

A Quasi-Experimental Evaluation of a Specialized Treatment Service for Youth Adjudicated for Sexual Offences in Queensland, Australia.

Benoit Leclerc (GYFS), Jesse Cale (GYFS), Tyson Whitten (UNSW), Francisco Perales (Griffith University) & Dustin O'Shannessy (GYFS)

Griffith Youth Forensic Service (GYFS), Griffith University
ANZAPPL Conference, Dec 2025, Tasmania,

GYFS WAS ESTABLISHED IN 2001 AND IS A PARTNERSHIP OF GRIFFITH UNIVERSITY'S CRIMINOLOGY INSTITUTE AND THE DEPARTMENT OF YOUTH JUSTICE AND VICTIM SUPPORT.

Background

- ▶ Young people (under 18) account for up to one-third of sexual offences against children
- ▶ Offending occurs on a continuum—from inappropriate behaviours to violent sexual assaults
- ▶ A subgroup continue to sexually offend in adulthood

Severity/potential harm of persistent sexual offending is one key rationale for specialized treatment

Background

- ▶ Current evidence support impacts on general but not sexual reoffending (Kettering & Lipsey, 2018)
- ▶ **Evidence for effectiveness limited** due to methodological constraints (no comparison group, low initial base rates of sex recidivism etc)
- ▶ **Challenge = Heterogeneity of population** (different risk levels, backgrounds, offending patterns) –
- ▶ **Challenge = Absence of appropriate comparison groups** = struggle to capture true treatment effects from naturally low base rates of sex recidivism observed

 Quasi-experimental evaluation of GYFS
with equivalent comparison group

Quasi-experimental evaluation of GYFS

- ▶ **Quasi-Experimental Design** is used when random assignment is not feasible
- ▶ Relies on **observational data** and statistical techniques to approximate experimental conditions.
- ▶ **Control over Confounding:** Quasi-experimental designs depend on statistical adjustments.
- ▶ **Feasibility:** Experimental designs are often costly and difficult to implement, whereas quasi-experimental designs are more adaptable to real-world constraints.

Methodology

Sample = Administrative data from Queensland Department of Youth Justice and Victim Support (2010–2024).

- ▶ Total cohort: 1,489 youth adjudicated for sexual offences (286 vs 1203)
- ▶ Criteria 1) Referred or convicted between Jan 1 2010 – June 30th 2024 for minimum follow of 2 months
- ▶ Treatment group: 144 GYFS clients; Control group: 303 non-treated youth.

Methodology (con't)

Procedures:

- ▶ Groups matched on variables = **comparison groups equivalent** on age of onset, prior offence history, current offence, risk assessment etc.
- ▶ Risk assessment scores taken immediately prior new offence
- ▶ Survival time measured from release/supervision end to reoffence
- ▶ Observation window: 1 Jan 2010 – 30 June 2024

Methodology (con't)

Measures:

- ▶ Outcomes: Any, sexual, violent, and non-violent reoffending.
- ▶ Recidivism = Proven offence (finding/admission of guilt).
- ▶ Covariates: Age, prior offences, offence severity, Indigenous status, custody time, YLS/CMI risk scores.

Methodology (con't)

Analytic Strategy – 5 different statistical methods:

- ▶ Covariate-adjusted Cox regression (bootstrap CI)
 - ▶ Stabilised Inverse Probability Weighting (SIPW)
 - ▶ Augmented SIPW (ASIPW)
 - ▶ Overlap Weights (OW)
 - ▶ Propensity Score Matching (PSM)
-
- ▶ Multiple methods strengthen causal validity.

Table 1
Descriptive statistics ($n = 447$).

| | Control $n = 303$ | Treated $n = 144$ | Comparison |
|-----------------------------------|----------------------|----------------------|---------------------------------|
| Aboriginal/Torres Strait Islander | 157 (51.8 %) | 59 (41.0 %) | $\chi^2 (1) = 4.60, p = .03$ |
| Age at start date | 15.22 (1.65) | 16.05 (1.13) | $t (389.11) = -6.22, p < .001$ |
| Age at onset | 14.04 (1.78) | 13.60 (1.45) | $t (338.71) = 2.73, p < .01$ |
| Prior offences | 14.18 (27.58) | 14.35 (27.52) | $t (445) = -0.06, p = .95$ |
| Prior offence severity | 65.45 (53.76) | 127.83 (16.73) | $t (402.36) = -18.41, p < .001$ |
| Prior offence severity (log) | 1.35 (0.95) | 2.09 (0.25) | $t (379.76) = -12.65, p < .001$ |
| Prior incarceration days | 26.74 (103.48) | 61.23 (150.81) | $t (210.49) = -2.48, p = .01$ |
| Prior supervision order days | 68.29 (226.63) | 67.67 (219.89) | $t (445) = 0.03, p = .98$ |
| Prior sex offence | 19 (6.3 %) | 61 (42.4 %) | $\chi^2 (1) = 86.53, p < .001$ |

RESULTS

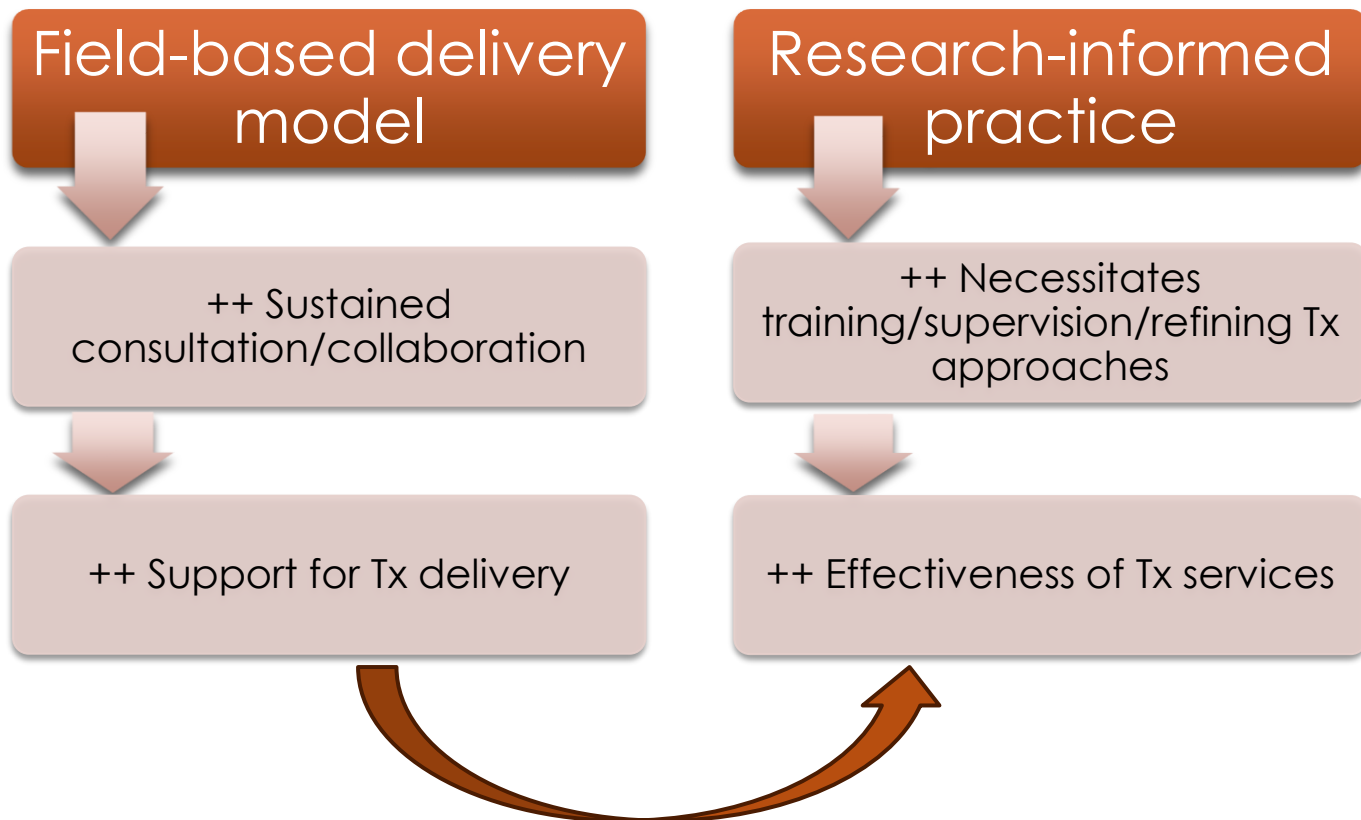
Results

- ▶ **Overall recidivism** reduced by 34–44%. Young people who received GYFS treatment were 1.6 to 1.8 times less likely to reoffend compared to similar untreated young people.
- ▶ **Sexual recidivism** reduced by 78–90%. The rate of sexual reoffending was up to 10 times lower among treated young people.
- ▶ **Non-sexual and violent reoffending** declined. While reductions were smaller and sometimes not statistically significant, trends were consistently positive.

Results

- ▶ **1- Findings consistent across analytic methods.**
- ▶ **2- Shows the critical importance of controlling for confounders in quasi-experimental studies**
- ▶ **3- Current evidence suggests GYFS intervention significantly lowers reoffending risk across offence types.**

Why is GYFS effective?



Why is GYFS effective?

Gannon et al. (2019)

A substantial improvement of treatment effectiveness occurs when the program benefits from:

- 1) consistent hands-on involvement by qualified registered psychologist and,
- 2) when staff receive ongoing clinical supervision

Why is GYFS effective?

CPLM (Quebec, Canada)

- ▶ CBT & MST
- ▶ Not field-based
- ▶ Collaborative approach with multidisciplinary team and YP family
- ▶ Research informed but not driven
- ▶ No focus on continuous staff training
- ▶ Referred by Child Protection, Court or voluntary basis

Implications

- ▶ **GYFS demonstrates strong evidence for trauma-informed, specialized treatment efficacy**
 - ▶ Individualized CBT, multisystemic interventions, and community-based engagement.
- ▶ Quasi-experimental methods yield credible results
- ▶ Limitations/future research: Follow-up restricted to youth data; long-term outcomes unknown

Implications

RECOMMENDATIONS FOR POLICYMAKERS

| POLICY AREA | RECOMMENDED ACTION |
|----------------------------------|---|
| <i>Program Funding</i> | Sustain and expand funding for GYFS to meet demand and ensure statewide coverage. |
| <i>Evaluation Infrastructure</i> | Establish a longitudinal data-sharing framework between Griffith University and the Department of Youth Justice and Victim Support for continuous evaluation. |
| <i>Cultural Responsiveness</i> | Co-design culturally specific interventions with Aboriginal and Torres Strait Islander communities. |
| <i>Workforce Development</i> | Maintain a model led by registered psychologists with ongoing supervision and professional training. |
| <i>Cross-System Integration</i> | Strengthen partnerships between youth justice, education, health, and child protection sectors to support holistic rehabilitation. |

Why is GYFS effective?

- ▶ 1- Individualised/multisystemic of GYFS approach for more comprehensive assessment/treatment
 - ▶ 2- Field-based delivery model for maximum access and stronger collaboration
 - ▶ 3- Sustained consultation with community members and professionals
- 4- Grounded in empirical research – strong commitment to research-informed practice drives clinicians to continuously refine approach and tailor intervention

| | | | |
|---|--------------------|--------------------|-------------------------------|
| Risk score | 2.08 (0.84) | 2.08 (0.79) | $t(445) = 0.07, p = .94$ |
| Outcome prevalence | | | |
| Any reoffence | 162 (53.5 %) | 55 (38.2 %) | $\chi^2(1) = 9.11, p < .01$ |
| Sex reoffence | 45 (14.9 %) | 4 (2.8 %) | $\chi^2(1) = 14.58, p < .001$ |
| Violent reoffence | 51 (16.8 %) | 17 (11.8 %) | $\chi^2(1) = 1.91, p = .17$ |
| Non-violent reoffence | 140 (46.2 %) | 52 (36.1 %) | $\chi^2(1) = 4.06, p = .04$ |
| Outcome incidence per 1000 person years | | | |
| Any reoffence | 1000.74 | 444.62 | $\chi^2(1) = 13.04, p < .001$ |
| Sex reoffence | 200.34 | 24.77 | $\chi^2(1) = 15.52, p < .001$ |
| Violent reoffence | 203.57 | 107.56 | $\chi^2(1) = 5.18, p = .02$ |
| Non-violent reoffence | 694.45 | 403.25 | $\chi^2(1) = 6.09, p = .01$ |
| Outcome mean follow-up days | | | |
| Any reoffence | 195.00 (274.33) | 313.55 (324.62) | $t(243.27) = -3.79, p < .001$ |
| Sex reoffence | 270.58 (327.98) | 409.38 (343.64) | $t(445) = -4.12, p < .001$ |
| Violent reoffence | 301.79 (366.34) | 400.60 (352.44) | $t(445) = -2.70, p < .01$ |
| Non-violent reoffence | 242.85 (340.61) | 326.86 (338.74) | $t(445) = -2.44, p = .02$ |

RESULTS

Results

