

# Examining Potential Moderators of the Effect of Age on Sexual Recidivism in two Very Large Samples

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- The current city of Vancouver rests on traditional and unceded lands of the Coast Salish Peoples.
- I would like to respectfully acknowledge the unceded traditional territories of the Sk̓w̓x̓w̓ú7mesh Úxwumixw (Squamish), səl̓ilw̓ətaʔl̓ (Tsleil-Waututh) and x̓<sup>w</sup>məθk̓<sup>w</sup>əy̓əm (Musqueam) Nations.
- [Native-land.ca](http://Native-land.ca)

# Maaike Helmus



**SIMON FRASER UNIVERSITY**  
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# LITTLE MISS CONTRARY

*By Roger Hargreaves*



Okay, so the age item  
works.....BUT.....

# Potential Arguments: Age reduction may not apply.....

- For individuals with pedophilia
  - Antisocial personality disorder tends to decrease in 40s and beyond (no longer predictive?)
  - Paraphilic sexual interests more persistent into older age
- For individuals with incest offences
  - Hanson (2002) – weaker age effects for those with incest offences
- For higher risk individuals
- For individuals from preselected high risk/need samples

# Samples

- Same two from David Thornton's presentation
  - Helmus et al.:  $k = 27$ ,  $n = 14,918$
  - Sandler New York Data:  $n = 9,984$

*Descriptive Information*

Study	<i>n</i>	<i>n</i> in 2012 paper	Age <i>M</i> ( <i>SD</i> )	Country	Recidivism Criteria	Type of Sample	Release Period
<b>Routine</b>							
Bartosh et al. (2003)	185	186	38.4 (12.2)	U.S.	Charges	Corrections	1996
Bigras (2007)	480	483	43.1 (12.2)	Canada	Charges	CSC Reception Centre	1995-2004
Boer (2003)	299	299	41.1 (12.5)	Canada	Conviction	CSC Release	1976-1994
Craissati et al. (2011)	209	209	37.6 (12.0)	U.K.	Conviction	Community supervision	1992-2005
Eher et al. (2009)	706	706	40.7 (12.6)	Austria	Conviction	European prison	2000-2005
Epperson (2003)	176	177	37.3 (13.2)	U.S.	Charges	Prison and Probation	1989-1998
Hanson et al. (2015)	764	702	41.5 (13.5)	Canada	Charges	Community supervision	2001-2009
Hanson, Lunetta et al. (2014)	494	-	42.5 (10.9)	U.S.	Charges	California Prison Release	2006-2007
Helmus et al. (2021)	4,333	-	40.9 (13.7)	Canada	Charges	Routine corrections	2004-2013
Långström (2004)	1,278	1,278	41.5 (12.0)	Sweden	Conviction	National Prison Release	1993-1997
Lehmann, Hanson et al. (2013)	923	-	38.4 (11.5)	Germany	Conviction	Berlin Police Registry	1994-2009
Mercado et al. (2011)	1,407	-	39.0 (12.0)	U.S.	Charges	Multiple New Jersey facilities	1996-2007
<b>Preselected Treatment</b>							
Allan et al. (2007)	492	492	42.3 (12.2)	New Zealand	Charges	Prison treatment	1990-2000
Brouillette-Alarie & Proulx (2008)	228	228	36.0 (10.2)	Canada	Conviction	Prison & community treatment	1979-2006
Harkins & Beech (2007)	197	197	43.3 (12.6)	U.K.	Conviction	Prison & community treatment	1994-1998
Johansen (2007)	273	273	37.8 (10.8)	U.S.	Charges	Prison treatment	1994-2000
Knight & Thornton (2007)	251	251	34.4 (10.1)	U.S.	Charges	Referred, not civilly committed	1957-1986
Swinburne Romine et al. (2008)	677	680	38.2 (12.3)	U.S.	Conviction	Community treatment	1977-2007
Ternowski (2004)	247	247	43.9 (13.0)	Canada	Charges	Prison treatment	1994-1998
<b>High Risk/High Need</b>							
Bengtson (2008)	308	311	32.8 (10.4)	Denmark	Charges	Forensic psychiatric evaluations	1978-1995
Bonta & Yessine (2005)	133	133	39.8 (9.6)	Canada	Conviction	Preselected high risk	1992-2004
Haag (2005)	198	198	37.1 (9.9)	Canada	Conviction	Detained until end of sentence	1995
Knight & Thornton (2007)	214	215	38.1 (12.4)	U.S.	Charges	Civilly committed	1959-1983
Nicholaichuk (2001)	281	281	34.8 (9.4)	Canada	Conviction	High intensity treatment	1983-1998
Wilson et al. (2007a & b)	232	232	41.6 (11.3)	Canada	Charges	Preselected high risk	1994-2007
<b>Other</b>							
Cortoni & Nunes (2007)	73	73	41.6 (12.3)	Canada	Charges	Prison treatment (lower risk)	2001-2004
Hill et al. (2008)	86	86	39.4 (11.1)	Germany	Conviction	Sexual homicide perpetrators	1971-2002
<b>Total (excluding Sandler data)</b>	14,918	8,390	40.0 (12.6)	-	-	-	1957-2013
Sandler (2023)	9,984	-	41.3 (13.3)	U.S.	Charges	New York State Sexual Felons	2007-2022

# General Analytic Approach

- Cox regression analyses
  - Hazard ratios
- Sexual recidivism
- Age item (categorical)
  - Reference group is 60+
  - Does not consider ordinal nature of age categories (gradual)
- Sample entered as strata variable (except sample type analyses)
- \* $p < .05$



But does the age item work for higher risk individuals?

	< 4 non-age points on Static-99R		4+ non-age points on Static-99R	
	Mixed data	NY data	Mixed data	NY data
N	9,964	6,654	4,890	3,316
Under 35 (vs. 60+)	<b>2.582*</b>	<b>5.510*</b>	<b>2.407*</b>	<b>1.639*</b>
35-39 (vs. 60+)	<b>2.318*</b>	<b>4.314*</b>	<b>2.345*</b>	1.353
40-59 (vs. 60+)	1.536	<b>2.339*</b>	<b>1.799*</b>	1.325
Model $\chi^2$	<b>39.23*</b>	<b>44.29*</b>	<b>29.96*</b>	5.06

Follow-up analyses from related paper: 40-59 vs 60+ was not significantly different for low risk vs high risk groups

But does the age item work for  
more sexually deviant  
individuals?

# Sexual deviance

- Summed prior sex offences (0-3), non-contact sex offences, any male victim
- Total rescored to 0, 1, 2+

	Sexual Deviance = 0		Sexual deviance = 1		Sexual deviance = 2+	
	Mixed data	NY data	Mixed data	NY data	Mixed data	NY data
N	7,834	5,739	3,389	2,074	2,685	2,167
Under 35 (vs. 60+)	<b>2.211*</b>	<b>5.389*</b>	<b>6.063*</b>	2.263	<b>3.384*</b>	<b>1.926*</b>
35-39 (vs. 60+)	1.726	<b>3.403*</b>	<b>6.287*</b>	2.536	<b>2.372*</b>	1.826
40-59 (vs. 60+)	1.135	2.475	3.095*	1.546	1.926*	1.504
Model $\chi^2$	<b>36.12*</b>	<b>36.55*</b>	<b>50.01*</b>	7.00	<b>52.89*</b>	6.08

Follow-up analyses from related paper: 40-59 vs 60+ was not significantly different across sexual deviance (continuous or dichotomized)

But does the age item work for more antisocial individuals?

# Antisociality

- Summed 4+ prior sentencing occasions and prior conviction for non-sexual violence

	Antisociality = 0		Antisociality = 1		Antisociality = 2	
	Mixed data	NY data	Mixed data	NY data	Mixed data	NY data
N	8,193	5,338	2,820	2,428	2,901	2,208
Under 35 (vs. 60+)	<b>2.572*</b>	<b>6.631*</b>	<b>1.966*</b>	1.537	<b>2.576*</b>	1.343
35-39 (vs. 60+)	<b>1.947*</b>	<b>4.257*</b>	<b>1.998*</b>	1.338	2.032	1.158
40-59 (vs. 60+)	1.562	2.333	1.467	1.073	1.556	1.165
Model $\chi^2$	<b>40.71*</b>	<b>47.79*</b>	<b>9.68*</b>	5.04	<b>22.48*</b>	0.93

Follow-up analyses from related paper: 40-59 vs 60+ was not significantly different across antisociality (continuous or dichotomized)



But does the age item work for those with incest offences?

	Incest		Adult victims		Unrelated child victims	
	Mixed data	NY data	Mixed data	NY data	Mixed data	NY data
N	1,911	1,855	3,626	2,380	2,668	4,343
Under 35 (vs. 60+)	<b>5.747*</b>	-	1.837	1.665	<b>2.913*</b>	1.872
35-39 (vs. 60+)	<b>4.610*</b>	-	1.812	0.947	<b>3.099*</b>	1.693
40-59 (vs. 60+)	2.517	-	1.545	0.887	<b>2.025*</b>	1.525
Model $\chi^2$	<b>15.87*</b>	<b>25.21*</b>	5.26	<b>13.96*</b>	<b>25.65*</b>	4.63

Difference in data: NY – mixed adult/child victims included with child victims

Mixed data: mixed adult/child excluded (where identified)

# Reducing the noise.....age item as non-categorical predictor

	Incest		Adult victims		Unrelated child victims	
	Mixed data	NY data	Mixed data	NY data	Mixed data	NY data
N	1,911	1,855	3,626	2,380	2,668	4,343
Age Item	<b>1.527*</b>	<b>2.098*</b>	<b>1.112*</b>	<b>1.258*</b>	<b>1.248*</b>	<b>1.138*</b>
Model $\chi^2$	15.28*	22.40*	4.38*	9.06*	21.30*	4.54*

But does the age item work  
across sample types?

New York data excluded

	Routine/Complete		Treatment Need		Preselected High risk/need	
	Mixed data		Mixed data		Mixed data	
N	11,028		2,365		1,366	
Under 35 (vs. 60+)	<b>2.846*</b>		<b>3.303*</b>		<b>2.809*</b>	
35-39 (vs. 60+)	<b>3.047*</b>		<b>2.647*</b>		<b>1.837*</b>	
40-59 (vs. 60+)	<b>1.952*</b>		1.810		1.830	
Model $\chi^2$	<b>54.58*</b>		<b>30.40*</b>		<b>19.86*</b>	

Does the predictive accuracy of sexual deviance and antisociality vary by age group?

Both variables range 0-2

	Age 60+		Age 40-59		Age 35-39		<35	
	Mixed	New York	Mixed	New York	Mixed	New York	Mixed	New York
N	799	1,000	5,354	4,105	2,114	1,215	5,351	3,646
Sex dev	1.455	<b>1.854*</b>	<b>2.000*</b>	<b>1.667*</b>	<b>1.745*</b>	<b>1.643*</b>	<b>1.791*</b>	<b>1.318*</b>
Antisoc	1.509	<b>1.914*</b>	<b>1.360*</b>	<b>1.637*</b>	<b>1.454*</b>	1.322	<b>1.300*</b>	<b>1.218*</b>
Model x2	<b>9.061*</b>	<b>18.58*</b>	<b>159.68*</b>	<b>78.92*</b>	<b>77.44*</b>	<b>18.25*</b>	<b>190.78*</b>	<b>20.35*</b>

# Potential Arguments: Age reduction may not apply.....

- For higher risk individuals
  - Mixed data: just as well for higher risk
  - New York: a bit lower for higher risk
  - But interactions in other paper (40-59 vs 60+) n.s.
- For individuals more sexual deviance
  - Mixed data: just as well, if not better for more sexual deviance
  - NY: Not as well for more sexually deviant (but interactions n.s. in other paper)
- For individuals with more antisociality
  - Mixed data: just as well, if not better for more antisociality
  - NY: Not as well for more antisocial (but interactions n.s. in other paper)



# Potential Arguments: Age reduction may not apply.....

- For incest offenders
  - Worked fairly well in both samples
  - May not work as well for those with adult victims – further analyses needed
  - Some differences in datasets still to resolve
- Across sample types
  - Remarkably similar
- Does sexual deviance and antisociality predict across all age categories?
  - Generally quite similar

Thank you for your time!

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