Does Denial Predict Sexual Offender Recidivism?

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Denial and Sexual Recidivism

- Presumably related to higher risk of sexual recidivism, influencing treatment inclusion (Ware, & Mann, 2012), and parole (Hood, Shute, Feilzer, & Wilcox, 2002).

- Mixed evidence in research literature (Ware, Marshall, Marshall, 2015).

- Limited evidence that denial may predict recidivism when moderated by actuarial risk (Harkins, Beech, & Goodwill, 2010).

- Hanson & Morton-Bourgon (2004) found:
  - Sexual recidivism: denial of sexual crime non-significant ($d = 0.02$; based upon 9 studies, 1780 participants).

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Denial Moderated by Risk ?

- Research by Nunes et al. (2007) found that denial was moderated by actuarial risk with an interaction between the two in a sequential logistic regression (OR= 0.50).

- Denial may increase risk for lower risk offenders

- Rates of sexual recidivism:

Low Risk	High Risk
• **15.5% of the deniers**	• 15.7% of the deniers
• 9.1% of the admitters	• 26.6% of the admitters

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Evidence of Domains of Risk

- Factor analyses of the item content of the most utilized risk measures for sexual offenders has found several factors constituting aspects of antisocial risk and sexual deviance risk (Barbaree, Langton, Peacock, 2006).

- These findings are further substantiated in Hanson and Morton-Bourgon's (2004) meta-analytic examination of 82 recidivism studies.
  - Finding that the strongest predictors of sexual recidivism were those variables that pertained to sexual deviancy ($d = .30$) and antisocial orientation ($d = .23$).

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Purpose of the Current Study

- To explore whether denial predicts sexual or violent (including sexual) recidivism.

- To assess whether relationship between denial and recidivism is moderated by risk level or specific domains of risk.

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Method

- Participants drawn from an archival dataset consisting of adult male sexual offenders incarcerated and released in Canadian federal prisons in the 1990s.
  - Representative sample under supervision at time.

- Data regarding denial and recidivism available for 320 of 551 offenders:

  - Average age was 39 years old

  - Majority were of Caucasian Ethnicity 70.9%

  - Majority convicted of 1 sexual offence 30.6%, or 2 offences 26%

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Method

Measures

- *Static-99R.* The Static-99R (S99-R; Helmus, Thornton, Hanson & Babchishin, 2011).
  - Coded from items from original dataset (Motiuk & Porporino, 1993) collected by Correctional Service of Canada (CSC) as well as criminal records.
- Recidivism coded from Canadian Police Information Center (CPIC) criminal records.
- Denial coded from original dataset response to, "Offender has admitted responsibility for any previous sex offence."

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Items from Risk Domains

- In accordance with the risk item division strategies utilized by Nunes and Cortoni (2008) the Static-99R was divided based upon items that pertained to sexual deviance risk or antisocial risk:

Antisociality items:
- 'Young age', 'ever married', 'index nonsexual violent convictions', 'prior nonsexual violent convictions', and 'prior sentencing dates.

Sexual deviance items:
- 'Prior sexual offenses', 'Unrelated victim', 'Stranger victim', as well as 'Male victim.'

- Items coded from (Malcom, 2011; Motiuk & Porporino, 1993).

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Results

- Overall rates of recidivism were 22% (71/320) for sexual recidivism and 44% (141/318) for violent (including sexual) recidivism.
- No significant difference (3.6 months difference) in follow up time for admitters ($M = 19.15$ years) vs. deniers ($M = 18.84$ years).

- Overall risk averages were as follows:

	Potential range:
Static-99R total ($M = 2.72$, $SD = 2.54$)	-3 to 9.
Antisociality domain ($M = 1.05$, $SD = 1.82$)	-3 to 5.
Sexual deviancy domain ($M = 1.65$, $SD = 1.40$).	0 to 6.

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Results

- Significant difference on Static-99R, with admitters higher risk, $d = 0.24$.
  - Admitters ($M = 2.97$, $SD = 2.48$)
  - Deniers ($M = 2.36$, $SD = 2.60$)

- Non-significant difference on Static-99R Antisociality, with admitters higher risk
  - Admitters ($M = 1.09$, $SD = 1.71$)
  - Deniers ($M = 1.00$, $SD = 1.97$)

- Significant difference on Static-99R Sexual Deviance, with admitters higher risk, $d = .34$.
  - Admitters ($M = 1.84$, $SD = 1.46$)
  - Deniers ($M = 1.38$, $SD = 1.26$)

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Results from the Sequential Logistic Regression Analyses

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- In the first hierarchical logistic regression, denial entered first a significant independent predictor of sexual recidivism (49% lower odds of deniers recidivating).

- Denial remained a significant independent predictor with the addition of the Static-99R Total score.

Table 1
Hierarchical Logistic Regression Analyses Predicting Sexual Recidivism

Analysis		χ^2 for Block[a]	R^2	OR	95% CI
	Block 1	5.80*	.018		
Denial and	Denial			0.51*	[0.28, 0.89]
Total Static-	Block 2	21.11***	.081		
99R	Denial			0.56*	[0.31, 1.01]
	Static-99R			1.30*	[1.16, 1.48]
	(Total)				
	Block 3	1.82	.086		
	Denial			0.29*	
	Static-99R Total			1.24**	
	Interaction			1.20	

Note: R^2 = Cox & Snell R Square value; OR = odds ratio; CI = confidence interval.
*$p < .05$ **$p < .01$ ***$p < .001$.
[a] The chi-square (χ^2) test for block tests whether there is a significant improvement in model fit for each block over the previous one.

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- In the second regression, denial entered first again significant independent predictor of sexual recidivism (50% lower odds of deniers recidivating).

- Denial a significant independent predictor with the addition of the Static-99R Antisociality score, both independently and significantly predicting recidivism.

Table 2
Hierarchical Logistic Regression Analyses Predicting Sexual Recidivism

Analysis		χ^2 for Block[a]	R^2	OR	95% CI
Denial and Antisociality[b]	Block 1	5.80*	.018		
	Denial			0.50*	[0.29, 0.89]
	Block 2	12.89***	.057		
	Denial			0.49*	[0.28, 0.88]
	Static-99R (Antisociality)			1.33***	[1.13, 1.56]
	Block 3	0.001	.057		
	Denial			0.49	
	Static-99R (Antisociality)			1.33**	
	Interaction			1.00	

Note: R^2 = Cox & Snell R Square value; OR = odds ratio; CI = confidence interval.
*$p < .05$ **$p < .01$ ***$p < .001$.
[a] The chi-square (χ^2) test for block tests whether there is a significant improvement in model fit for each block over the previous one.
[b] Antisociality refers to a subset of Static-99R items reflecting sexual deviance risk.
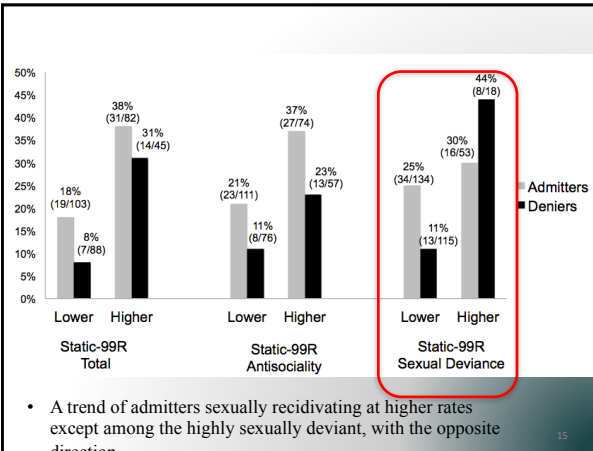
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- In the third regression, denial entered first a significant independent predictor of sexual recidivism (49% lower odds of deniers recidivating).

- Denial no longer significant with the addition of the Static-99R Sexual deviancy score.

- Significant interaction between denial and sexual deviancy

Table 3
Hierarchical Logistic Regression Analyses Predicting Sexual Recidivism

Analysis		χ^2 for Block[a]	R^2	OR	95% CI
Denial and Sexual Deviance[c]	Block 1	5.56*	.017		
	Denial			0.51*	[0.29, 0.91]
	Block 2	11.17***	.051		
	Denial			0.59	[0.33, 1.06]
	Static-99R (Sexual Dev.)			1.375***	[1.14, 1.66]
	Block 3	5.02*	.066		
	Denial			.023**	[0.08, 0.67]
	Static-99R (Sexual Dev.)			1.20	[0.97, 1.50]
	Interaction			1.63*	[1.05, 2.55]

Note: R^2 = Cox & Snell R Square value; OR = odds ratio; CI = confidence interval.
*$p < .05$ **$p < .01$ ***$p < .001$.
[a] The chi-square (χ^2) test for block tests whether there is a significant improvement in model fit for each block over the previous one.
[b] Sexual Deviance refers to a subset of Static-99R items reflecting sexual deviance risk.

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- A trend of admitters sexually recidivating at higher rates except among the highly sexually deviant, with the opposite direction

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Summary and Discussion

- Denial a significant independent predictor of lower odds of sexual recidivism over most analyses.

- Inconsistent with some previous risk studies, (e.g., Nunes et al., 2007, Harkins, Beech, and Goodwill, 2010).
  - However, denial often defined inconsistently adding to difficulty assessing predictive capacity.
  - Studies ignore underlying factors inherent in measures utilized.

- Possible explanations:
  Some evidence that highly sexually deviant sexual offenders with higher levels of minimization may also recidivate at higher rates (Langton et al., 2008).
  - Denial may share an unknown relationship with other cognitive distortions for the highly sexually deviant

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Future Directions and Conclusion

- Replicate results with larger sample (allowing further meaningful distinctions of risk level beyond a dichotomous split).

- Utilize other measures which specialize more specifically in assessing one of the domains of risk (e.g., VRAG; Harris, Rice, & Quinsey, 1993).

- The current study offers novel contributions to the research literature, highlighting a relationship between denial and higher odds of sexual recidivism amongst offenders higher in sexually deviant risk.
  - Future research can attempt to test new theories as to why this relationship may exist for this group of offenders.

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Thank you!

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