at risk in the community will decrease following each successive sanction.

	1st Release Period	2nd Release Period	3rd Release Period	4th Release Period
N	M (SD) Days in Community			
189	1002.33 (1185.21)			
142	988.65 (1152.28) ^a	769.15 (982.07) ^b		
75	978.95 (1233.10) ^a	685.15 (889.83) ^b	709.55 (882.89) ^{ab}	
35	669.09 (913.39) ^a	571.57 (960.80) ^a	692.71 (916.53) ^a	636.83 (817.32) ^a

H4 When time at risk in the community is accounted for, the average number of total victims per year will be constant.

		1st Release Period	2nd Release Period	3rd Release Period	4th Release Period
N		Expected Marginal Mean Victim Count/Person/Year			
189	Undetected	0.79			
	Detected	0.45			
	Total	1.24			
142	Undetected	0.79	1.04		
	Detected	0.45	0.51		
	Total	1.24	1.55		
75	Undetected	0.84	1.45	1.43	
	Detected	0.37	0.58	0.45	
	Total	1.21	2.03	1.87	
35	Undetected	0.62	1.06	0.68	0.80
	Detected	0.50	0.68	0.57	0.61
	Total	1.12	1.74	1.25	1.41

Discussion – take home points

- Detection rate from general community samples (e.g., National Crime Victimization Survey) will be too low (5%) for high-risk individuals with prior sanctions
- Prior to first sanction, sample had a high detection rate: 21%
 - Likely due to starting young; non-sexual offenses
- Those who were released after their first sanction ($n = 189$) had a significantly higher detection rate: 36%
- Of all cases who had at least one release at any point following a sanction ($n = 193$) had a detection rate of 31%

Discussion – take home points

- Only the first sanction appears to have a protective effect
 - Those who persist despite a sanction may reflect more chronic antisociality (Hanson & Thornton, 2003)
- Those with a second sanction were detected more quickly and spent less time in community
- Any multiplier derived from the Table 2 may not be accurate
 - Does not account for the skewed distribution of victims per individual
 - Majority had 1 – 5 total victims with some outliers (less outliers after sanctions)
 - $M = 9.22$, $SD = 16.86$, $Med = 5.00$ ($n = 193$)

Implications for practice

Adjusting Recidivism Estimates to Allow for Undetected Offending

- Risk estimates for the individual are based on statistical estimates of rates of detected sexual recidivism for persons with similar scores on risk instruments
- Allowing for undetected offending means estimating what these risk estimates would have been if recidivism had included both detected and undetected reoffending
- At least two statistical models have been developed to do this
 - Hanson et al., 2003
 - Scurich & John, 2019

Hanson et al. 2003

Hanson, R. K., Thornton, D., & Price, S. (2003, October 9). *Estimating sexual recidivism rates: Observed and undetected* [Conference session]. Association for the Treatment of Sexual Abusers (ATSA) Annual Research and Treatment Conference, St. Louis, MO, United States.

$$\text{RRR} \times \text{DRI} = \text{ORR}$$

$$\text{RRR} = \text{ORR} / \text{DRI}$$

RRR = Real Recidivism Rate

ORR = Observed Recidivism Rate

DRI = Detection Rate per Individual

From Hanson
et al., 2003

DRI Depends on DRV and # of Victims in Follow Up Period

- DRV = Detection rate per victim
- # of Victims in follow up = # of victims if not detected by end of follow up

Estimates of DRV from Kelley et al.

- Proportion of victims detected in the first release period ($n = 189$)
 - 0.36
- Proportion of victims detected for all cases who had at least one release following a sanction ($n = 193$)
 - 0.31
- Options
 - Use proportion from first release period 0.36
 - Use 0.31 as based on most victims

Estimates of # of Victims

- About 1 new victim per year
 - First Release Period = 1.24
 - Mean of Marginal Means = 1.38
- Median victims per offending individual:
 - Med = 5.0 (95% CI: 4.0, 6.0)

For $DRV = 0.36$

Detection Rate per Victim (DRV)	0.36	
Expected Number of Victims per Recidivist	5	
For one hundred recidivists		
	Average N Caught after Victim	Cumulative N Undetected
Before first victim	0	100
Victim 1	36	64
Victim2	23.04	40.96
Victim 3	14.7456	26.2144
Victim 4	9.437184	16.777216
Victim 5	6.03979776	10.73741824
Cumulative % Caught after 5 Victims	89.26258176	
Proportion Caught after 5 victims	0.892625818	

For DRV = 0.31

Detection Rate per Victim (DRV)	0.31	
Expected Number of Victims per Recidivist	5	
For one hundred recidivists		
	Average N Caught after Victim	Cumulative N Undetected
Before first victim	0	100
Victim 1	31	69
Victim2	21.39	47.61
Victim 3	14.7591	32.8509
Victim 4	10.183779	22.667121
Victim 5	7.02680751	15.64031349
Cumulative % Caught after 5 Victims	84.35968651	
Proportion Caught after 5 victims	0.843596865	

Estimating True 5-Year Recidivism Rates

RRR for 5-Years = Observed Recidivism for 5-Years / 0.84

For Example:

- Observed 5-year Rate = 26% (5-yr rate for a Static-99R score of 6)
- RRR for 5-Years = 26% / 0.84 = 31.0%

Limitations and future directions

- Highly selected sample of individuals ultimately committed as SVPs in WI
 - Everyone who was released reoffended
 - No way to investigate those who may have naturally desisted
 - But likely generalizable to other SVP samples
- There appears to be important differences between race & diagnosis
- Not generalizable to routine cases or community samples

Limitations and future directions

- Average age of the sample was 32 when last in the community
- Unknown if the results can be applied to patients who have been committed for lengthy periods of time
- Does not account for the time free effect
- Does not account for non-contact offenses & number of offenses to a single victim

Contact information

Sharon Kelley, Psy.D.

Sand Ridge Secure Treatment Center –
Evaluation Unit

Madison, Wisconsin

SharonM.Kelley@wisconsin.gov