Long-Term Recidivism Risk of Individual with a Sexual Offense History: Research Findings
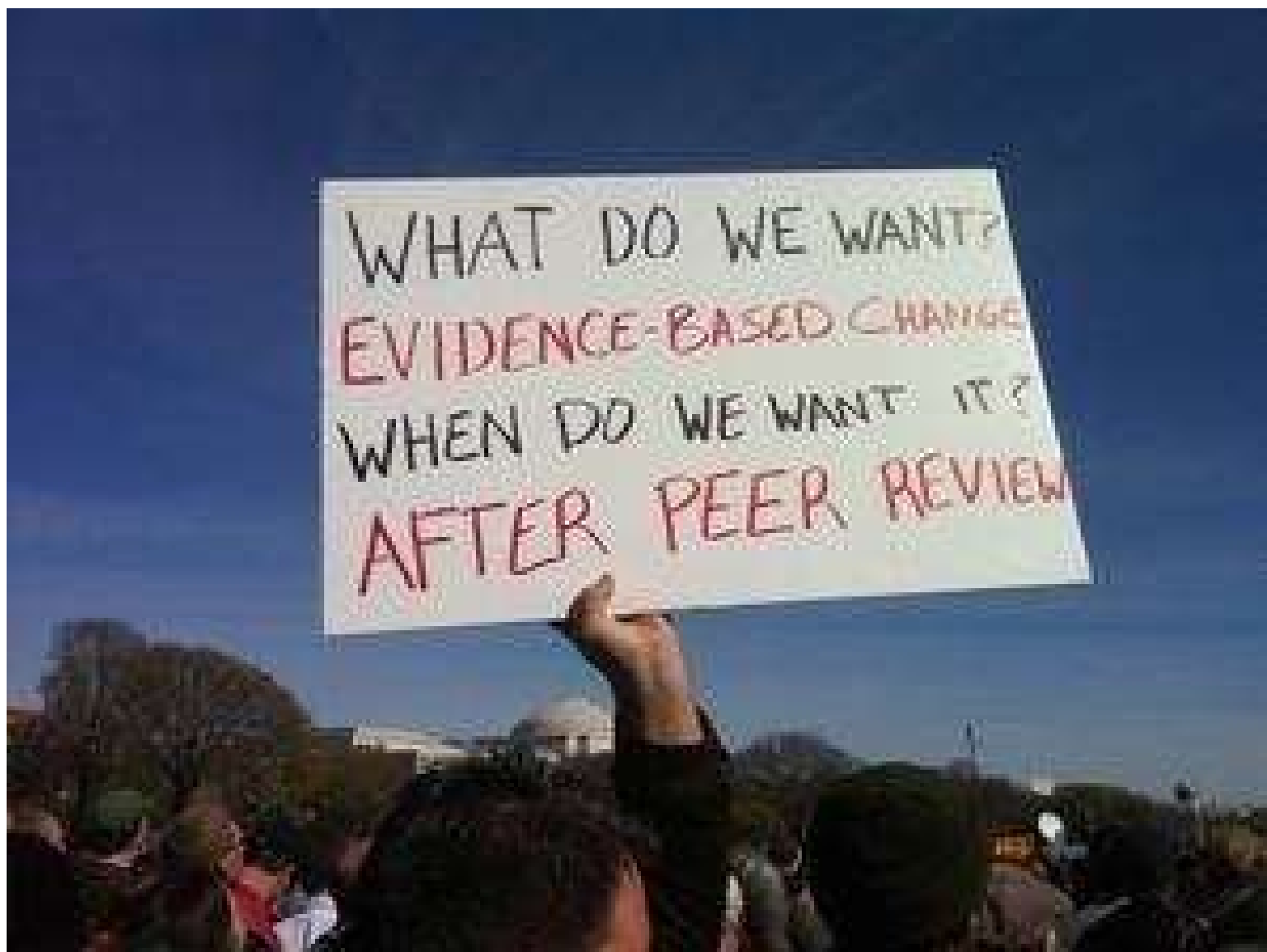
Presentation to Connecticut State Legislators
January 5, 2021

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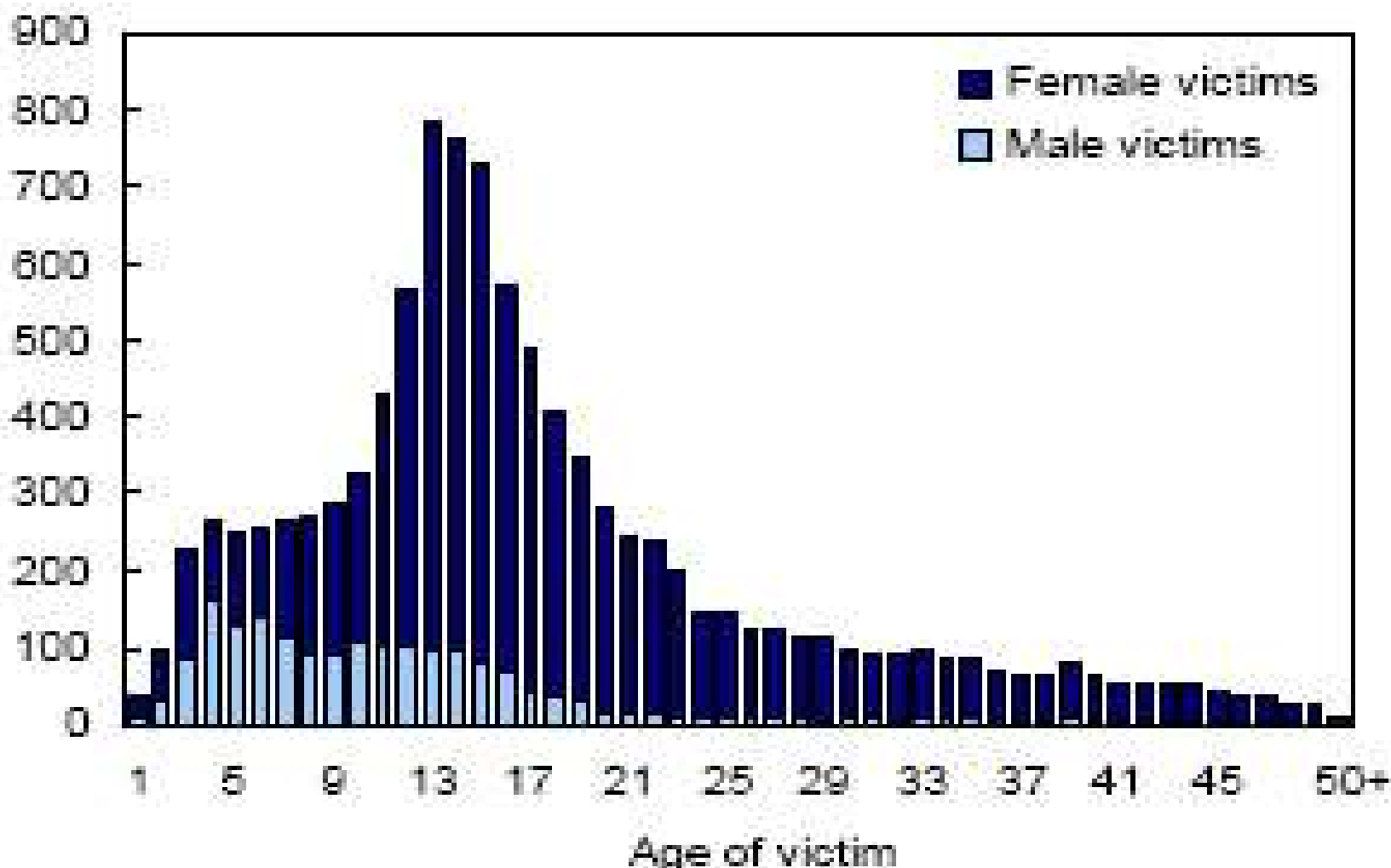
@rkarlhanson

Sexual Offenses

- Sexually motivated behaviour involving non-consenting persons or persons unable to provide consent (e.g., children, cognitively impaired)
  - Sexual adult of adult women, child molestation, exhibitionism, voyeurism, parent-child incest
- Offences against public morals
  - Prostitution, indecent materials

Young women at highest risk of sexual victimization, 2002

Young males at highest risk of sexual offending, 2002

Rate per 100,000 population
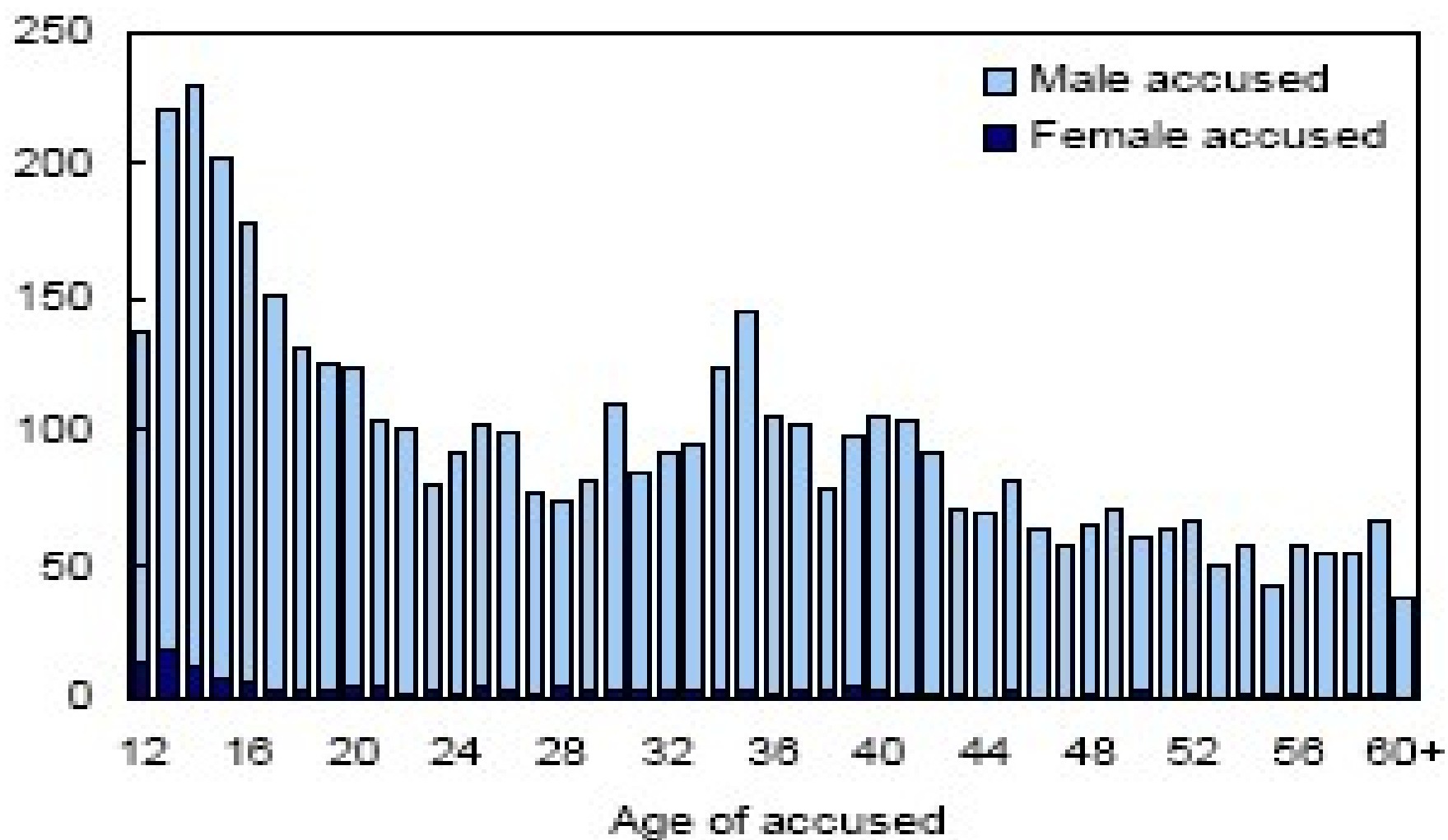
Age Distribution of Adult Males with Sexual Offence Conventions
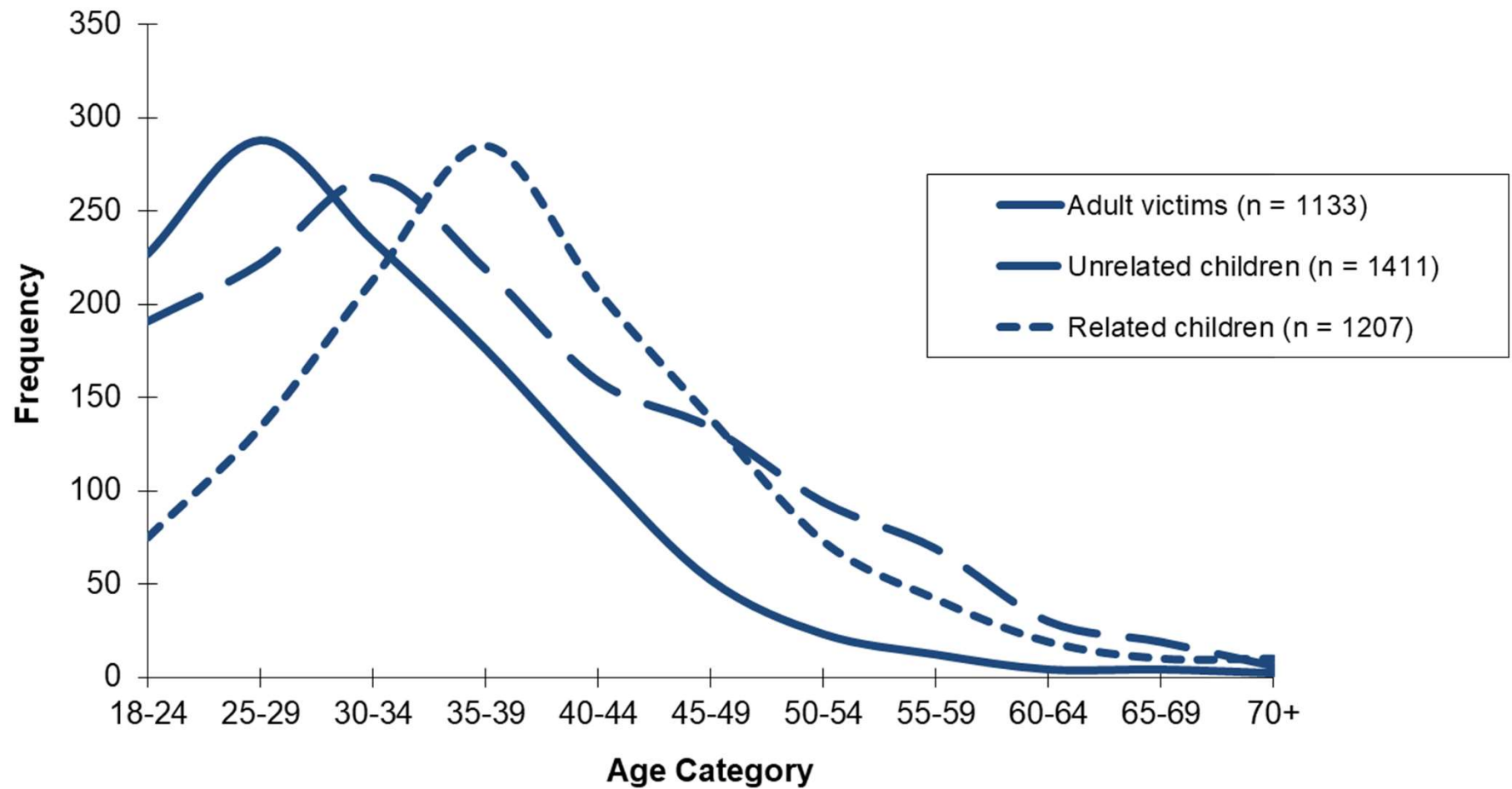
Relationship at the Time of the Sexual Offense
(sexual crimes reported to police)

Friends 10%

Acquaintances 42%

Family 28%

Strangers 20%
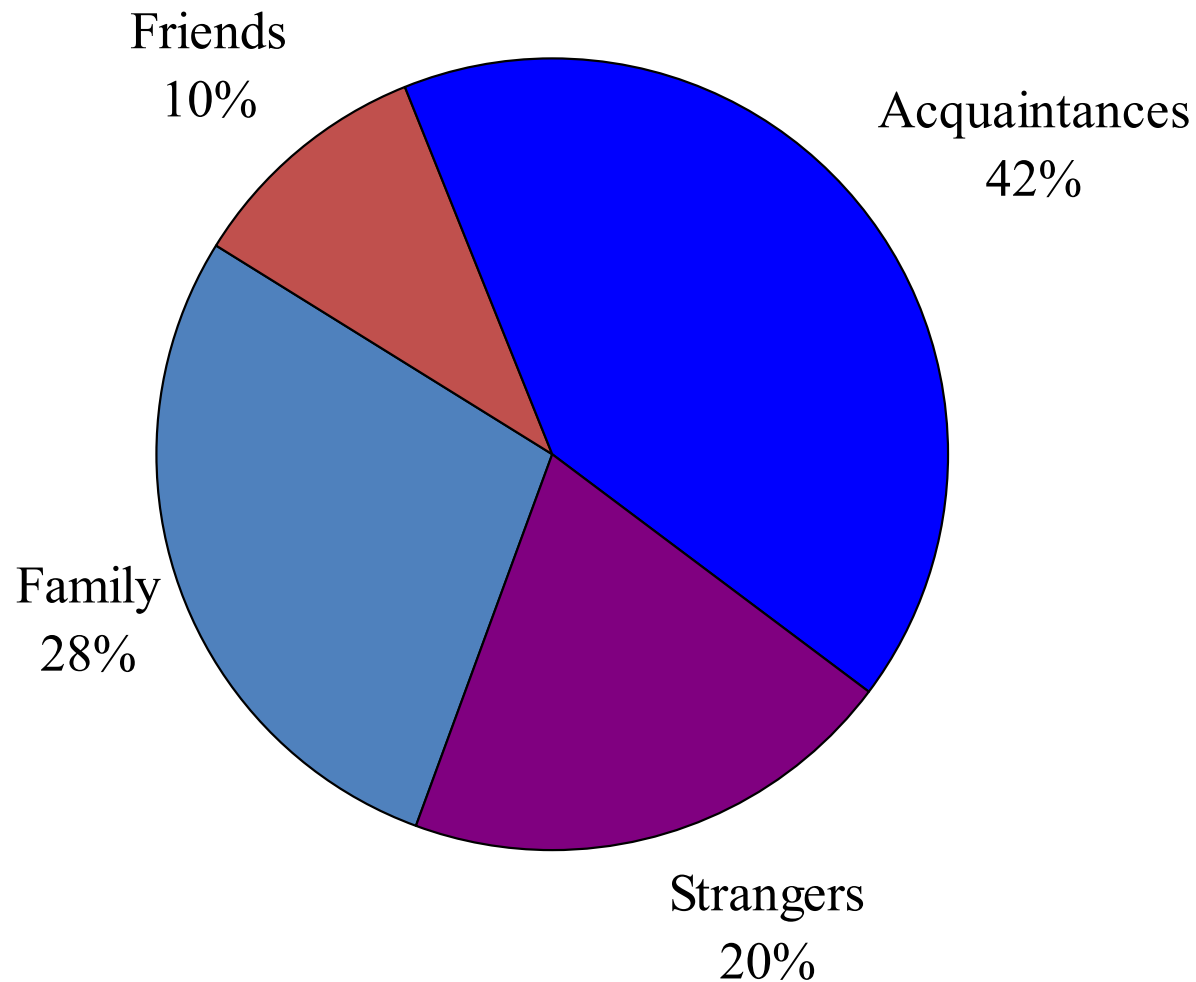
Sexual Victimization Rates

- Yearly incidence 1%-2%

- Lifetime prevalence
  - 20%-40% for women
  - 2%-10% for men

- 5% to 20% reported to police.

Community males

Community Males

   5% to 20% admit to a sexual offence

   1% to 2% convicted of a sexual offense prior
      to age 40

Males with nonsexual conviction

   1% to 2% convicted of a sexual offense within
      5 years

Defining a desistance threshold:
The rate of spontaneous out-of-the-blue sexual offences among individuals with only a history of nonsexual crime
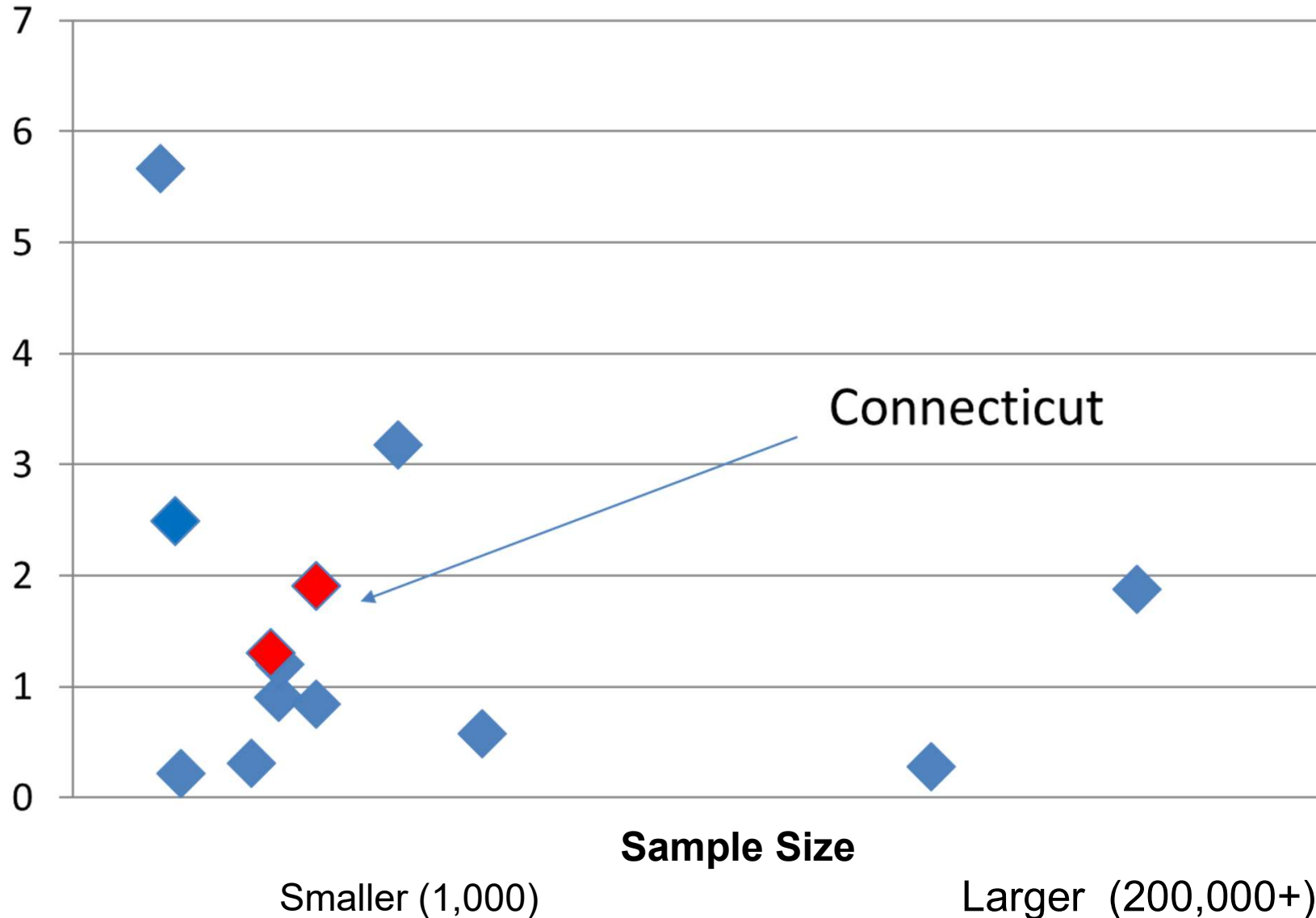
Desistance Threshold

Out of 100 individuals, 2 or less will be detected for a new sexual offence after 5 years in the community.

Conversely, 98 out of 100 will not.

Nature of Risk

- Harm
  - Sexual crimes are consistently perceived as among the most serious
  - Incestuous abuse the most psychologically damaging
  - Psychological harm largely unrelated to physical harm
- Likelihood
  - Sexual recidivism rates are lower than commonly expected

Sexual Offence Recidivism Rates

Recidivism Rate

Length of Follow-up

Connecticut

Sample size
50
100
250
500
1000
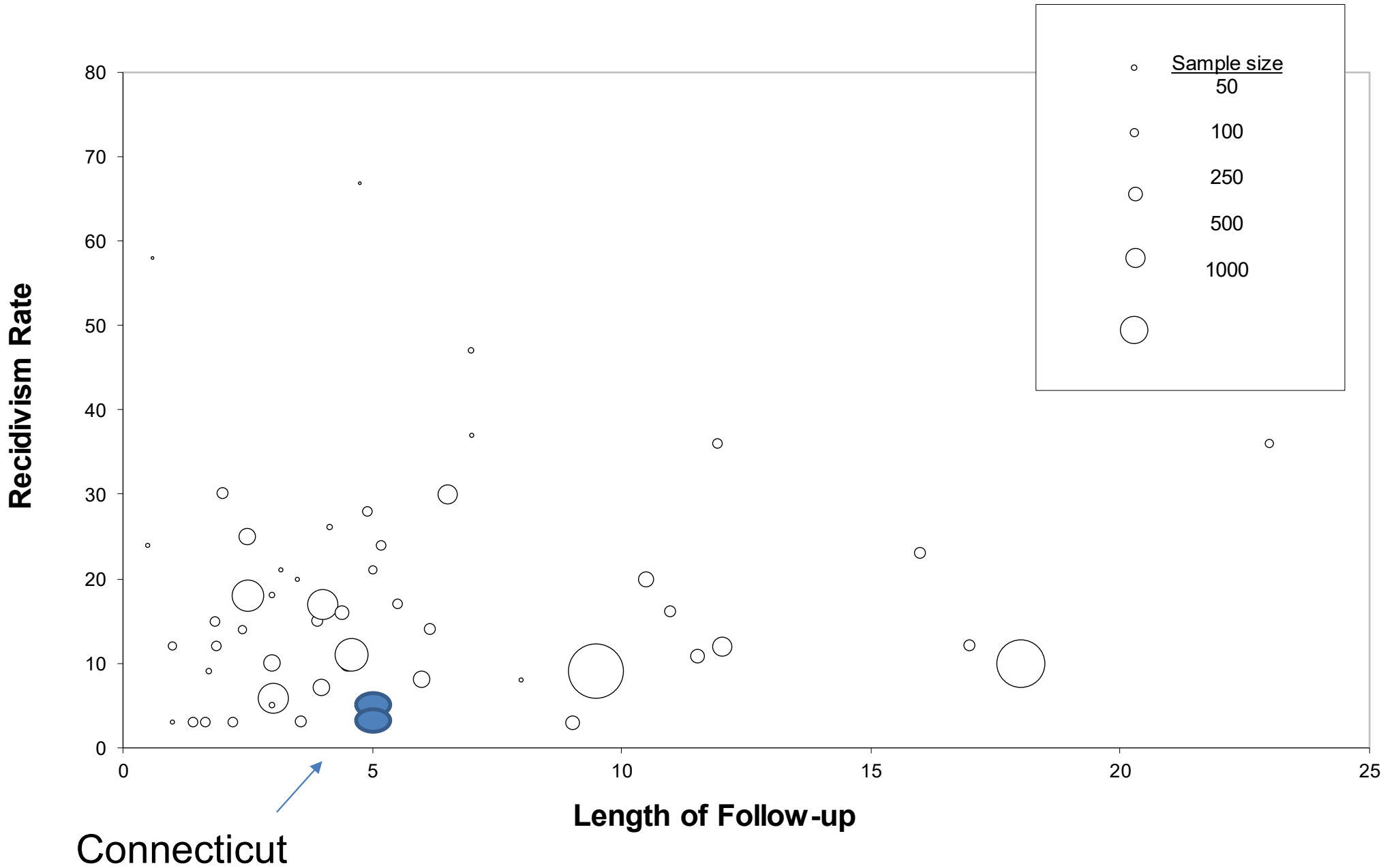
Time Period	Sexual Recidivism Rates
5 years	5% to 15%
10 years	8% to 20%
20 years	10% to 30%
Lifetime	10% to 30%

The Risk Declines the Longer Individuals
Remain Sexual Offense Free in the Community

	0 to 5 yrs	5 to 10 yrs	10 to 15 yrs
Rate	14	6	4
Cumulative rate	14	20	24

Sample size = 4,724

Sexual Recidivism Rates (%)

Victim type	5 years	10 years	15 years
Adult women	14	21	24
Related children	6	9	13
Unrelated girls	9	13	16
Unrelated boys	23	28	35

STATIC-99R:
A Sexual Recidivism Prediction Tool

- Age
- Ever lived with a lover
- Current non-sexual violence
- Prior non-sexual violence
- Prior sexual offences

- 4+ sentencing dates
- Non-contact sexual offences
- Unrelated victims
- Stranger victims
- Male victims

Number	Standardized Risk Level	Static-99R			
		Scores	Midpoint percentile	Predicted 5-year Recidivism rate (%)	Risk Ratio
I	Very Low Risk	-3, -2	2.8	0.9 – 1.3	< 0.26
II	Below Average	-1, 0	14.8	1.9 – 2.8	0.37 - .0.52
III	Average Risk	1, 2, 3	49.1	3.9 – 7.9	1.0
IV-a	Above Average	4, 5	83.4	11.0 – 15.2	1.94 – 2.70
IV-b	Well Above Average	6 or more	96.2	20.5 – 53.0	> 3.77

US Justice Center's 5-Levels for General Crime Risk/Need

I	Prosocial, made mistake Offending in the past
II	Minor concerns
III	Typical problems for individuals in trouble with the law
IV	Chronic rule violation, few strengths
V	Virtually certain to reoffend

Standardized Levels for Sexual Recidivism

I **Very Low Risk**	Older, prosocial, Offending in the past	
II **Below Average**	Minor concerns	
III **Average**	Typical problems for individuals with a sexual offence history	
IVa **Above Average**	History of rule violation, problems with sexual self- regulation, few strengths	Chronic problems
IVb **Well Above** **Average**		More and more severe

Treatment Dosage Recommendations

I **Very Low Risk**	**None Needed**
II **Below Average**	**Case Management**
III **Average**	**100+ Hours Intervention** **Change Focused Community** **Supervision**
IVa **Above Average**	**200-300 Hours** **of Changed Focused** **Intervention and** **Cascade of Services**
IVb **Well Above Average**	

Time Free Desistance Effects

"The general tendency for recidivism risk to decline over time is among the best replicated results in empirical criminology. It is probably not an exaggeration to say that any recidivism study with more than a 2- or 3-year follow-up period that did not find a downward-sloping marginal hazard would be immediately suspect" (Kurlychek et al., 2012, p. 75).

Alfred Blumstein & Kiminori Nakamura

Blumstein, A. & Nakamura, K. (2009). Redemption in the presence of widespread criminal background checks. *Criminology,* 47, 327-359. doi: 10.1111/j.1745-9125.2009.00155.x

Individuals arrested for robbery at age 18 look like the general population 7.7 years later
US (Blumstein & Nakamura, 2009)

Figure 2a. Comparison with Age–Crime Curve: Age 18 Robbery
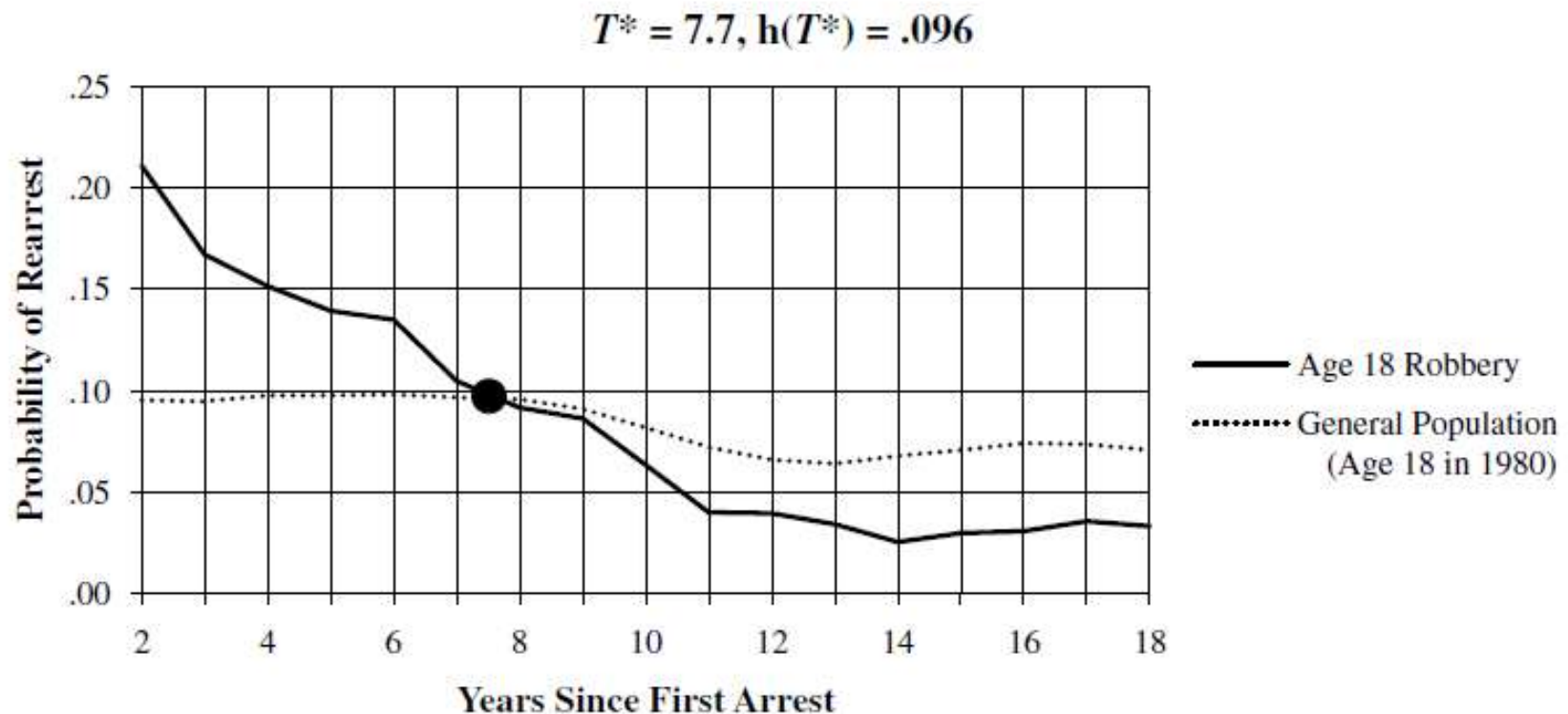
Figure 1. Empirical Hazards for Sample
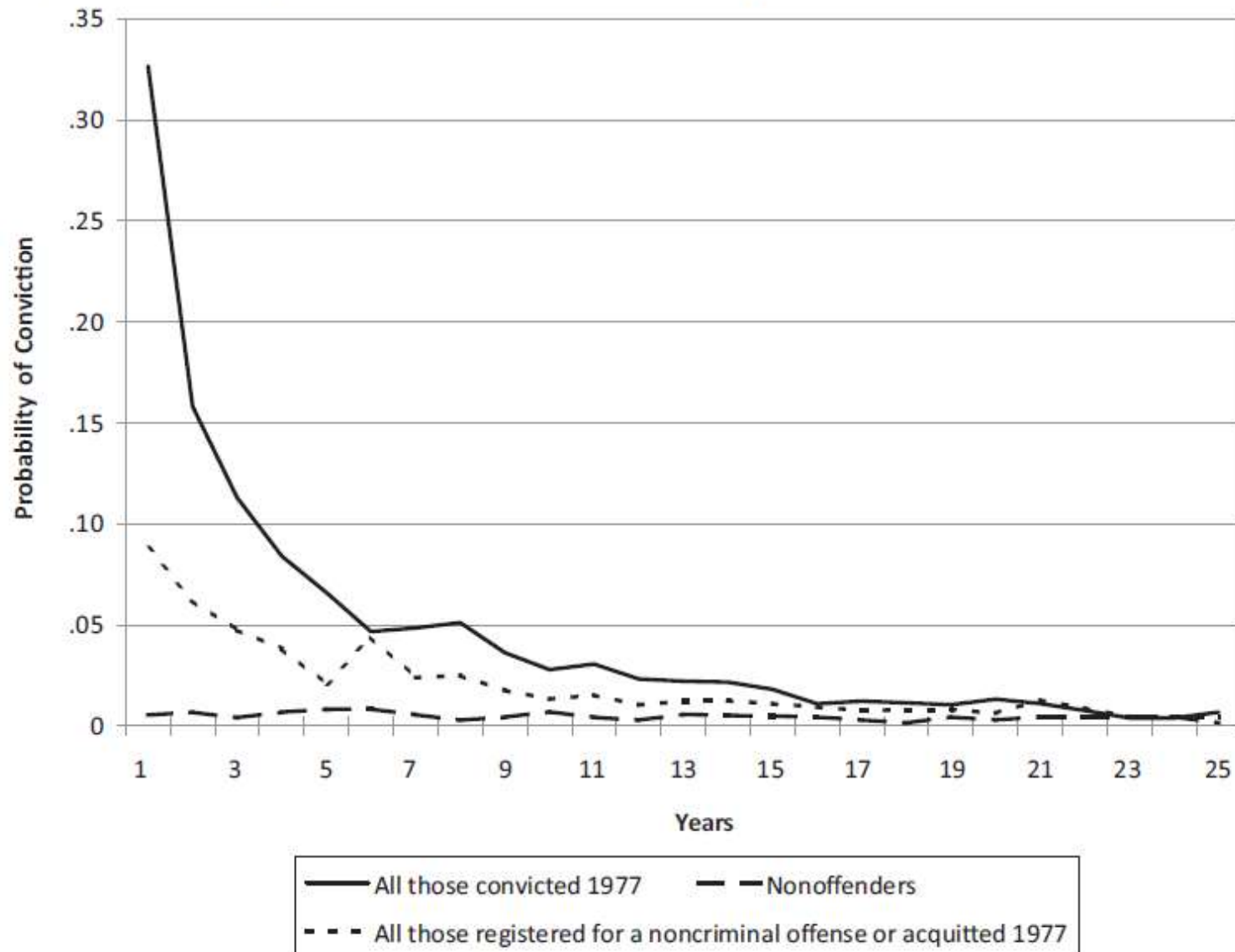
Figure 3. Predicted Hazards of a 26-Year-Old Offender with Different Criminal History Records
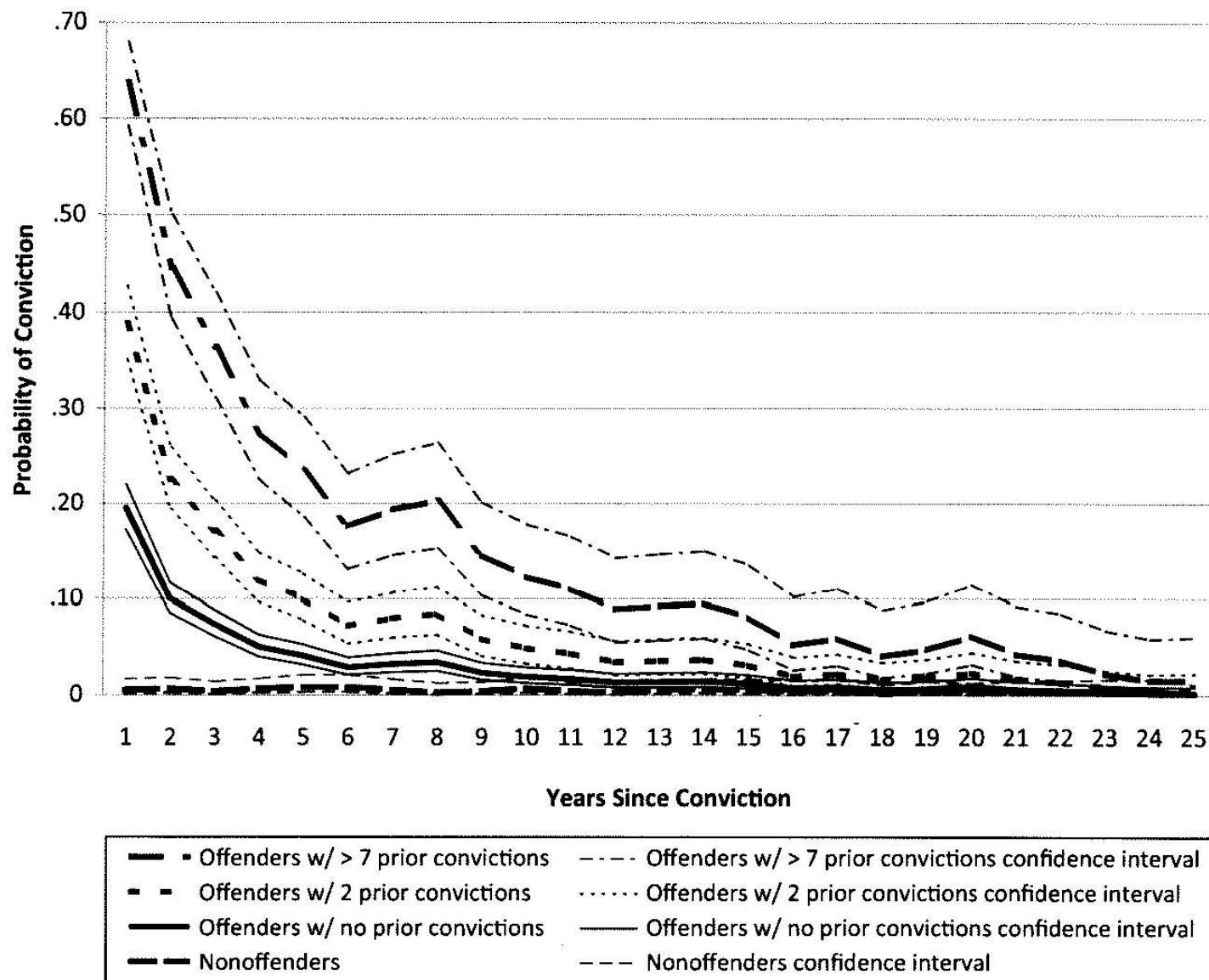
Declines for All Types of Recidivism (UK; Howard, 2011)

Figure S1 Hazards of main categories of reoffending

Legend:
- Violent (OVP definition)
- Drugs
- Drink driving
- Theft & handling
- Burglary
- Fraud & forgery
- Absconding
- All other
- Sexual
- Other motoring

Y-axis: % hazard of reoffending in this 3-month period

X-axis: Months since sentence/discharge (1-3, 4-6, 7-9, 10-12, 13-15, 16-18, 19-21, 22-24, 25-27, 28-30, 31-33, 34-36, 37-39, 40-42, 43-45, 46-48)
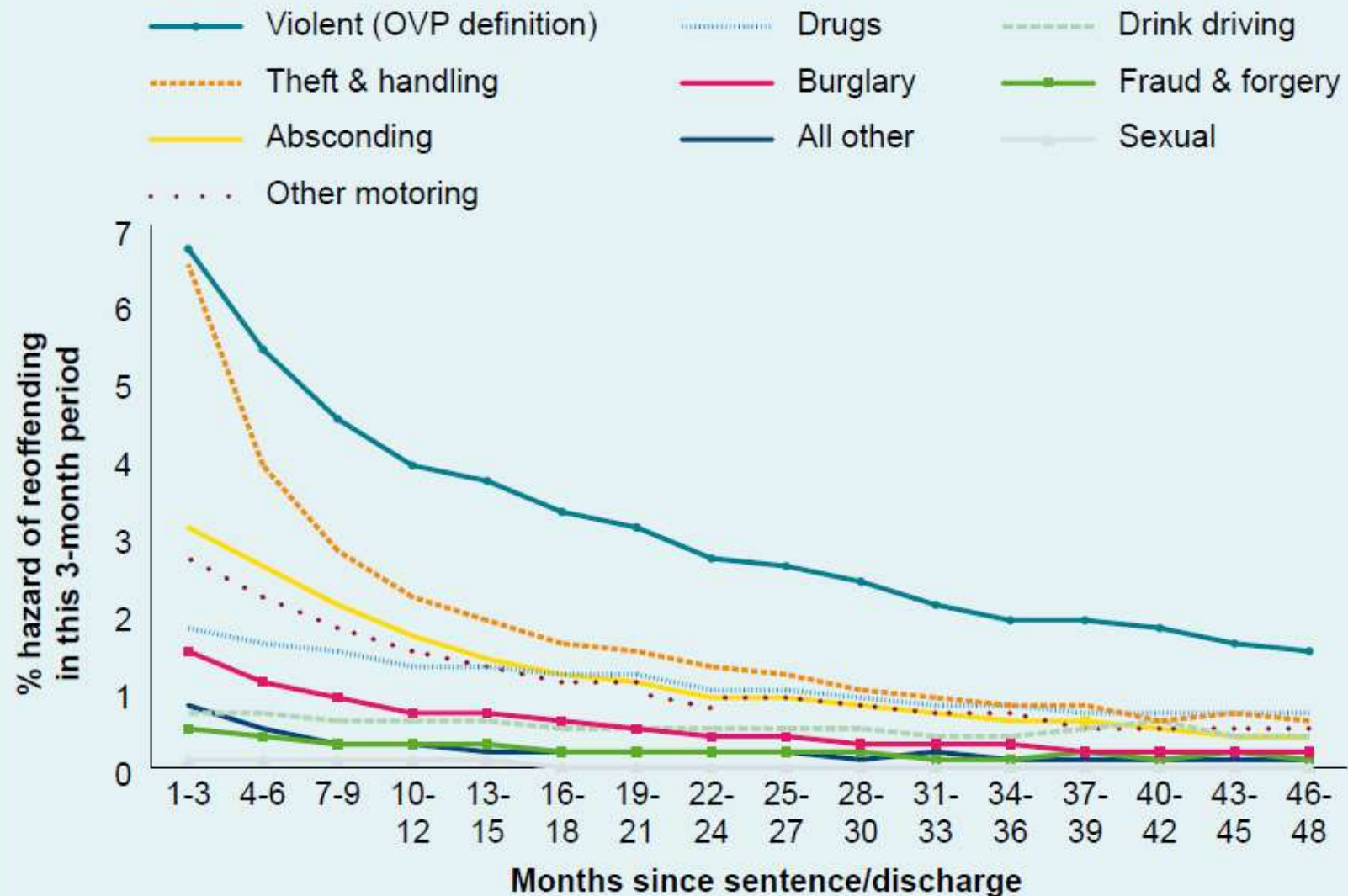
(Hazard = chance of reoffending in this 3-month period IF no reoffending (for this offence) previously)

Most juveniles desist within 5 years (Kurlychek et al., 2007)

Juvenile Offenders and Nonoffenders
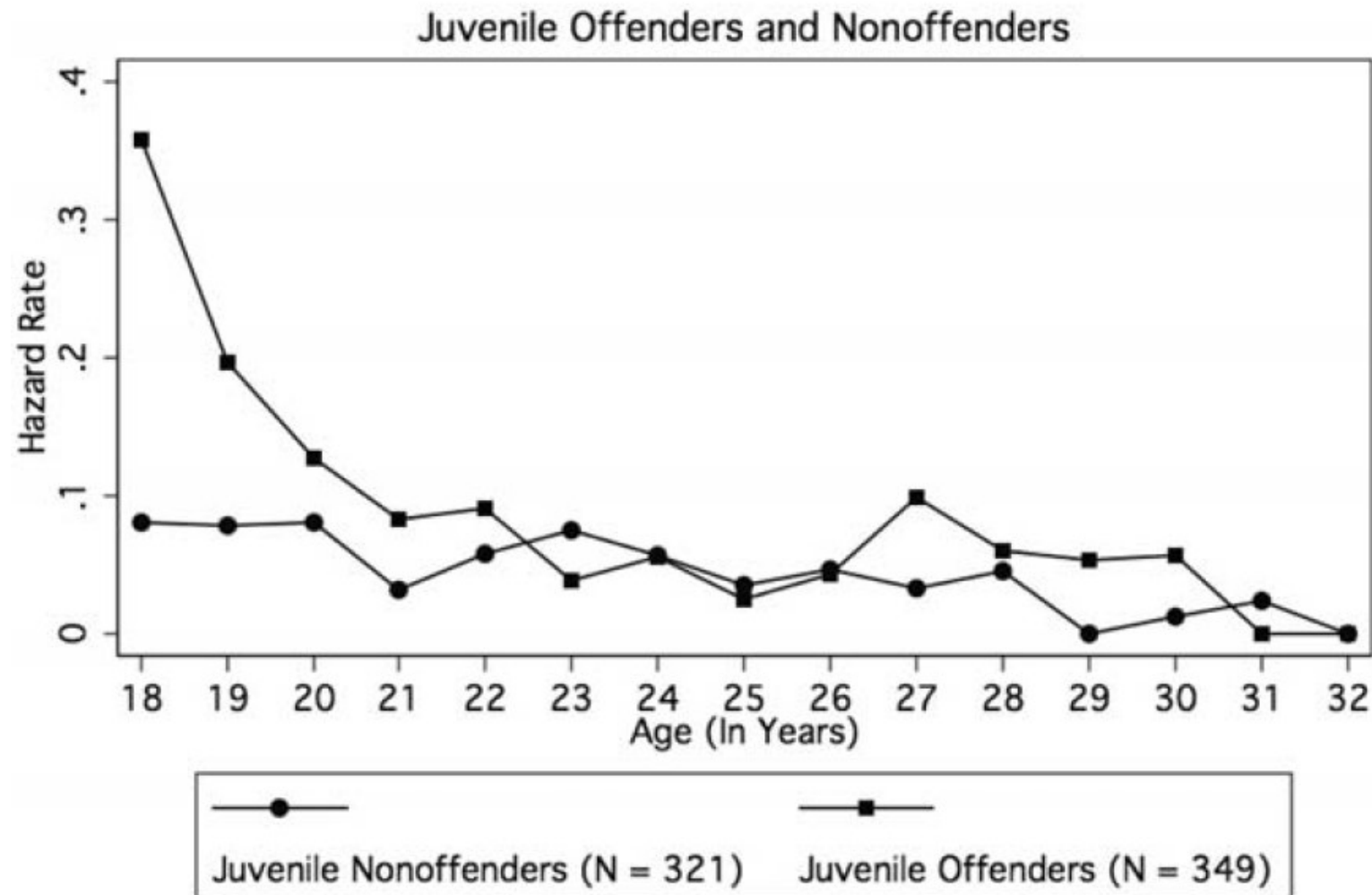
Sometimes it takes a bit longer . . . UK (Soothill & Francis, 2009)

Legend:
- no 10-16 convictions, no 17-20 convictions
- no 10-16 convictions, 17-20 convictions
- 10-16 convictions, no 17-20 convictions
- 10-16 and 17-20 convictions

x-axis: age at first conviction after age 20
y-axis: hazard rate

FIGURE 3

Conviction Hazard Rates for Four Groups Using the 1953 Offenders Index Cohort Data

High-Risk Sex Offenders May Not Be High Risk Forever
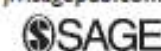
R. Karl Hanson,[1] Andrew J. R. Harris,[2] Leslie Helmus,[3] and David Thornton[4]

Abstract

This study examined the extent to which sexual offenders present an enduring risk for sexual recidivism over a 20-year follow-up period. Using an aggregated sample of 7,740 sexual offenders from 21 samples, the yearly recidivism rates were calculated using survival analysis. Overall, the risk of sexual recidivism was highest during the first few years after release, and decreased substantially the longer individuals remained sex offense–free in the community. This pattern was particularly strong for the high-risk sexual offenders (defined by Static-99R s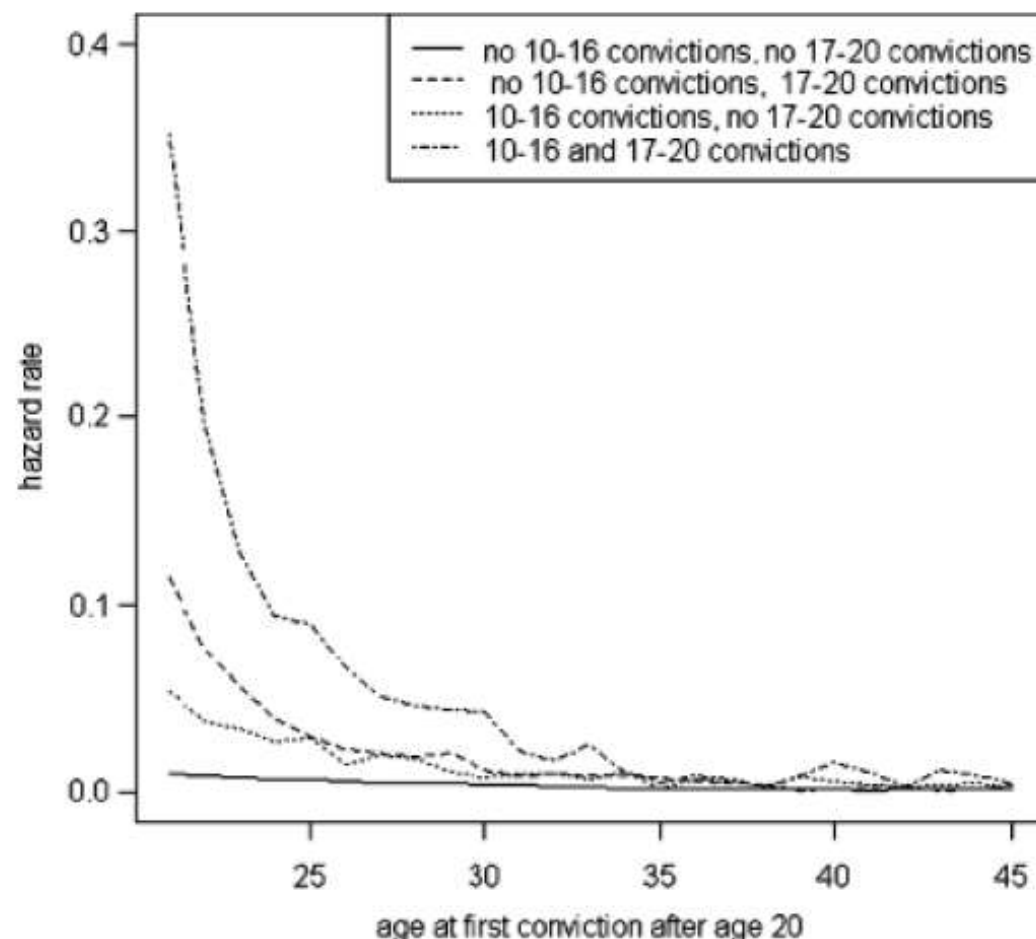cores). Whereas the 5-year sexual recidivism rate for high-risk sex offenders was 22% from the time of release, this rate decreased to 4.2% for the offenders in the same static risk category who remained offense-free in the community for 10 years. The recidivism rates of the low-risk offenders were consistently low (1%-5%) for all time periods. The results suggest that offense history is a valid, but time-dependent, indicator of the propensity to sexually reoffend. Further research is needed to explain the substantial rate of desistance by high-risk sexual offenders.

Samples

- 21 samples from the Static-99 re-norming project
  - N ranged from 133 to 1,278 (N = 7,740)
  - Majority from Canada (k = 9) or the U.S. (k = 5)

Time to Sexual Recidivism by Risk Level

Years of Follow-up

Low   Moderate   High

Low *n* = 890   Moderate *n* = 4,858   High *n* = 1,992

5 Years - no recorded recidivism

Low *n* = 601   Moderate *n* = 3,081   High *n* = 1,053

10 Years - no recorded recidivism

Years of Follow-up

Low n = 235   Moderte n = 1,179   High n = 438
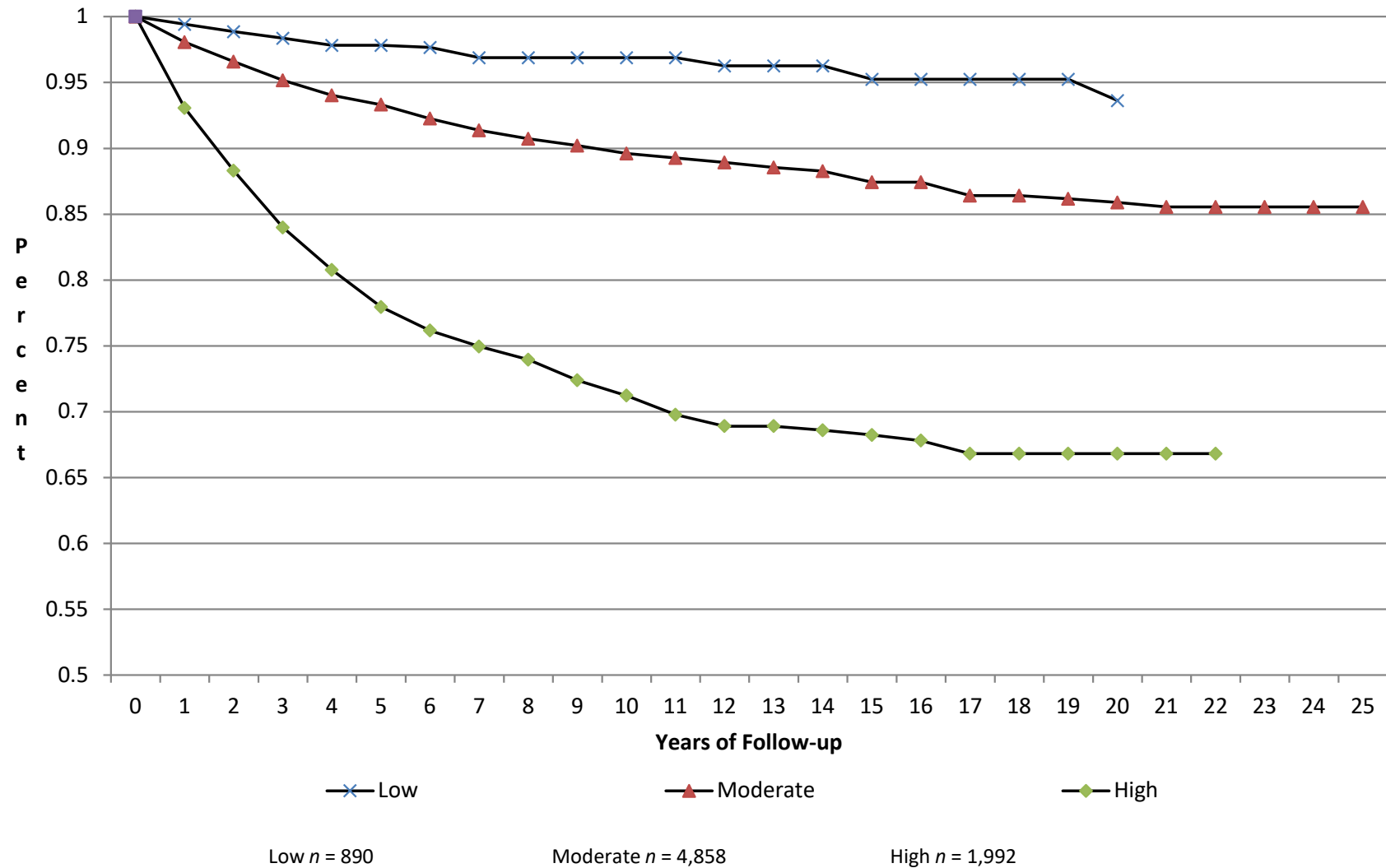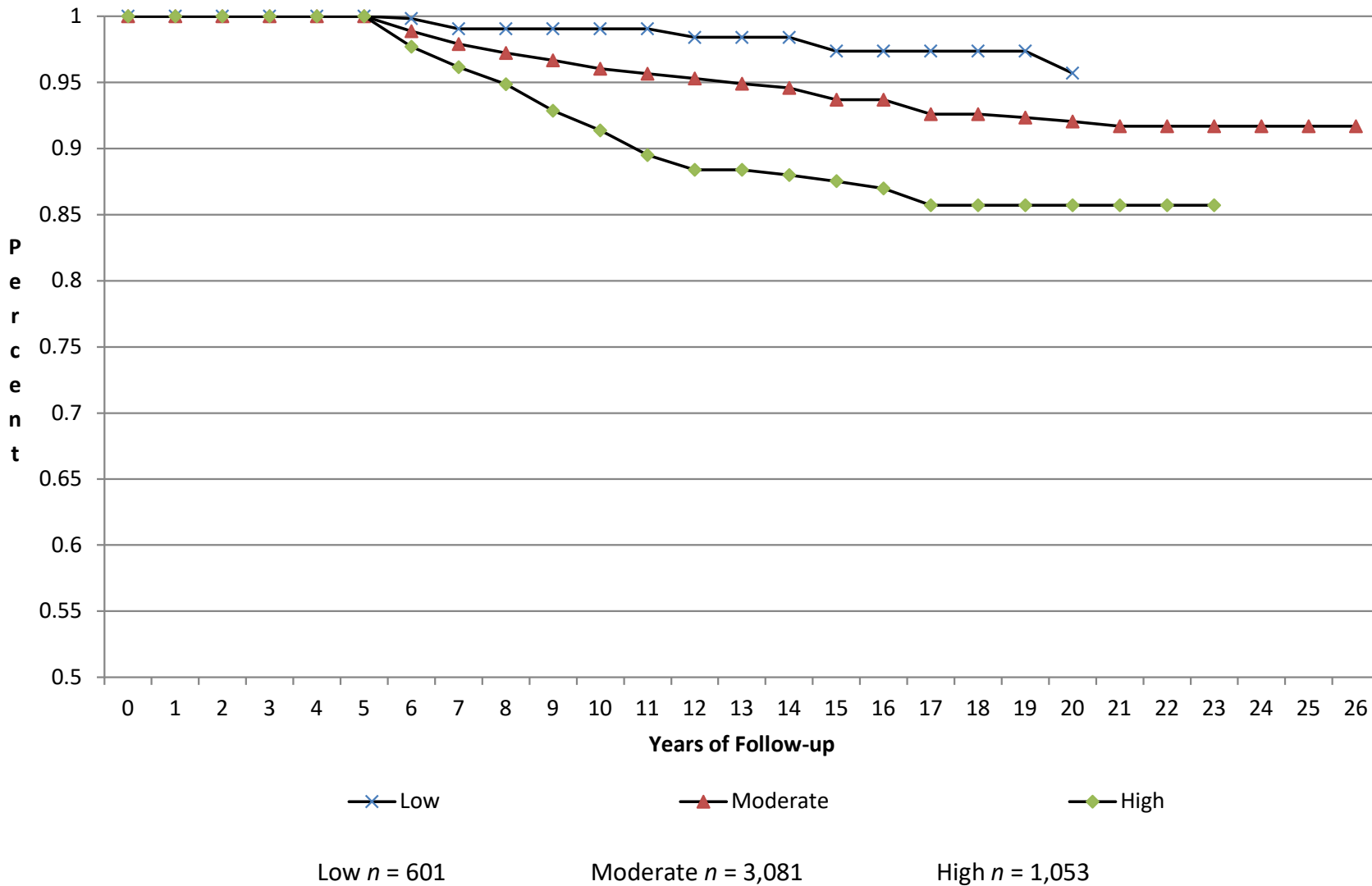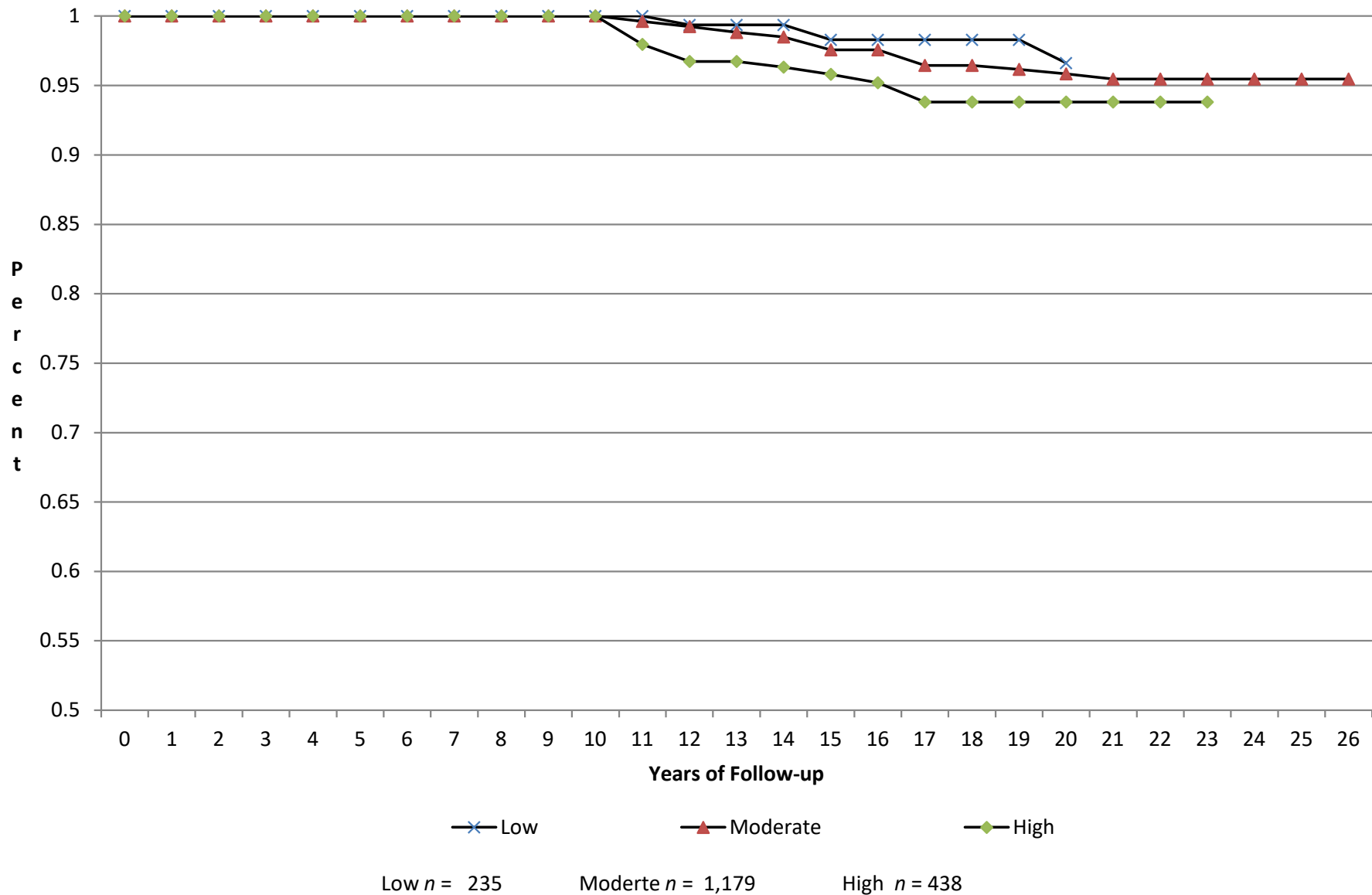
Table 3. Relative Reductions in Sexual Recidivism Based on Comparing the Rate During the First Five Years in the Community With the 5-Year Rates Starting After 5 and 10 Offense-Free Years in the Community.

	Sample Size at Start of Follow-up	Initial 5-Year Recidivism Rate (Years 1-5)		Relative Rate After 5 Years Offense-Free (Years 6-10)		Relative Rate After 10 Years Offense-Free (Years 11-15)	
		%	(n)	Risk Ratio	(n)	Risk Ratio	(n)
Complete sample	7,740	10.1	(4,735)	0.46	(1,847)	0.28	(755)
Risk level (Static-99R scores)							
Low (scores of −3 to −1)	890	2.2	(601)	0.44	(234)	0.78	(88)
Moderate (scores of 0 to 4)	4,858	6.7	(3,081)	0.59	(1,175)	0.36	(496)
High (scores of 5+)	1,992	22.0	(1,053)	0.39	(438)	0.19	(171)
Age at release							
Immature (18 to 30 years)	1,818	13.74	(1,130)	0.46	(524)	0.31	(260)
Young (30 to 50 years)	4,434	10.07	(2,719)	0.44	(1,051)	0.21	(411)
Prime of life (50+ years)	1,488	5.44	(866)	0.52	(272)	0.31	(84)
Sample type							
Routine correctional	4,040	6.73	(2,248)	0.55	(671)	—	
Preselected treatment	1,920	8.85	(1,442)	0.46	(642)	0.32	(420)
Preselected high risk/needs	1,621	20.42	(963)	0.37	(491)	0.16	(294)
Country							
United States	1,782	12.70	(1,318)	0.33	(810)	0.15	(552)
Canada	2,875	11.10	(1,298)	0.48	(379)	0.16	(55)
Other	3,082	7.63	(2,118)	0.60	(658)	—	

(continued)

Table 3. (continued)

	Sample Size at Start of Follow-up	Initial 5-Year Recidivism Rate (Years 1-5)		Relative Rate After 5 Years Offense-Free (Years 6-10)		Relative Rate After 10 Years Offense-Free (Years 11-15)	
		%	(n)	Risk Ratio	(n)	Risk Ratio	(n)
Year of release (sample median)							
1970-1995	4,268	11.38	(3,278)	0.42	(1,628)	0.24	(734)
1996-2003	3,472	8.40	(1,457)	0.47	(219)	—	
Victim type							
Adults (rape)	2,182	9.95	(1,262)	0.45	(443)	0.24	(102)
Children (all child molesters)	3,188	8.59	(1,887)	0.42	(807)	0.19	(351)
Related children (incest)	1,539	4.17	(985)	0.50	(418)	0.07	(179)

How quickly should revise our STATIC risk assessments?

Reductions in Risk Based on Time Offense-Free in the Community: Once a Sexual Offender, Not Always a Sexual Offender

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Whereas there is a common assumption that most individuals with a criminal record can be eventually reintegrated into the community, the public has different expectations for sexual offenders. In many countries, individuals with a history of sexual offenses are subject to a wide range of long-term restrictions on housing and employment, as well as public notification measures intended to prevent them from merging unnoticed into the population of law-abiding citizens. This article examines the testable assumption that individuals with a history of sexual crime present an enduring risk for sexual recidivism. We modeled the long-term (25-year) risk of sexual recidivism in a large, combined sample ($N > 7,000$). We found that the likelihood of new sexual offenses declined the longer individuals with a history of sexual offending remain sexual offense-free in the community. This effect was found for all age groups and all initial risk levels. Nonsexual offending during the follow-up period increased the risk of subsequent sexual recidivism independent of the time free effect. After 10 to 15 years, most individuals with a history of sexual offenses were no more likely to commit a new sexual offense than individuals with a criminal history that did not include sexual offenses. Consequently, policies designed to manage the risk of sexual recidivism need to include mechanisms to adjust initial risk classifications and determine time periods where individuals with a history of sexual crime should be released from the conditions and restrictions associated with the "sexual offender" label.

Sample & Method

- 7,225 adult males (791 sexual recidivists)
- 20 samples
  - Routine/Complete (8), Treatment (5), High Risk/High Need, Other (2)
  - Canada (10), US (4) and one each from UK, Austria, Sweden, New Zealand, Denmark and Germany
- Variable follow-up: .5 to 25 years
- Discrete-time survival analysis (logistic regression)
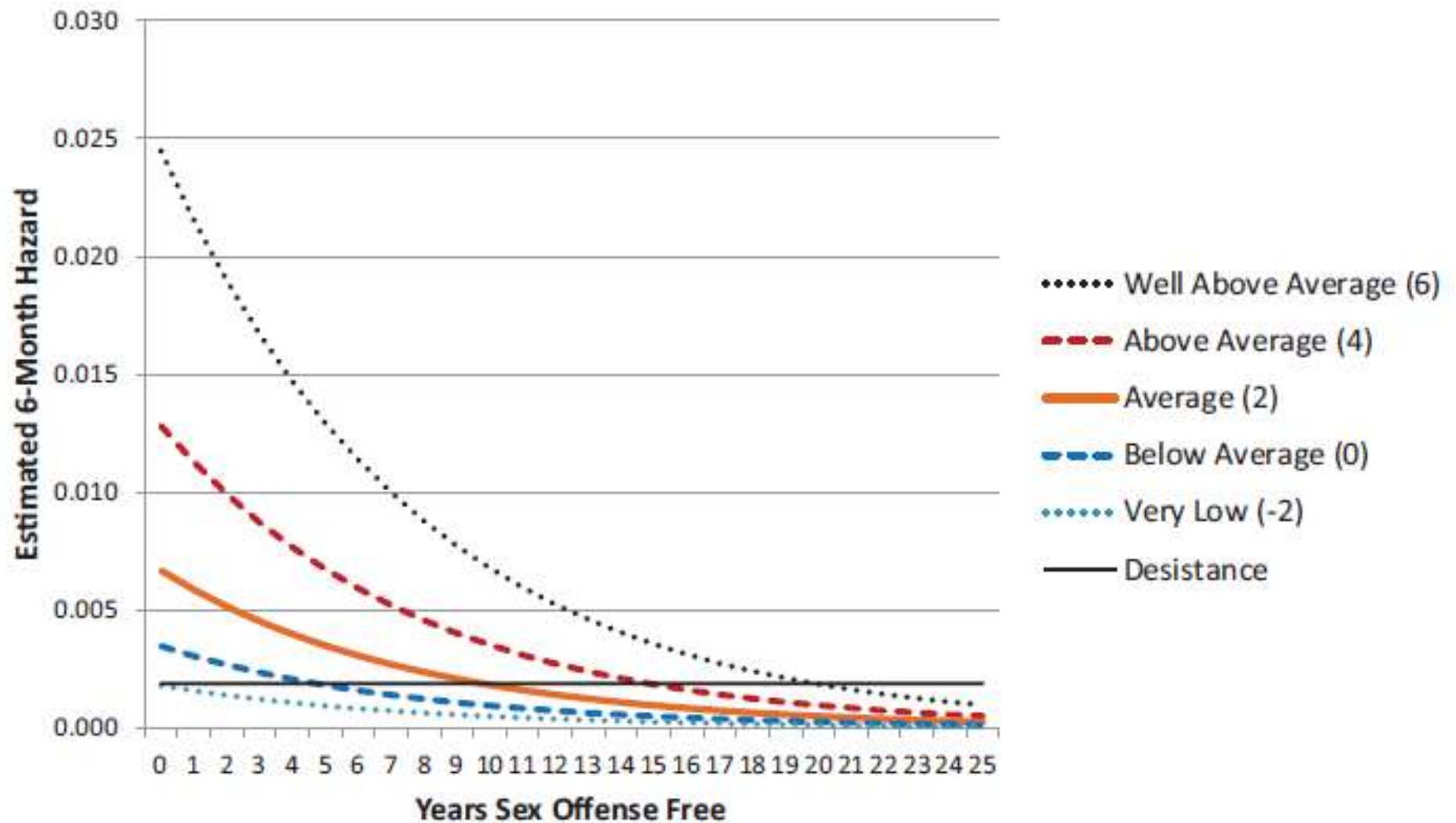
Figure 2. Years to desistance according to initial risk level based on selected Static-99R scores. Estimated hazard rates based on Model 5 ($n = 7,225$) for routine/complete samples.

Other Researchers Find the Same Effect
UK (Hargreave & Francis, 2014)
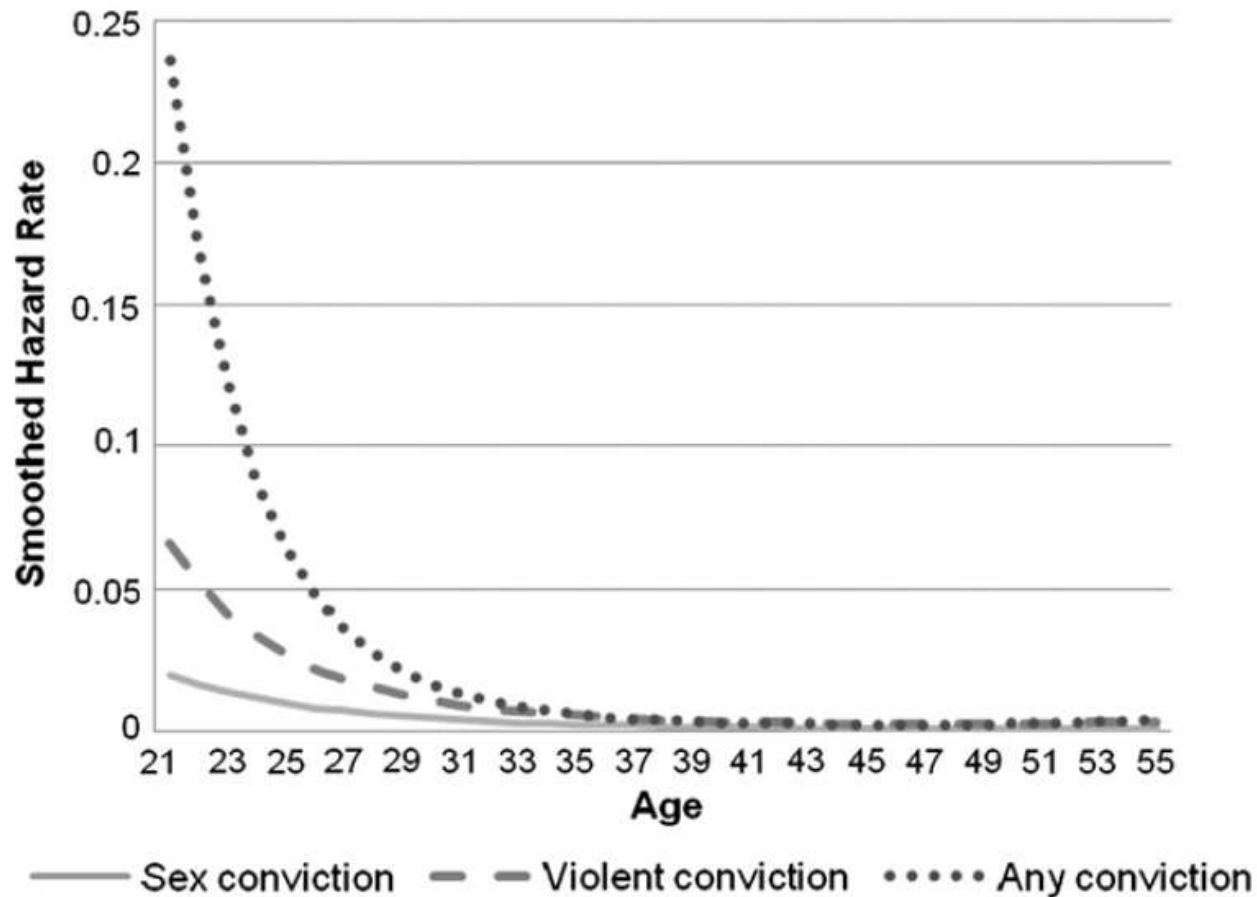
Fig. 1. Convicted sexual offenders' hazard rate of multiple recidivism types.

Decline in Risk Level Based on Initial Static-99R Score and Years Sexual Offence Free in the Community

Years Sexual Offence Free in the Community

STATIC-99R Scores	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
-3	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
-2	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
-1	II	II	II	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
0	II	II	II	II	II	II	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
1	III	III	III	II	II	II	II	II	I	I	I	I	I	I	I	I	I	I	I	I	I	I
2	III	III	III	III	III	III	II	II	II	II	II	I	I	I	I	I	I	I	I	I	I	I
3	III	III	III	III	III	III	III	III	II	II	II	II	II	I	I	I	I	I	I	I	I	I
4	IVa	IVa	IVa	III	III	III	III	III	III	III	III	II	II	II	II	II	I	I	I	I	I	I
5	IVa	IVa	IVa	IVa	IVa	IVa	III	III	III	III	III	III	III	II	II	II	II	II	I	I	I	I
6	IVb	IVb	IVb	IVa	IVa	IVa	IVa	IVa	III	III	III	III	III	III	III	III	II	II	II	II	II	I
7	IVb	IVb	IVb	IVb	IVb	IVb	IVa	IVa	IVa	IVa	IVa	III	III	III	III	III	III	III	II	II	II	II
8	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVa	IVa	IVa	IVa	IVa	III	III	III	III	III	III	III	III	II
9	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVa	IVa	IVa	IVa	IVa	III	III	III	III	III	III
10	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVb	IVa	IVa	IVa	IVa	IVa	III	III	III	III

Projected residual risk (recidivism rates as percentages) from time of release up to 20 years offence-free in the community for **routine/complete** samples

| Follow-up year | Initial Risk (based on Static-99R scores) | | | | | | | | | | | | | |
| | Level I | | Level II | | Level III | | | Level IV.a | | Level IV.b | | | | |
	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
At release	1.7	2.5	3.7	5.4	7.4	10.6	14.8	20.3	27.5	36.1	46.3	57.2	67.9	77.6
1	1.5	2.2	3.2	4.7	6.5	9.3	13.0	17.9	24.3	32.2	41.8	52.3	62.9	72.9
2	1.3	1.9	2.8	4.1	5.6	8.1	11.3	15.7	21.5	28.7	37.5	47.4	57.8	68.0
3	1.1	1.6	2.4	3.5	4.9	7.0	9.9	13.7	18.9	25.4	33.4	42.7	52.7	62.8
4	1.0	1.4	2.1	3.0	4.2	6.1	8.6	12.0	16.6	22.3	29.7	38.3	47.7	57.6
5	0.8	1.2	1.8	2.6	3.7	5.3	7.5	10.4	14.4	19.6	26.2	34.0	42.9	52.3
6	0.7	1.0	1.5	2.3	3.2	4.5	6.6	9.0	12.5	17.1	22.9	30.1	38.2	47.2
7	0.6	0.9	1.3	1.9	2.7	3.9	5.5	7.8	10.8	14.8	20.0	26.4	33.8	42.1
8	0.5	0.8	1.1	1.6	2.3	3.3	4.8	6.6	9.3	12.7	17.3	23.0	29.6	37.3
9	0.4	0.6	0.9	1.4	2.0	2.8	4.0	5.6	7.9	10.9	14.8	19.8	25.7	32.6
10	0.4	0.5	0.8	1.2	1.6	2.4	3.4	4.8	6.7	9.2	12.6	16.9	22.1	28.3
11	0.3	0.5	0.7	1.0	1.4	2.0	2.8	4.0	5.6	7.8	10.6	14.3	18.8	24.2
12	0.3	0.4	0.5	0.8	1.1	1.6	2.3	3.3	4.6	6.4	8.9	12.0	15.8	20.4
13	0.2	0.3	0.4	0.7	0.9	1.3	1.9	2.7	3.8	5.3	7.2	9.8	13.0	17.0
14	0.2	0.2	0.4	0.5	0.7	1.1	1.5	2.1	3.0	4.2	5.8	7.9	10.5	13.8
15	0.1	0.2	0.3	0.4	0.6	0.8	1.2	1.7	2.4	3.3	4.5	6.2	8.3	10.9
16	0.1	0.1	0.2	0.3	0.4	0.6	0.9	1.2	1.8	2.5	3.4	4.7	6.2	8.2
17	0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.9	1.2	1.7	2.4	3.3	4.4	5.8
18	<0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.5	0.8	1.1	1.5	2.1	2.8	3.7
19	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.7	1.0	1.3	1.7
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

So, what is happening?

- Frailty
  - Selective attrition of high risk cases

- Real change
  - Risk relevant propensities
  - Intentions

When you've finished changing, you're finished.

– Benjamin Franklin

Why might individuals desist?

- Effective psychological interventions
  - Regulating risk relevant propensities
- Aging
  - Physical decline
  - Increased psychological maturity
- Increasing rewards from prosocial life
  - Success in work
  - Rewarding leisure activities
  - Decent friends
  - Caring intimate partner
  - Increased dependence

Policy and Practice Implications

- Sort individuals according to risk levels
  - Have structured methods for assigning individuals to risk levels.

- Invest the most resources in the highest risk cases
  - Align interventions, service, and supervision with risk levels.

- Routinely revise risk levels
  - Have structured methods for revising risk level assignment.

Questions?