

Using Risk Matrix 2000 with Men who have Committed CSEM Offenses

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Static Actuarial Instruments

Most static actuarial tools for assessing risk for sexual recidivism have their origins in the 1990s or the 2000s

Three of these tools have been robustly cross-validated
• By this is meant that their predictive validity has been demonstrated across multiple jurisdictions, multiple areas, and with people who have offended against both adults and children

Static-99R is the most widely validated

Risk Matrix 2000 is the second most validated

Static-2002R is the third most validated

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But how do they apply to CSEM Offenses?

Child Sexual Exploitation Material offenses involve production, possession, or sharing of illegal sexual images of children

The usual medium for these images is on people's computers, tablets, or smart phones

Images may be obtained in a variety of ways but mostly commonly through the Internet

Since popular use of the Internet was not a thing when these three robust scales were developed this raised a question about the applicability of these instruments to people who had committed this new kind of sex offense

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Online Sexual Offending: A Broader Category including any Internet-Mediated Sex Offense

Collect or distribute CSEM

To commit traditional noncontact offenses e.g., expose self through a webcam

To lure/manipulate others to meet so they can be sexually assaulted

To engage in illegal sexual talk with minors

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Static-99R and Static-2002R are only Applicable to Persons who have Committed Category A Offenses

Risk Matrix 2000 is the only robust static actuarial instrument deemed by its authors to be generally applicable to individuals who have committed CSEM offenses

It does not require an offense against an identifiable victim in the way these other tools do

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The CPORT

There is also the CPORT which was developed specifically for use with this population.

This was developed and tested initially based on a Canadian sample with police data

It was later tested with other samples

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Agenda #1

General findings re population who commit CSEM offenses

Specialization vs Similarity to Offline Sex Offense

Base rates

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Agenda: #2

Review duelling articles re how empirically supported the CPORT is

Scurich, N., & Krauss, D. A. (2023). Risk assessment of child-pornography-exclusive offenders. *Law and Human Behavior*, 47(4), 499-509. <https://doi.org/10.1007/s11292-023-10047-7>

Helmus, L. M., Eke, A. W., & Seto, M. C. (2025). What risk assessment tools can be used with men convicted of child sexual exploitation material offenses? Recommendations from a review of current research. *Law and Human Behavior*, 49(1), 71-88. <https://doi.org/10.1007/s11292-025-10055-5>

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Agenda #3

How Risk Matrix 2000 was modified for this population

Empirical support for Risk Matrix 2000

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Agenda #4

Walk through scoring instructions for this population

Special emphasis on how and when modifications apply

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Agenda #5

Interpreting Risk Matrix results

Risk estimates and risk levels

Treatment Need Indicators

Combining with STABLE

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General Findings re CSEM Population
A) Specialization vs Similarity

Bjorkholm, E. M., Karlström, R., & Hermans, C. A. (2010). The Characteristics of Online Sex Offenders: A Meta-Analysis. *Sexual Abuse*, 23(1), 92-123. <https://doi.org/10.1177/1079963210370708> (Original work published 2011)

About half admit to a prior contact offense

About 12% had an official history of a prior contact sex offense

Online offenders

- Younger than offline offenders and the general population
- More sexually deviant per PPG etc than offline offenders
- Less cognitive distortions than offline offenders

Both online and offline offenders had elevated levels of sexual and physical abuse

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Specialization in Different Types of Sex Offending

Howard, P.D., Barnett, G. D., & Mann, R. E. (2013). Specialization in and Within Sexual Offending in England and Wales. *Sexual Abuse*, 26(3), 225-251. <https://doi.org/10.1080/08912400.2013.774180> (Original work published 2014)

Short term follow (37 months) up of very large sample (N=14,804) of men with a sex offense history managed by NOMS

Examined specialization across categories of offense type

Found strong evidence of specialization by those who committed indecent image offenses

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Base Rates : L.M.Helmus (2023) Recidivism rates of Men Charged/Convicted of Child Pornography Offenses. The Form Newsletter.

Estimated 5-year Rates		Any Sexual Recidivism	Contact Sexual Recidivism	CP Recidivism
Total	CP	5.5% (394/7,112, k = 15)	2.8% (383/13,574, k = 15)	2.7% (353/13,183, k = 17)
	CP+NC	3.9% (139/3,582, k = 7)	1.4% (32/2,209, k = 3)	4.8% (138/2,889, k = 7)
	CP+C	10.0% (103/1,029, k = 5)	3.4% (262/7,751, k = 4)	1.1% (89/7,837, k = 6)

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Key Points from Helmus (2023)

- All CP Population
 - Recidivism is equally likely to be CP or Contact
- CP with **no** history of Contact
 - Three times as likely to reoffend with CP as with Contact
- CP with a history of Contact
 - Three times as likely to reoffend with Contact as with CP
- Overall base rate for any sex recidivism
 - 4% for CP with **no** history of Contact i.e. a little below Routine base rate
 - 10% for CP with a history of Contact i.e. above Routine base rate

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Next two slides from from Babchishin & Helmus (2025)

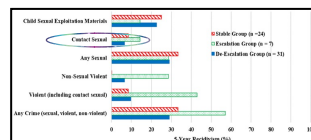
- Presentation at IATSO

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Sex Offence Order Matters

- 387 men with CSEM offences in Ontario, Canada
 - Most (65%) exclusively had one CSEM as their sexual offending history
- Of those with another sexual offence occasions:
 - 47% stable (CSEM → CSEM)
 - 41% mixed de-escalation (contact → CSEM)
 - 12% mixed escalation (CSEM → contact)

5-year recidivism rates after the second sex offence:



The management and treatment of individuals with CSEM offending should be sensitive to their sexual offending patterns.

Babchishin et al. (2022)

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Reoffending with Contact Sex Offence

- A Minority
- Matches sex of CSEM
 - Sex offence against girl: more girl CSEM than boy CSEM
 - Against boy: more boys than girl CSEM
- Intrafamilial vs. extrafamilial victims
 - We know a minority will have a contact sexual reoffence, how many with relatives?
 - Ontario: Of the 14 CSEM men reoffended with a contact sexual offence against 17 children during follow-up, at least 3 were intrafamilial

Eke & Seto (2023); Owen et al. (2016)

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Postscript

- There is a new meta-analysis of CSEM recidivism data by Kelly Babchishin's group
 - This largely confirms Helmus (2023) but with more samples and a more rigorous methodology
- In interpreting CSEM recidivism i.e. the rate of committing new CSEM offenses, we should be mindful that the way CSEM is detected is very different from how contact sex offenses are committed
 - CSEM recidivism may be harder to detect

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Scurich, N., & Krauss, D. A. (2023).

VS

Helmus, L. M., Eke, A. W., & Seto, M. C. (2025).

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Scurich & Krauss Arguments

This is a critique of the evidence base for experts using the CPORT to provide risk assessments of men convicted for committing "Child Pornography" offenses

Small sample size and especially small of N of recidivists & none from USA

Large amounts of missing data for some items, especially items 5 and 7

Potentially dated samples, given the changing technology used such as dark web, encryption, and software that wipes files, and changes in the population

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Helmus, Eke, & Seto – Response

Decisions regarding risk are being made now so some form of risk assessment must be made now

The evidence base will necessarily be imperfect in some ways since the time taken to collect recidivism data inevitably means that samples will be 10+ years out of date

The test should be whether a method is better than the default alternative which is unstructured clinical judgment (with an AUC of around .56)

As research advances the test then becomes whether an instrument improves on existing tools

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Helmus & Olver (2024) Suggested Considerations

Predictive accuracy – statistically significant with AUC of .56+?

Match to referral context – right outcome, info to score available?

Availability and quality of recidivism estimates – N recidivists, stability across era, and locations

Inter-rater reliability

Comprehensive, empirically supported and theoretically credible items

Can inform treatment targets and assess change

Quality of training / implementation resources

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Helmus et al. Conclusions re Use for CSEM Offenders

Four tools recommended

CPORT

Risk Matrix 2000

STABLE

ACUTE

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CPORT

Earlier meta-analysis of six studies (Cumulative N = 1,311)

- AUC = .75 for any sex recidivism
- AUC = .65/.66 for CP recidivism (five studies, N=1,376)

Results consistent across studies for any sex recidivism but more variable for CP recidivism

Updated meta-analysis found similar results except for one study that used a different method

N=1,675 without study with unusual method

N=1,979 for CP recid incl all studies AUC = .68

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Outcome	Fixed-effect results	
	AUC	95% CI
Any sexual recidivism		
All studies	.681	[.656, .706]
Without Cohen (2023)	.746	[.710, .782]
Any CSEM recidivism		
All studies	.675	[.645, .705]

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Risk Matrix
2000

Two studies, one in England and one in Canada

English study (Wakeling et al, 2011) N=994 with two year follow up

- AUC = .67 for any sex recidivism

Canadian study (Helmus et al., 2024) N=339 with 5-year follow up

- AUC=.66 for any sex recidivism and .67 for CP recidivism

Helmus et al found the RM2000 did not over-predict sex recidivism, observed rates in the Canadian sample were a little higher than predicted rates

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STABLE and
ACUTE

STABLE tested in one Canadian sample

- N = 308
- Sexual, CSEM, and Contact recidivism predicted with Harrell's C of .75 or higher
- Results for subgroups had poor statistical power
- Calibration tentatively suggested

ACUTE tested in same Canadian sample

- N=297
- Sexual, CSEM, and Contact recidivism predicted with Harrell's C of .71 or higher

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How was RM2000 modified for CSEM Offenses?

History

When Internet mediated offenses started being more of a thing in the mid 2000s, Professor Don Grubin (who was one of the people leading use of RM2000 in the UK) contacted me and we discussed what to do about it

Don Grubin and I met in England and figured out modifications to the scoring that would prevent automatically assigning risk to a group that, based on early data, had a lower sexual recidivism rate than that found for those who had been convicted for a contact sex offense

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Key ideas in modifying Scoring Instructions

Avoid automatically
assigning increased risk for
Internet offenses

Distinguish Internet
offenses that resemble
traditional sex offenses
from those that are different

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Walk Through Scoring Instructions

Special emphasis on CSEM group

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RM2000 S- Scale

RM2000S Scale – Risk for Sexual Recidivism

Step One: Initial Risk Category

Age	18-24 = 2 points; 25-34 = 1 point; Older = 0 points
Sexual Appearances	1 = 0 points; 2 = 1 point; 3, 4 = 2 points; 5+ = 3 points
Criminal Appearances	4 or less = 0 points; 5 or more = 1 point
Points	0 1-2 3-4 5-6
Category Label	Below Average Average Above Average Well Above Average

Step Two: Revised Risk Category

Male	Stranger	Single	Non-contact
0 / 1	0 / 1	0 / 1	0 / 1
Put the risk category up one level if two or three aggravating factors apply, and up two levels if four aggravating factors apply. Circle the Revised S-Category.			
Revised S-Category: Below Average Average Above Average Well Above Average			

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Focus on items with modified rules

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Sexual Offenses against a Male

In scoring this item count any conviction for a contact sex offense that involves a male victim aged under 16 at the time of the offense.

Also count non-contact sex offenses involving male victims aged under 16 if the sexual behavior involved was clearly and deliberately directed at a male. For example, indecent exposure to a group containing males and females would not count, as the males may have only been incidentally present.

Offenses against animals are not used to score this item.

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Rationale for Change

The original version of RM2000 had Male Victim scored regardless of victim age. Now only male victims under 16 count.

- Most male victims in the original data sets were aged under 16
- There was some evidence of risk being higher for older male victims, but the effect was smaller than for male child victims
- Evidence for the predictive value of male child victims is strong as is its association with a sexual preference for children
- Concern that giving a risk point for adult male victims might discriminate against gay men so to give this risk point requires particularly strong evidence
 - The evidence that adult male victim is associated with raised risk is not that strong

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Child Sexual Exploitation Material (CSEM)/Child Pornography Offences

A conviction for possession or distribution of indecent images of children that included pictures of males and females would not normally be scored under this item unless there was evidence that the individual had deliberately sought images of males.

Evidence that the individual deliberately sought images of males can come from a variety of information sources. If the indecent images contained a greater proportion of males than females, then you can safely presume they sought images of males. Similarly, the individual may self-report that they sought images of males.

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When such information is unavailable, the following may be indicators of having sought images of males:

- Is there evidence of the individual using male search terms (e.g., "boys") while searching for indecent images?
- Was there evidence of the individual perusing websites that promote sexual contact with boys? (e.g., websites promoting boylove)
- Did the individual engage in online conversations with other adults about images or sexual activity with males?
- Fascination with boy stars (e.g., singers/performers)
- Focus on males in other child content that would not be considered illegal (e.g., saving catalogue photos of boys)

These factors may be evidence against deliberating having sought male content:

- The majority of the indecent images of males also included female children
- The individual has used the internet to contact boys so as to befriend them in order to gain trust or contact with females, who were targeted for sexual offenses.

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Sexual Offenses against a Stranger

Count any conviction for a sexual offense against a stranger.

A victim counts as a stranger if either the victim did not know the individual who offended 24 hours before the offense or the individual who offended did not know the victim 24 hours before the offense.

"Knowing" minimally involves having physically met, had a conversational exchange with, and being able to recognize the other person. All three of these conditions must be met to classify as "knowing". The exception to this is when two people have been communicating via a webcam; in this situation, they may not have physically met, but could still be classed as "knowing" each other for the purpose of this item.

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Do Not Count when scoring Stranger

- Offenses against animals
- Accidental victims
- CSEM offenses involving possession, viewing or downloading indecent images of children

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Single (No History of Two-Year Cohabitation)

This factor is counted as present if the individual has never, as an adult, cohabited in the community with an adult with whom they had a marriage-like relationship for at least 2 years.

The 2 years must be continuous with the same partner. Common-law marriages and stable same-sex relationships count as marriage for this purpose. Polyamorous relationships where the individual has cohabited with at least one of the partners for 2 years count as marriage for this purpose.

If an individual claims a marriage or marriage-like relationship and there is some reason to doubt this claim, then only treat him as having been married if there is some corroborating evidence to support this.

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If the individual has lived in a "marital" type relationship continuously for at least two years, but sexually abused children within that family within the first two years of that relationship, then the marital type relationship is deemed to have ended at the point he started abusing the child.

Note that the risk factor can still be scored as present even if either of the following apply.

- The individual has had a number of short-term relationships that together add up to over two years.
- The individual is a priest.

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Clarification

- The instruction that the marital relationship is deemed to have ended at the point when the man abuses children within that family relates only to sex offenses against victims within that family
- If he offends against someone outside the family this is NOT deemed to end the marital relationship for scoring purposes
- CSEM offenses are (in general) not against children within the family so they would not "end" the marital relationship

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continued

The 2 continuous years living in a marital-type relationship need to be in the community. Brief interruptions when one party was away should be disregarded but if the individual is in custody for more than three months then this interrupts the count of time together and resets the clock to zero.

Extended work-related separations such as for individuals working on oil rigs, merchant seaman, or during military service do not necessarily interrupt the count of "time married" so long as the evaluator judges there to be a genuine attempt to live together when this is possible and regular contact is maintained (in so far as this is practical) while they are apart. Email, messaging, and phone calls are now commonly possible even during such absences.

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Noncontact Sex Offense

This covers convictions for illegal sexual behavior involving:

- Indecent exposure;
- Voyeurism;
- Possession of or manufacturing illegal pornography or indecent images of children;
- Obscene telephone calls;
- Unwanted obscene suggestions made in person or through other media (telephone, Internet).

Where there is a sexual offense that does not involve physical contact, and is not on the list (a to e) above, you should only score it as Noncontact if the underlying behavior indicates the presence of a paraphilia and is of a kind known to occur at a relatively high rate. Consider also how similar the behavior is to one of the prototypical noncontact offenses (a to e above).

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continued

Also do not score as "Noncontact" if the underlying behavior was a contact offense and plea-bargaining or some similar process led to a conviction for a noncontact offense.

Do not score one of these offenses as "Noncontact" if they occurred incidentally in the course of committing or attempting a contact offense. By incidentally is meant two things, either that the person was trying to commit a contact offense and as a by-product of this committed a noncontact offense, or, that the noncontact offense was committed primarily as a steppingstone to carrying out a contact offense. Examples of these two kinds of incidental noncontact offense are as follows.

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Examples

The first example is an instance of a noncontact offense occurring as an unintended by-product of committing a contact offense.

A man breaks into a woman's apartment, makes his way to her bedroom where she is sleeping, and rapes her. During the rape, the woman's child, disturbed by the noise, wanders through into his mother's bedroom, calling out. The man, startled by the appearance of the child, pulls his penis out of the woman he was raping and stands up, thus exposing his erect penis to the child.

The second example is an instance of a noncontact offense was committed primarily as a steppingstone to carrying out a contact offense.

A man develops a strategy of exposing his penis to children before approaching them and touching them sexually. His idea is that if the child does not run off when they see his penis then they will be open to his touching them.

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Determining if it was a steppingstone

In cases of uncertainty, follow the principle that if a man commits a noncontact offense but then makes a sexual approach or attempts to sexually assault the same victim within 24 hours of the noncontact offense then presume the noncontact offense was intended to be a steppingstone to a contact offense unless there is clear evidence to the contrary

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Example

A man would allow his teenage daughter to drink alcohol at home and sometimes drugged it so that she passed out. While she was unconscious, he would undress her and pose her in sexual positions. Then he would take photographs of her. He stored the photographs on his computer and used them to masturbate to.

Here, both a contact sexual offense and a noncontact sex offense occurred, but the noncontact offense was not a steppingstone to the contact offense. If anything, it seems to have been the other way round. So, the Noncontact item should be scored.

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Example

A man sent an unsolicited "dick pic" to a woman he knew along with a message suggesting they should get together. Later that day when saw her he spoke to her briefly and then grabbed her breast.

Again, this involves a noncontact offense followed with 24 hours by a contact offense against the same victim. Further, although the unsolicited picture and sexual suggestion is not a realistic way of winning the woman's interest, it is plausibly part of the behavioral sequence that led to the contact offense. The Noncontact item would not be scored.

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Example

Travelling to work on a train, a man discovered that he could airdrop "dick pics" into iPhones being used by women who were nearby. He started doing this regularly, enjoying their startled expressions when they saw the pic. One evening travelling home he dropped an image into the phone of a woman standing next to him in the crowded train, waiting to get off at the station. In the crush he put his hand on her butt and fondled it while she was held in place by the crowd.

Here, although he committed a contact offense against a woman who he had just committed a noncontact offense against, many of the instances of his noncontact offending were against different women who he did not try to physically molest so there was a significant amount of noncontact offending that was independent of his contact offense. Consequently, the Noncontact item would be scored.

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There are several more examples in the Scoring Guide

I encourage you to review them all

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continued –for CSEM Offenses

If the individual's only sexual offense is an Internet sexual offense involving downloading or possessing indecent images of children, do not score as Noncontact. However, if the individual has both such an indecent images offense and a contact sexual offense, then you would score the Noncontact item based on this Internet offense. In such cases the individual could be considered to be closer in nature to the prototypical individual who commits contact sex offenses, and therefore it would be reasonable in such cases to count the indecent images offense as noncontact, and so score the Noncontact item.

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Interpreting Risk Matrix Results

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Risk Estimates and Risk Levels

Risk Matrix assigns people to four levels, corresponding more or less to the standardized risk levels

- Below Average, Average, Above Average, Well Above Average
- As compared to Static-99R it is harder to get into the Well Above Average category and so the associated recidivism rate seems to be higher

Given the finding that RM2000 does not over-estimate risk for the CSEM population, it seems safe to use these categories and associated recidivism rates when reporting results

- Note that the comparison was to the CSEM developmental sample which has particularly good recidivism data

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Treatment Need Indicators

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Risk vs Need

RM2000 is composed of statistical risk indicators

Treatment needs are based on dynamic risk factors (otherwise known as Criminogenic Needs)

- The sort of thing assessed with STABLE

We have found that statistical risk indicators can be combined to predict the kind of treatment needs that would have been identified if you had scored STABLE

RM2000 Treatment Need Indicators

- Sexual deviancy
- Antisociality

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Need Indicators

Sexual Criminality		General Criminality	
Indicator	Points	Indicator	Points
Sexual Appearances	0 1 2 3	Criminal Appearances	0 1
Male	0 1	Violent Appearances	0 1 2 3
Stranger	0 1	Burglary	0 2
Noncontact	0 1		
Sexual Criminality Score		General Criminality Score	

Note: Transfer points assigned to each indicator from the front page. Sum points to get scores.

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Interpretation

Sexual Criminality Score	Are criminogenic needs related to Sexual Deviance indicated?	General Criminality Score	Are criminogenic needs related to Antisociality indicated?
0	No	0	No
1	No	1	No
2+	Yes	2+	Yes

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Interpretation of Treatment Need Indicators

Needs related to Sexual Deviance indicated

- Offense-related sexual interests
- Sexual preoccupation
- Sexual coping

Needs related to Antisociality

- Impulsiveness
- Hostility
- Aggression
- Oppositional reactions to authority

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Using Treatment Need Indicators with CSEM

- There is no obvious reason why the Treatment Need Indicators should not apply for those who have committed CSEM but they have not been specifically tested with them
- Recommendation
 - Use the TNI
 - If a category of Need is indicated, then it is very likely present
 - If it is not indicated then needs related to sexual deviancy may still be present as these are common in this population

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Combining with STABLE

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Both RM2000 and STABLE have been validated with this population

- Option 1
 - Report results using categories without combining them
- Option 2
 - Report results using categories and recidivism estimates for RM2000 and using categories for STABLE
- Option 3
 - Report results using categories based on combining RM2000 and STABLE
- Option 4
 - Report results using categories recidivism estimates based on combining RM2000 and STABLE

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Recommendation

Report the results in categories for the two scales separately

Then add at least the category based on combining the scales

Add the caution that we don't have a direct test of the combination rules for CSEM population but since both scales work for the population there is no reason for supposing the combination rules won't

You have to combine the two scales results for your final conclusion anyway. Using the combination rules is more objective

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General Philosophy on New Populations

If a scale is known to work on the general population of people who have committed sex offenses then

- the presumption should be that it will work on a specific population of people who have committed sex offenses unless you have credible evidence or theory to the contrary

Supporting evidence of validity in similar or related uses strengthens this presupposition

The onus is on someone who wants to question this presupposition to produce evidence or theory justifying their position

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Shouldn't we insist that instruments should only be used for populations in which they have been tested?

Static-99R generally works, but does it work for men with red hair?

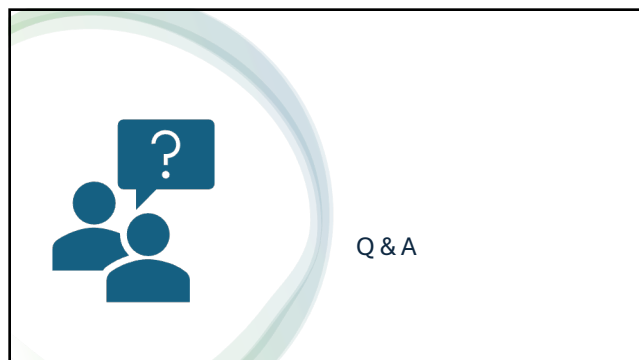
What about men with red hair who have worked as a plumber?

What about with red hair who have worked as a plumber and were born in XX county?

You can describe anyone in a way that makes them sound like they belong to a population in which Static-99R has not been tested

Saying you can only use an instrument in populations where it has been tested would mean never using any instruments

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Contact Information

- DavidSMThornton@icloud.com
- These slides and RM2000 Guides can be downloaded from
 - <https://fas-tr.com/conference-handouts>
- RM2000 Trainings are provided through SAARNA
 - The next one is scheduled for February 2026
 - Sign up via the <https://saarna.org/> website (look under Events tab)

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