



Process Evaluation of the Special Treatment Units for Violent Offending (STU:VO)

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Introduction: Violent offending in Aotearoa

- **Violent offending:** Actual or threatened harm by violence including physical assault, homicide, sexual assault, abduction/kidnapping and robbery.

266,000 (6.4%)
report +1 incident
of interpersonal
violence

1,211,000
(29 per 100 adults)
offences of
interpersonal
violence

+80% of prison
population have
convictions for
violent offending

STU:VO programmes in Aotearoa

Duration: 84 sessions, 32 weeks, 3-4 day per week

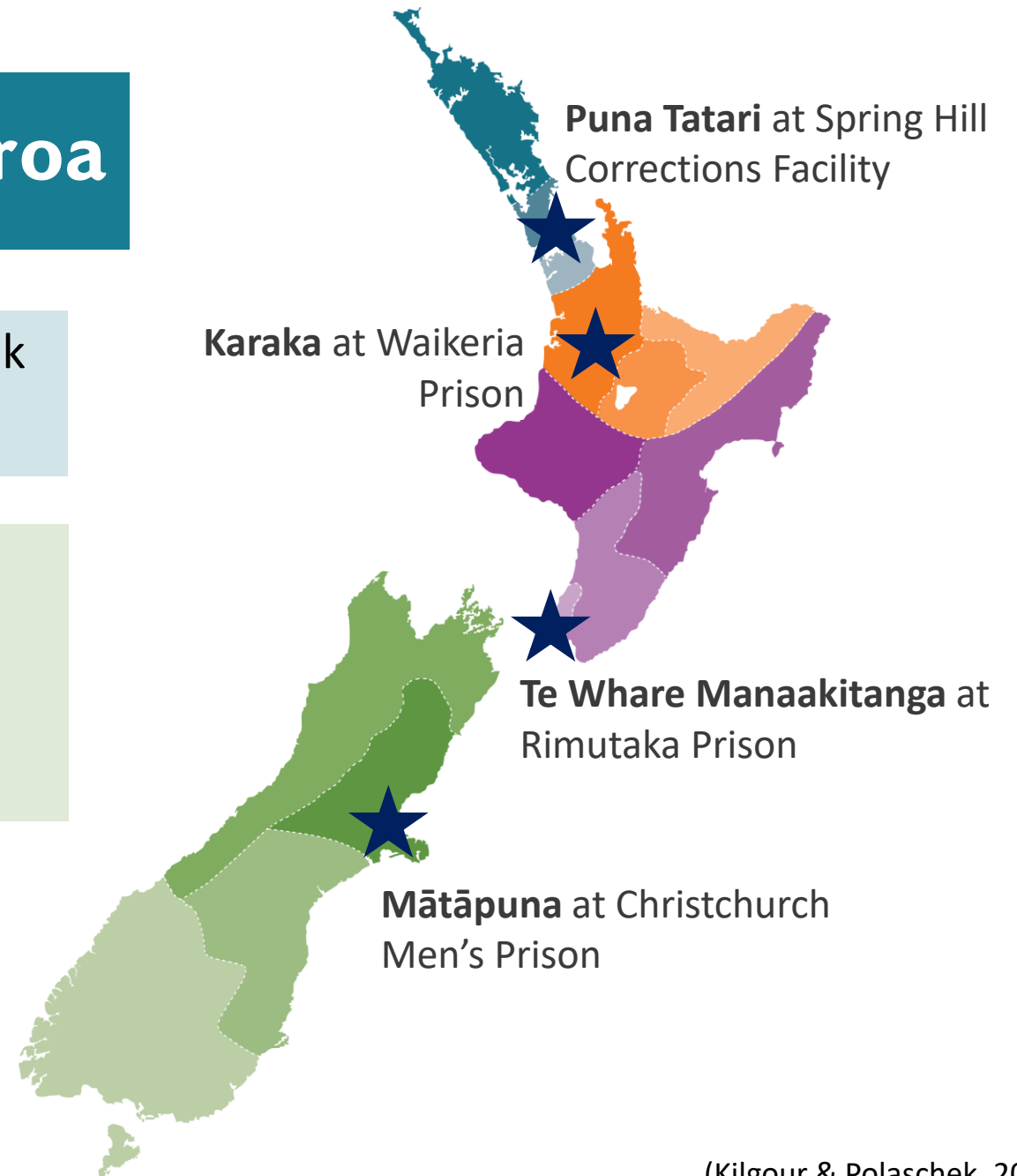
Timing: At least 12 months prior to PED date

Eligibility criteria:

- Age: +20yrs
- Male/Tāne (or in a male prison)
- Risk: RoC*RoI 0.7
- Violent offending priority
- Security: min/low-med
- Sentence: >2year

Exclusion criteria:

- Responsivity barriers
- High security



Introduction: Existing Literature

STU Outcome Evaluations

Significantly reduced recidivism - Re-imprisonment -11.5% Re-sentenced -13.4%
(Ara Poutama, 2024)

Within-Treatment Change

Dynamic Risk Factors

(Andrews & Bonta, 2010; Beggs & Grace, 2011; Lewis et al., 2013; Olver et al., 2014)

Psychopathy

(Caldwell, 2007; Grover, 2023; Kustrin, 2021; Lewis et al., 2013; Polaschek et al. 2022; Tew & Atkinson, 2013; Wilson & Tamatea, 2013)

Psychopathology

(Kilgour, 2015; Polaschek, 2023; Ward and Stewart, 2003)

Hōkai Rangi

2. Humanising and healing

Long-term outcomes



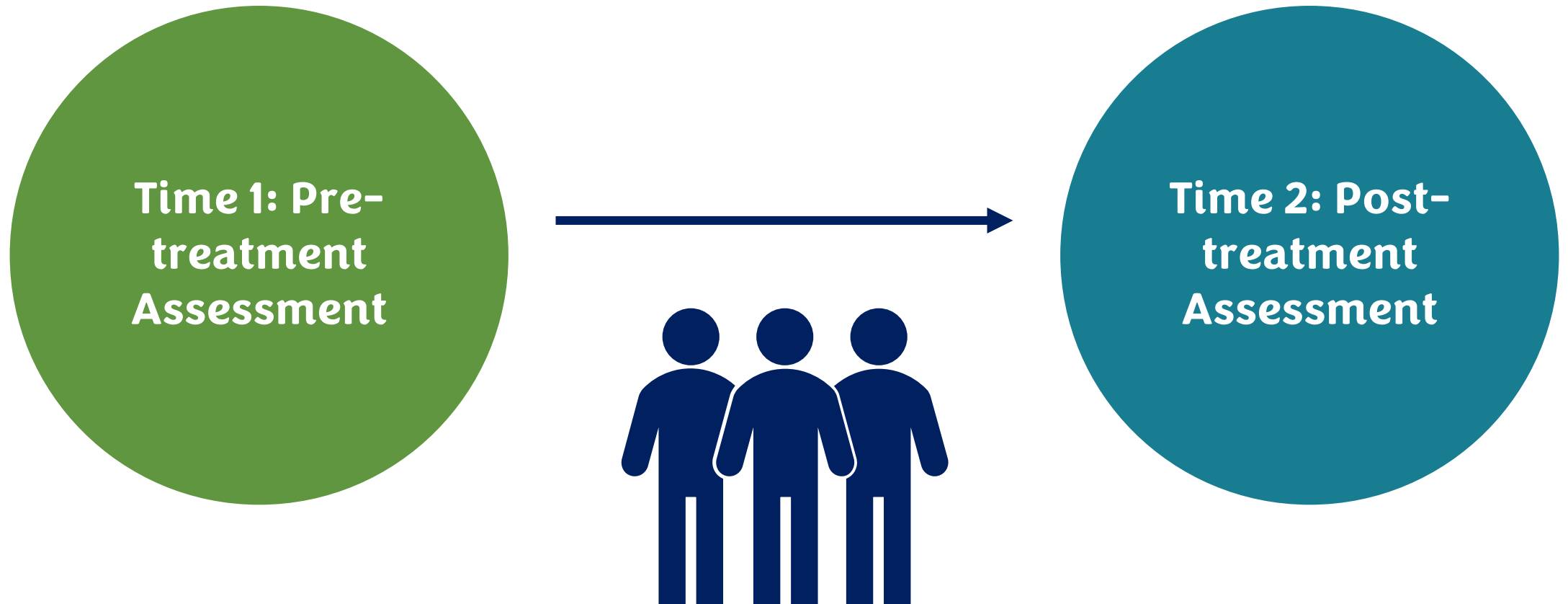
People

“People within the care and management of Ara Poutama Aotearoa and their whānau are well **ā-tinana** (physical health), **ā hinengaro** (mental health) and **ā-whānau** (stable relationships with their whānau)” (pg. 20)

Research Aim

To explore within-treatment changes in dynamic risk and clinical psychological factors.

Method: Design



Method: Participants

N = 265

Men who undertook
treatment at an
STU:VO between
2017-2021

Sample characteristics	Frequency	Percent
Treatment completion		
Complete	210	79.2
Exit	30	11.3
Missing	25	9.4
STU site		
Mātāpuna	110	41.5
Karaka	83	31.3
Te Whare Manaakitanga	72	27.2
Repeated Treatment		
First time	232	87.5
Repeater	33	12.5
Ethnicity		
Māori	166	62.6
Pākehā/European	85	32.1
Pasifika	28	10.6
Other	3	1.1

Method: Measures

Dynamic Risk

Violence Risk Scale

- Wong & Gordon, 2006
- 26 Clinician-rated items

Criminal Attitudes Towards Violence Scale

- Polaschek et al., 2004
- 20 Self-reported items

Clinical Psychological Factors

Triarchic Psychopathy Measure

- Patrick, 2010
- 58 Self-reported items

Millon Clinical Multiaxial Inventory-IV

- Millon et al., 2015
- 195 Self-reported items

Method: Analysis

Group Level Analysis

- Paired sample t-tests
- Independent variables: VRS total dynamic score, CAVS total score, TriPM subscale & total scores and each of the 25 MCMI-IV clinical subscales.
- Bonferroni correction: Required p-value = 0.0016

Individual Level analysis

- Clinically Significant Change Analysis

Clinically Significant Change Analysis

What is CSC?

- Statistically reliable
- Dysfunctional to functional ranges

Previous research:

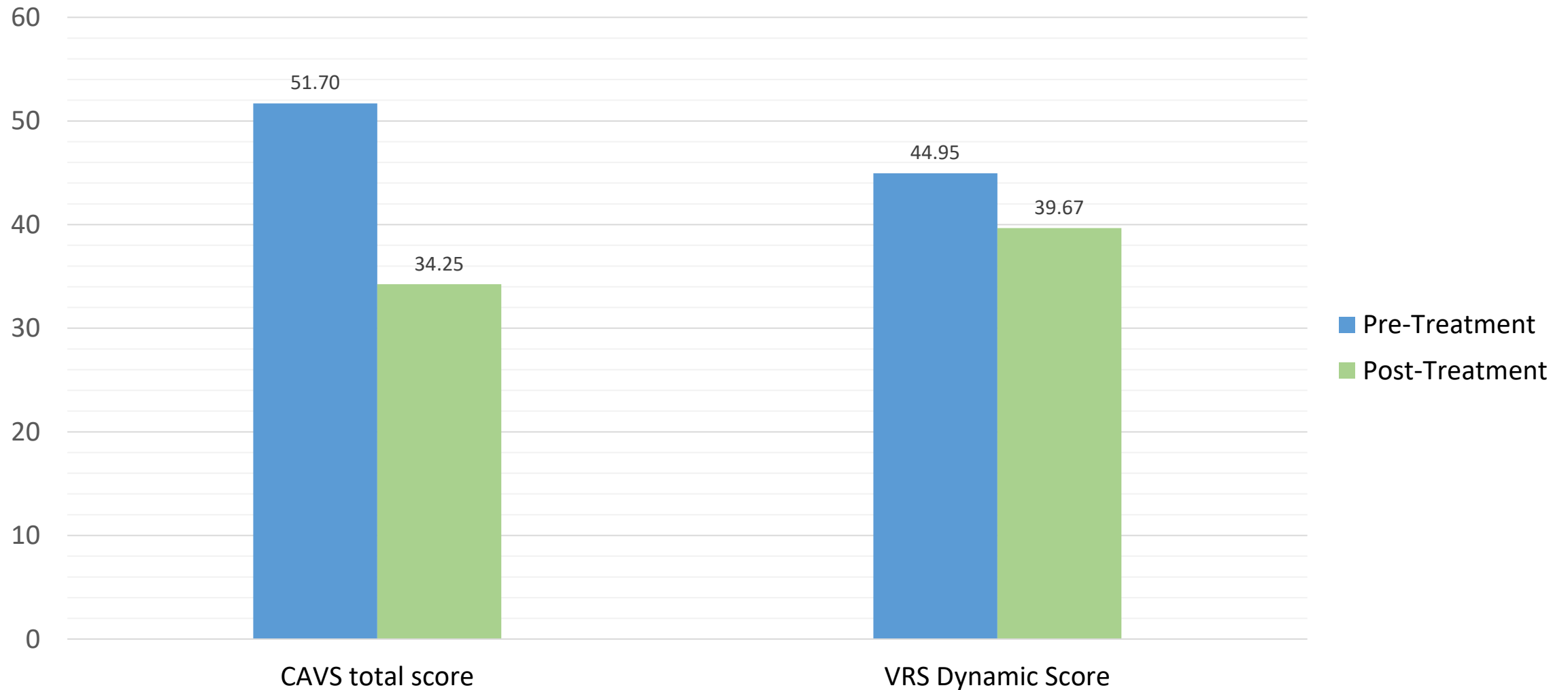
- Olver et al., 2015; Nunes et al., 2011

How to perform CSC analysis?

1. Define Clinically functional thresholds (≥ 21)
2. Calculate standard error value
3. Calculate Reliable Change Index
4. Interpret individual trends

Findings

Findings: Dynamic Risk



Findings: Dynamic Risk

Dynamic Risk measure	n	Pre-treatment score		Post-treatment score		Change in score (pre-post)		Paired Sample t-test	
		Mean	SD	Mean	SD	Mean	SD	t	Cohen's d
CAVS total score	220	51.70	20.35	34.25	16.61	17.44	21.58	11.99*	.81
VRS Dynamic Score	174	44.95	5.28	39.67	5.08	5.29	2.49	28.01*	2.12

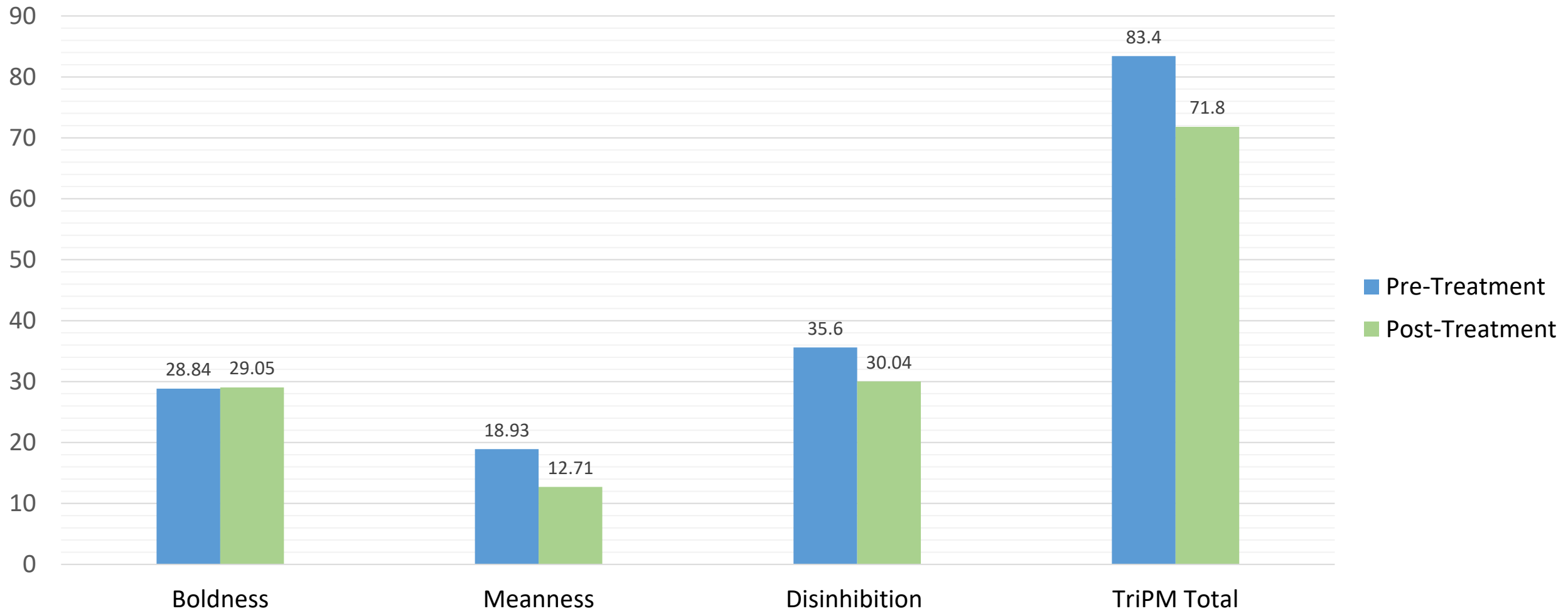
Note: * p < 0.001

Findings: Clinically Significant Change

Clinically Significant Change Group	N (%)	Roc*RoI (SD)	Mean Violence Risk Scale Scores (SD)				RCI (SD)
			Static pre-treatment	Dynamic pre-treatment	Dynamic post-treatment	Dynamic change (pre-post)	
Improved	130 (74.71)	.69 (.16)	12.78 (2.63)	45.57 (5.24)	39.14 (4.92)	6.43 (1.55)	2.64 (.64)
Unchanged	44 (25.23)	.66 (.17)	12.82 (3.08)	43.14 (5.01)	41.22 (5.28)	1.92 (1.49)	.79 (.61)

(Beggs & Grace, 2011; Bowen, 2012; Olver et al., 2015; Nunes et al., 2011)

Findings: Psychopathy



Findings: Psychopathy

TriPM subscale	Pre-treatment score		Post-treatment score		Change in score (pre-post)		Paired Sample t-test	
	Mean	SD	Mean	SD	Mean	SD	t	Cohen's d
Boldness	28.84	7.38	29.05	6.54	-.20	7.54	-.37	-.03
Meanness	18.93	11.29	12.71	9.40	6.22	10.51	8.18*	.59
Disinhibition	35.60	11.76	30.04	11.75	5.56	10.65	7.21*	.52
TriPM Total	83.40	22.22	71.80	19.88	11.57	20.66	7.74*	.56

(Caldwell et al., 2007; Garofalo et al., 2024; Sokić & Ljubin-Golub, 2019; Tew & Atkinson, 2013; Wilson & Tamatea, 2013)

Findings: MCMI Axis I

Axis I: Clinical Syndromes		Pre-treatment score		Post-treatment score		Change in score		Paired Sample t-test	
		Mean	SD	Mean	SD	Mean	SD	t	Cohen's d
A	Generalised anxiety	55.55	34.97	39.17	34.59	16.38	38.06	6.53*	.43
H	Somatic symptom	23.87	26.32	15.01	22.91	8.86	29.98	4.48*	.30
N	Bipolar spectrum	58.62	24.14	46.43	26.03	12.19	26.30	7.03*	.46
D	Persistent depression	37.69	25.05	24.81	22.69	12.88	25.28	7.73*	.51
B	Alcohol use	78.14	48.22	62.11	25.67	16.03	52.44	4.64*	.31
T	Drug use	86.33	18.73	76.31	26.08	10.02	26.36	5.77*	.38
R	Post-traumatic stress	56.24	31.67	41.69	32.72	14.55	32.16	6.86*	.45
Axis I: Severe Clinical Syndromes									
SS	Schizophrenic spectrum	48.12	22.96	30.56	25.23	17.57	25.53	10.43*	.69
CC	Major depression	30.19	29.96	14.78	24.89	15.41	30.87	7.57*	.50
PP	Delusional	51.11	27.86	33.12	31.85	17.99	33.50	8.14*	.54

Note: Participants with invalid MCMI-IV responses at either pre- or post-treatment were excluded from analysis (n = 10)

Findings: MCMI Axis II

Axis II: Personality Disorder scales		Pre-treatment score		Post-treatment score		Change in score		Paired Sample t-test	
		Mean	SD	Mean	SD	Mean	SD	t	Cohen's d
1	Schizoid	59.10	22.61	40.75	25.93	18.35	26.78	10.39*	.69
2A	Avoidant	58.60	25.07	44.60	26.66	14.00	27.98	7.59*	.50
2B	Melancholic	49.90	27.77	31.36	27.39	18.53	29.82	9.42*	.62
3	Dependent	48.00	26.23	32.97	26.21	15.04	28.46	8.01*	.53
4A	Histrionic	50.63	20.66	54.17	21.11	-3.54	21.33	-2.52	-.17
4B	Turbulent	61.54	19.78	61.83	19.94	-.287	22.06	-.20	-.01
5	Narcissistic	59.70	44.21	46.44	27.38	13.26	46.28	4.34*	.29
6A	Antisocial	76.23	15.72	64.59	19.63	11.64	22.61	7.80*	.52
6B	Sadistic	60.15	24.05	43.29	26.17	16.86	27.64	9.25*	.61
7	Compulsive	49.63	18.10	55.61	38.20	-5.98	38.78	-2.34	-.15
8A	Negativistic	54.86	26.70	35.17	29.18	19.68	28.63	10.43*	.69
8B	Masochistic	55.69	25.12	35.83	28.83	19.86	30.93	9.74*	.64
Axis II: Severe Personality Pathology									
S	Schizotypal	56.11	23.61	36.83	27.72	19.283	27.43	10.66*	.70
C	Borderline	47.64	28.11	30.37	27.34	17.270	28.42	9.22*	.61
P	Paranoid	62.32	24.11	39.35	30.89	22.974	30.55	11.41*	.75

Note: Participants with invalid MCMI-IV responses at either pre- or post-treatment were excluded from analysis (n = 10)

Discussion: Key Findings

Significant pre-to-post treatment reductions in:

- Self-reported dynamic risk
- Clinician-rated dynamic risk
- Self-reported psychopathic traits
- Self-reported psychopathology

Effectiveness of STU:VO programmes in targeting intermediate level factors associated with recidivism

Limitations

Response & Measurement biases



Future Directions

More objective and/or holistic
outcome measures

Predictive validity



Longitudinal follow up

Sample bias



Control sample

Pātai/Questions?

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Supplementary Findings: MCMI

MCMI Scale	Proportion (%) of scores ≥ 75 pre-treatment	Proportion (%) of scores ≥ 75 post-treatment	Proportion (%) that reduced from ≥ 75 pre-treatment to < 75 post-treatment
Personality Scales			
Antisocial	60	26.09	33.91
Sadistic	20.87	6.96	13.91
Clinical Scales			
Anxiety	55.22	30	25.22
Drug Dependence	75.65	57.39	18.26
Alcohol Use	56.96	31.30	25.65
Post-Traumatic Stress	32.17	17.83	14.35



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