

# Posttraumatic stress disorder among youth probationers in British Columbia: Prevalence, profiles, and implications for probation practice

PTSD Multidisciplinary Conference 2016: Causes, Consequences, Responses  
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# Presentation Overview

- Research question
- Existing literature on PTSD & youth in conflict with the law
- The present research study's sample & methodology
- Research findings
- Conclusions
- Special consideration for policy & practice

# Research Question

- What are the specific profiles of youth diagnosed with PTSD who are supervised on youth probation?
- Is there a significant positive relationship between PTSD and recidivism among youth probationers?

# Literature on PTSD & Young Offenders

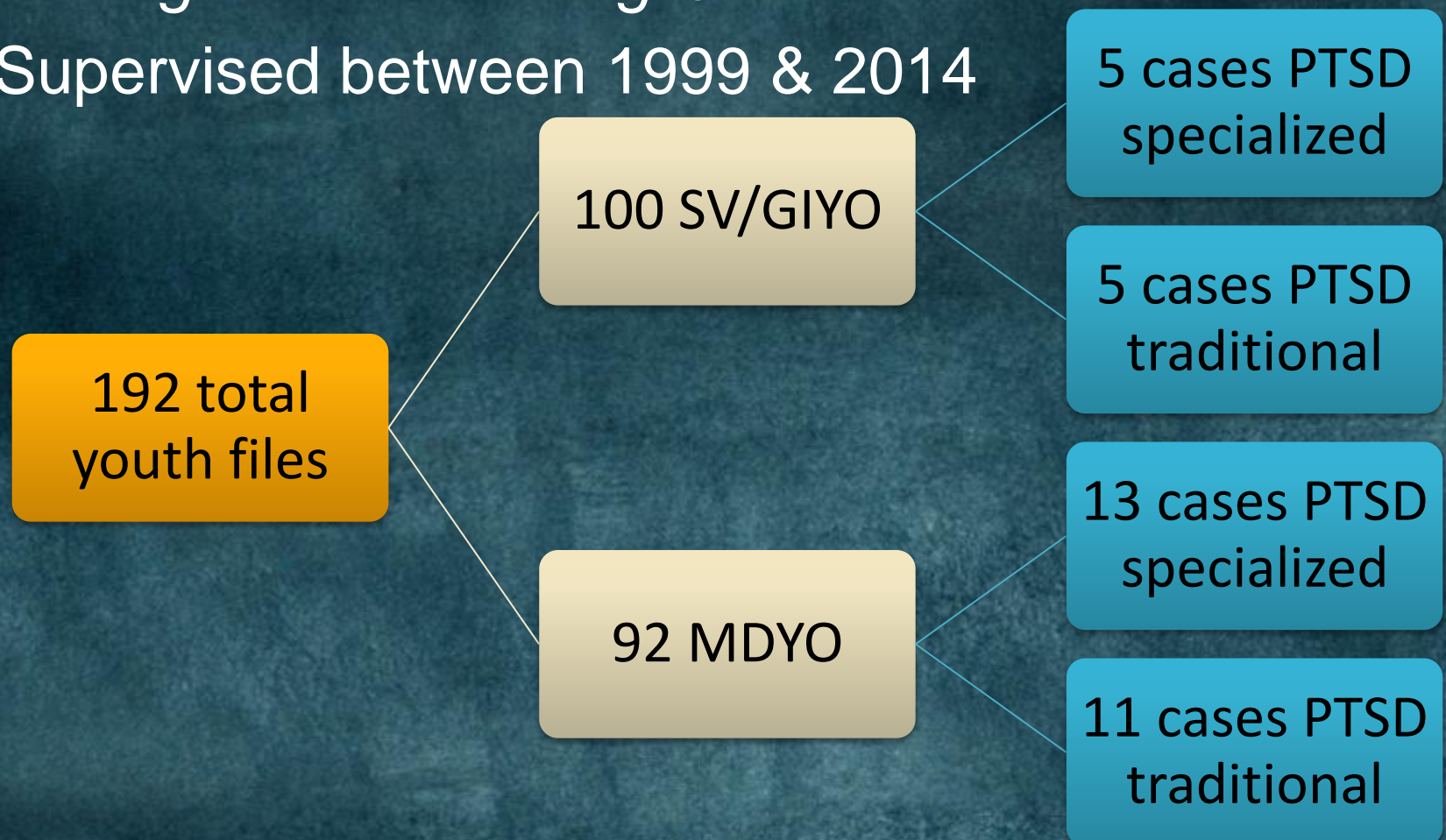
- PTSD more common in justice-involved youth (Cauffman et al., 1998; Wasserman et al., 2002; Abram et al., 2013).
- Up to over 90% youth probationers have experienced a traumatic event; over 10% diagnosed with PTSD (Wilson et al., 2013).
- More severe emotional and behavioural issues found in youth diagnosed with PTSD (Stimmel, Cruise, Ford, & Weiss, 2014; Wilson et al., 2013).
- Female young offenders' PTSD associated with 4+ psychiatric diagnoses, sexual abuse (Dixon, Howie, & Starling, 2005)

# PTSD, Violence, & Recidivism Literature

- Exposure to violence linked to externalizing behaviours (Kirk & Hardy, 2012).
- Exposure to traumatic events and violence associated with PTSD, but not aggression (Stimmel et al., 2014).
- Girls and minority youth with PTSD have higher odds of recidivating (Becker, Kerig, Lim, & Ezechukwu, 2012).
- Neglect & physical abuse related to general & violent recidivism among males and general recidivism only for females (van der Put & de Ruiter, 2016).

# Present Study – Youth Probationer Sample

- *Study on Specialized Community Case Management of Young Offenders*
- Supervised between 1999 & 2014



# Methodology

- Assessed the risk/recidivism profiles of justice-involved youth with PTSD
  - Demographics, familial, educational, substance use, mental health, peer associations, assessment ratings, first offence severity
  - Bivariate analysis
- PTSD
  - Suspected or diagnosed by a mental health professional
- Recidivism
  - Various measures of recidivism (conviction) and chronic offending (5+).
  - Logistic regression

# Probationer Descriptives (N = 192)

Variables (N = 192)	%/Mean (SD)
High Supervision Rating (3-4)	71.40%
High Needs Rating (3-4)	67.20%
High Risk Rating (3-4)	65.60%
Average Time on Probation	1201.93 days (536.99)
Ever in Custody	96.90%
Average Time in Custody	426.00 days (472.44)

Variables (N = 192)	%/Mean (SD)
Age Entered Probation	14.75 (1.59)
Male (Yes = 1)	82.80%
Ethnicity	
Caucasian (1)	40.10%
Aboriginal (2)	24.50%
Other (3)	35.40%
Primary Caregiver Pre-13	
Both Biological Parents (1)	22.90%
Biological Mother Only (2)	35.40%
Other (Father, Extended Family, Care) (3)	41.70%
Bio. Mother, Father, and/or Sibling(s) Deceased	21.40%
Ever in Foster Care (Yes = 1)	51.00%
Family Environment Scale (1-3)	2.24 (.81)
Family Risk Scale (1-4)	2.70 (1.17)
Abuse Scale (1-3)	2.01 (.83)
Educational Attainment (grades 3-12)	9.44 (1.44)
Ever Suspended or Expelled (Yes = 1)	72.90%
Ever Enrolled in Alternative School (Yes = 1)	80.70%
Substances Use Scale (1-13)	5.26 (2.38)
Age Onset Substance Use ≤12 years of age	55.20%
Mental Health Scale (1-19)	4.32 (3.03)
Antisocial Peer Scale (1-3)	2.63 (.63)
Gang-Involved (Yes = 1)	34.40%
Ever Attended Counselling (Yes = 1)	69.30%
Ever Prescribed Medications (Yes = 1)	58.90%

# Probationer Descriptives - PTSD Subsample (n = 34)

Variables (n = 34)	%/Mean (SD)
Age Entered Probation	14.35 (1.43)
Male (Yes = 1)	64.70%**
Ethnicity	6.59*
Caucasian (1)	35.30%
Aboriginal (2)	41.20%
Other (3)	23.50%

Variables (n = 34)	%/Mean (SD)
Primary Caregiver Pre-13	3.09
Both Biological Parents (1)	17.60%
Biological Mother Only (2)	29.40%
Other (Father, Extended Family, In Care) (3)	52.90%
Bio. Mother, Father, and/or Sibling(s) Deceased	32.40%*
Ever in Foster Care (Yes = 1)	79.40%***
Family Environment Scale (1-3)	2.59 (.61)**
Family Risk Scale (1-4)	3.26 (.99)**

# Probationer Descriptives

- PTSD Subsample (n = 34) cont.

Variables (n = 34)	%/Mean (SD)
Abuse Scale (1-3)	2.44 (.79)**
Physical Abuse (Yes = 1)	55.90%*
Sexual Abuse (Yes = 1)	47.10%***
Experienced Neglect (Yes = 1)	52.90%**
Witnessed Abuse (Yes = 1)	50.00%

<sup>†</sup>p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

# Probationer Descriptives

- PTSD Subsample (n = 34) cont.

Variables (n = 34)	%/Mean (SD)
Substances Use Scale (1-13)	6.44 (2.64)**
Age Onset Substance Use ≤12 years	64.70%
Mental Health Scale (1-19)	7.35 (3.35)***
Antisocial Peer Scale (1-3)	2.47 (.75)
Gang-Involved (Yes = 1)	26.50%

<sup>†</sup>p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

# Probationer Descriptives

- PTSD Subsample (n = 34) cont.

Variables (n = 34)	%/Mean (SD)
Educational Attainment (grades 3-12)	8.85 (1.62)**
Ever Suspended or Expelled (Yes = 1)	64.70%
Ever Enrolled in Alternative School (Yes = 1)	85.30%
Ever Home-Schooled (Yes = 1)	14.70%

<sup>†</sup>p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

# Probationer Substance Use Profiles

Variables	Youth w/ PTSD (n = 34)	Youth w/o PTSD (n = 158)	$\chi^2$
Alcohol	94.10%	88.00%	1.08
Acid	26.50%	15.20%	2.5
Cocaine	50.00%	41.10%	0.9
Crack	41.20%	21.50%	5.77**
Crystal Meth	61.80%	32.90%	9.89**
Ecstasy	61.80%	55.70%	0.42
Heroin	32.40%	7.00%	17.78***
Marijuana	97.10%	88.60%	2.24
Mushrooms	41.20%	27.20%	2.61

†p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

# Probationer “Risk/Needs” Profiles

Variables	PTSD Youth (n = 34)	Non-PTSD Youth (n = 158)	$\chi^2$
Supervision Level – High	81.80%	70.50%	6.76 <sup>†</sup>
Needs Assessment – High	78.80%	66.00%	7.02 <sup>†</sup>
Risk Assessment – High	75.80%	64.70%	2.82
Unstable Family Relationships	87.90%	76.90%	7.65
Poor Parental Supervision	42.40%	59.60%	5.32
Unstable Living Arrangements	63.60%	50.00%	6.22
Education/Employment Interfering	84.80%	73.10%	3.29
Criminal Peer Relations	90.90%	88.40%	6.17
Substance Abuse/Usage	75.80%	73.10%	5.17
Problematic Leisure Activities	75.70%	76.90%	3.83
Behavioural Problems	93.90%	89.10%	3.13
Problematic Attitudes	84.80%	71.80%	4.37
Three + Prior Court Dispositions	49.40%	60.60%	3.12
Severity of Violence – High	15.20%	32.10%	4.83
Age of First CJS Contact 12-13	30.30%	25.60%	1.48
Ever in Custody	100.00%	96.20%	1.33
Age of First Child Welfare Contact < 5	42.40%	21.20%	12.89*

<sup>†</sup>p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

# Probationer Recidivism

Recidivism	PTSD Subsample (n = 34)	Non-PTSD Subsample (n = 158)	$\chi^2$
General <sup>1</sup>	91.20%	78.50%	2.90 <sup>†</sup>
Administrative	85.30%	74.70%	1.76
Chronic <sup>1</sup> (5+)	41.20%	43.70%	0.07
Serious Chronic <sup>1</sup>	23.50%	19.60%	0.26
Severe Chronic <sup>1</sup> (10+)	14.70%	10.10%	0.60

<sup>†</sup>p ≤ 0.10, \*p ≤ 0.05, \*\*p ≤ 0.01, \*\*\*p ≤ 0.001

<sup>1</sup>excluding administrative offences

# Logistic Regression Results (N=192)

General Recidivism Model (N = 192)				
Variables	B	S.E.	Wald	Exp( $\beta$ )
Caseload			5.88	
Trad. SV/GIYO	0.25	0.83	0.18	1.42
Spec. MDYO	-2.09	1.15	3.32 <sup>†</sup>	0.88
Trad. MDYO	-0.15	1.24	0.02	0.14
Age Entry	-1.32	0.34	15.06***	0.73
Gender – Female	-1.6	1.01	2.5	0.8
Ethnicity			1.99	
Aboriginal	-0.84	1.2	0.49	0.57
Other	-1.1	0.78	1.98	0.67
Family Environ. Scale	-0.74	0.43	2.89 <sup>†</sup>	0.52
Abuse Scale	1.19	0.5	5.74*	3.29
Alternative School	1.86	0.72	6.69**	6.42
Antisocial Peer Scale	0.59	0.45	1.76	1.81
Crack Use	4.12	1.52	7.37**	61.75
ADHD	1.61	0.93	3.03 <sup>†</sup>	5.02
Constant	20.38	5.69	12.85***	7.12 x 10 <sup>8</sup>
Overall % predicted	90.6			
$\chi^2$ (p)	68.72***			
Nagelkerke pseudo-R <sup>2</sup>	0.55			

<sup>†</sup>p < 0.10, \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001

# Logistic Regression Results II (N=192)

Variables	Serious Recidivism Model (N = 192)				Severe Chronic Model (N = 192)			
	B	S.E.	Wald	Exp(β)	B	S.E.	Wald	Exp(β)
Caseload			10.95*				4.91	
Trad. SV/GIYO	0.7	0.71	0.99	2.02	1.27	0.72	3.12 <sup>†</sup>	3.57
Spec. MDYO	-1.99	0.83	5.69*	0.86	1.27	0.78	2.63	3.56
Trad. MDYO	-1.24	0.8	2.41	0.71	1.67	0.77	4.66*	5.31
Age Entry	-1.11	0.21	26.97***	0.67	-0.77	0.19	15.51***	0.54
Gender – Female	-1.7	0.66	6.65*	0.82	-0.73	0.62	1.42	0.52
Ethnicity			1.26				0.48	
Aboriginal	0.79	0.76	1.09	2.2	0.13	0.54	0.06	1.14
Other	0.36	0.56	0.41	1.44	0.4	0.58	0.48	1.49
Abusive Family	0.89	0.48	3.41 <sup>†</sup>	2.42	-	-	-	-
Family Risk Scale	-	-	-	-	0.27	0.22	1.53	1.31
Ever In Care	-	-	-	-	1.89	0.57	10.85***	6.61
Education Level	-0.03	0.17	0.03	0.03	0.36	0.2	3.31 <sup>†</sup>	1.43
Crack Use	1.67	0.7	5.69*	5.31	1.27	0.52	5.90*	3.56
Alcohol	2.06	1	4.24*	7.82	-	-	-	-
Antisocial Peers	0.25	0.38	0.41	1.28	0.6	0.53	1.31	1.82
Gang Involved	-0.42	0.58	0.52	0.44	-0.41	0.53	0.61	0.44
FASD	1.32	0.75	3.11 <sup>†</sup>	3.75	-	-	-	-
Psychosis	1.94	1.02	3.60 <sup>†</sup>	6.96	-	-	-	-
Anxiety	-	-	-	-	-1.79	0.67	7.22**	0.83
Bipolar Disorder	-	-	-	-	-2.5	0.93	7.29**	0.92
Learning Disability	-	-	-	-	1.23	0.57	4.74*	3.42
SUD	-	-	-	-	1.52	0.57	7.01**	4.57
Constant	17.47	3.9	20.09***	3.9 x 10 <sup>7</sup>	1.21	3.5	0.12	3.35
Overall % predicted	85.9				81.3			
χ <sup>2</sup> (p)	104.17***				92.31***			

# Policy & Practice Implications

- Youth probationers with PTSD have complex needs profiles.
- While a PTSD diagnosis was not significantly associated with a higher likelihood of reoffending, several factors associated with trauma and/or the onset of PTSD were.
- Youth probation and community programming/support services should be sensitive to high rates of trauma exposure /PTSD.
- Cultural and gender specific programming and supports needed
  - Aboriginal youth
  - Youth from immigrant families
  - Girls

**THANK YOU**

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