Promoting early identification of adults with intellectual developmental disabilities in contact with police

Ron Hoffman, PhD

Lynn Martin, PhD

LEPH Conference
Edinburgh, Scotland
October 21-23, 2019

Overall objectives:

- Examine the feasibility of developing an assessment tool that CJS staff could use to identify persons with IDD?

- Build on success of current mental health screener (BMHS) used by police and expand its use to a vulnerable persons screener?

What we know about IDD…

- Persons with moderate IDD (less likely) and severe IDD (rarely) involved with CJS but are nonetheless vulnerable to victimization

- IQ scores help to determine mental age but do not necessarily reflect person's ability to understand legal procedures or ability to tell the truth

What we know about IDD…

General reference for understanding levels of intellectual functioning (mental age):

<u>Mild</u>: 9-12 years, up to grade 6

<u>Moderate</u>: 6-9 years, up to grade 2

<u>Severe</u>: 3-6 years, up to grade 1

<u>Profound</u>: 0-3 years

What we know about IDD…

- Overly respectful of persons in authority

- "Cloak of competence" i.e. have learned correct answers or how to communicate socially but not really understand true meaning of words

- Acquiesce to others particularly those assumed more powerful, i.e. say "yes" more often than "no"; limit responses so as to not show lack of knowledge; display unconditional trust in persons in authority

What we know about IDD…

- Be easily suggestible

- Not disclose disability or want to seem different

- Confess and plead guilty more often

- Change answers because unsure or have trouble remembering

- Limited knowledge of rights and responsibilities

About the IDD Study

- Educational initiative to enhance awareness about IDD in the justice sector
  - Developmental Disabilities Justice Toolkit
  - Informed by our literature review and analysis of adults with IDD assessed with the RAI-MH

About the IDD Study

- Can the currently used police mental health screener (BMHS) differentiate between IDD & no IDD?

- Conduct a literature to identify psychometrically sound screening instruments for IDD and identify similar items in RAI-MH that could be used to add to the BMHS?

interRAI Brief Mental Health Screener (BMHS)

A new screener that police officers would complete when they encounter someone who they believe may have a mental health disorder.

What makes the interRAI BMHS unique?

Evidence-informed:

- key indicators of serious mental disorder obtained from health database

Enhanced training & communication:

- teaching police health language enhances training
- common language promotes better **collaboration** between frontline of systems

Embedded algorithms:

- Designed to communicate degree of severity

Development of HealthIM Software

- Support police & mobile crisis teams

- Enables electronic transmission

- Summarizes police officer observations

- Calculation of algorithms for danger to self, danger to others, inability to care for self

- Supports police officer decision-making

- In short, it assists officers to identify major indicators of serious mental disorder and communicate this information to appropriate agency

BMHS items in the RAI-MH (psychiatric assessment system used in hospitals)

- Crosswalk BMHS items in RAI-MH for IDD vs no IDD
- Cohort creation
  - Initial assessments only
    - N=7,929 unique individuals with IDD
    - N=205,600 unique individuals without IDD

BMHS code	RAI-MH code	Description
A5	cc4b=8	Homeless
B1a	B1j	Irritability
B1b	B1u	Hallucinations
B1c	B1v	Command Hallucinations
B1d	B1w	Delusion
B1e	B1i	Hyper-arousal
B1f	B1l	Pressured speech or racing thoughts
B1g	B1x	Abnormal thought process
B1h	E1d	Socially inappropriate or disruptive behaviour
B1i	E1a	Verbal abuse
B1j		Intoxication by drug or alcohol
B2	B2	Insight into mental health - Limited
B2	B2	Insight into mental health - None
B3	F2	Decision-making - Modified independence or worse
	C1	Alcohol (5+ drinks in single setting)
	C2a	Inhalants (in last week)
	C2b	Hallucinogens (in last week)
	C2c	Cocaine or crack (in last week)
	C2d	Stimulants (in last week)
	C2e	Opiates (in last week)
	C2f	Cannabis (in last week)
	C3	Withdrawal symptoms (any)
	C4a	Felt need/told to cut down on drinking/drug use
	C4b	Criticized about drinking/drug use
	C4c	Reports guilt about drinking/drug use
	C4d	Eye opener
C1		Previous police contact in last 30 days
	CC2f	Involvement with CJS, forensic admission
	A5a	Police intervention - violent (in last year)
	A5b	Police intervention - non-violent (in last year)
C2		Person has been known to carry or use weapons
C3a	D2c	Violent ideation
C3b	D2b	Intimidation of others or threatened violence
C3c	D2a	Violence to others
C4a	D1a=4,5	Self-injurious attempt in last 7 days
C4b	D1b=3,4,5	Considered SI in last 30 day
C4c	D1db	Suicide plan in last 30 days
C4d	D1da	Others concerned person is at risk for SI
C5		Home enviroment - squalid
C6	K2	Medication refusal

BMHS items in the RAI-MH

Characteristics	No IDD N=205,600	IDD N=7,929
Sex (male)	50.7%	60.1%
Mean age (SD)	44.7 (18.0)	41.4 (18.3)
Age groups		
Under 18	1.9%	3.6%
18-24	13.8%	19.8%
25-44	35.7%	34.7%
45-64	33.6%	30.2%
65+	15.0%	11.8%
Homeless	2.7%	2.7%

BMHS items in the RAI-MH

Items	No IDD N=205,600	IDD N=7,929
Mood		
Irritability	33.8%	**42.0%**
Hallucinations	14.8%	**21.1%**
Command hallucinations	4.3%	6.9%
Delusions	21.8%	22.0%
Hyper-arousal	9.7%	13.7%
Pressured speech/racing thoughts	17.9%	20.6%
Abnormal thought process	27.4%	37.3%
Insight into mental health		
Limited	**58.6%**	52.2%
none	17.5%	**37.9%**
Behaviour		
Socially inappropriate/disruptive	8.9%	**20.3%**
Verbal abuse	7.0%	**15.2%**
Medication refusal	12.4%	14.8%

BMHS items in the RAI-MH

- Violence more common with IDD:
    - Violent ideation (8.0% vs. 4.3%)
    - Intimidation of others/threatened violence (30.8% vs. 17.4%)
    - Violence to others (6.7% vs. 3.1%)

- Self-harm was less common with IDD
    - Self-injurious attempt in last 7 days (10.5% vs. 12.6%)
    - Suicide plan in last 30 days (12.1% vs. 18.6%)
    - Others concerned person is at risk for self-injury (34.9% vs. 38.0%)

Possible Screening items from the literature

DEVELOPMENTAL DISABILITIES JUSTICE TOOLKIT

Project Lead	Research	Toolkit	Training Video	Regional Resource Guides
Eastern Network of Specialized Care	Dr Ron Hoffman	Susan Morris	Patti Hancock	Community Networks of Specialized Care
Lisa Holmes	Dr. Greg Brown			
	Dr. Lynn Martin			
	Dr. Krista Mathias			
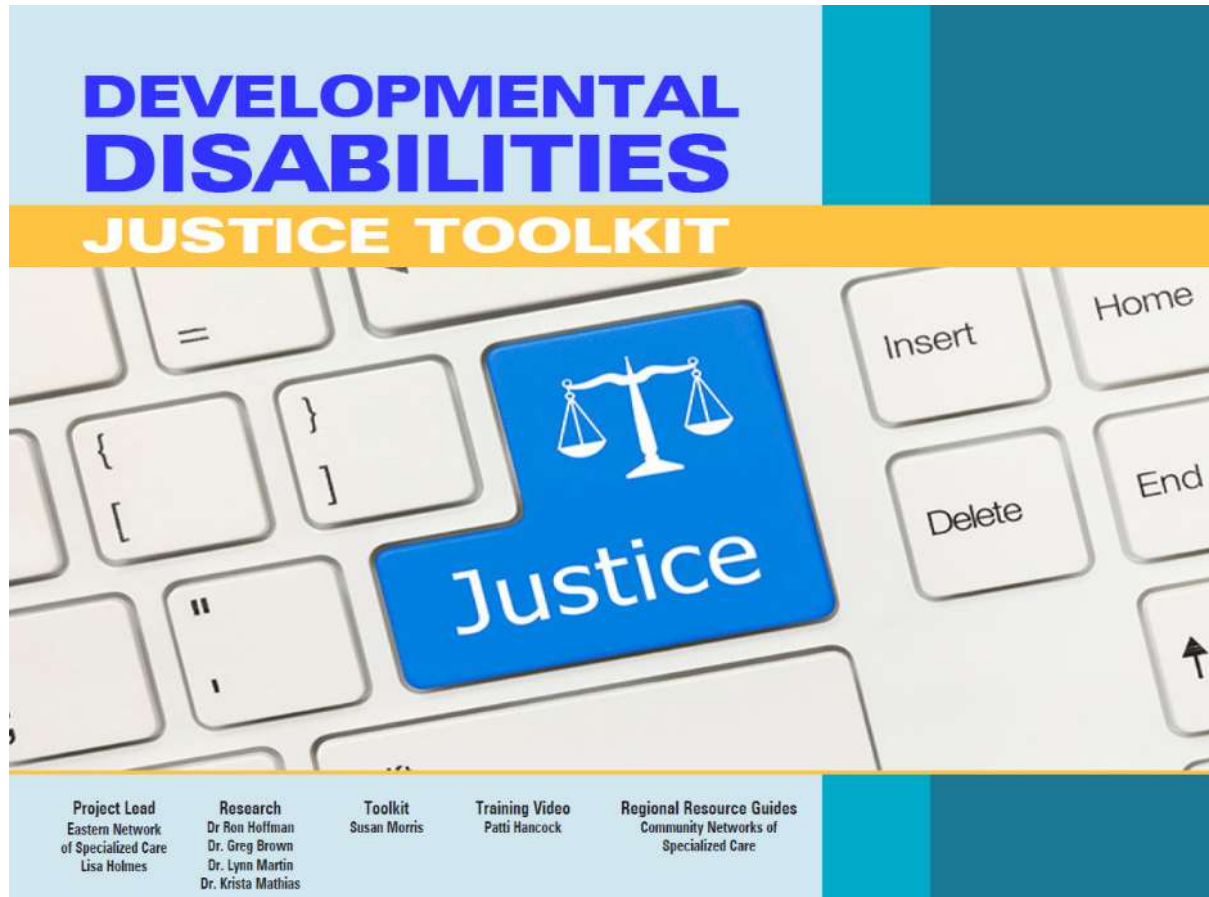
From the literature: Supports

|	IDD	No IDD
Who lived with at admission		
Alone	22.8%	30.1%
Spouse only	5.9%	14.1%
Spouse + others	3.9%	13.6%
Children, not spouse	1.9%	5.4%
Others, not spouse/child	36.5%	28.2%
Group setting with non-relatives	**29%**	8.74%
Usual residence		
Private home/rented room	66.4%	88.7%
Board and care	1.6%	0.6%
AL/SIL	3.9%	1.4%
MH residence	7.1%	1.5%
Group home, physical disabilities	2.6%	0.2%
Setting for persons with ID	7.1%	0.1%
Behaviour management (offered, received, scheduled)	35.4%	27.7%

Orientation, Numbers, Memory, Judgement

	IDD	No IDD
Periods of altered perception/awareness of surroundings – not recent onset	**13.6%**	6.2%
IADL Capacity – Not independent (score 1+)		
How travels by public transportation, arranges transport	50.3%	17.6%
Managing financing	57.4%	19.3%
Memory		
Short-term memory problems	32.2%	15.1%
Procedural memory problems	32.4%	12.3%
Cognitive skills for decision-making – Not independent (score 1+)	58.0%	24.7%

Appearance and behaviour
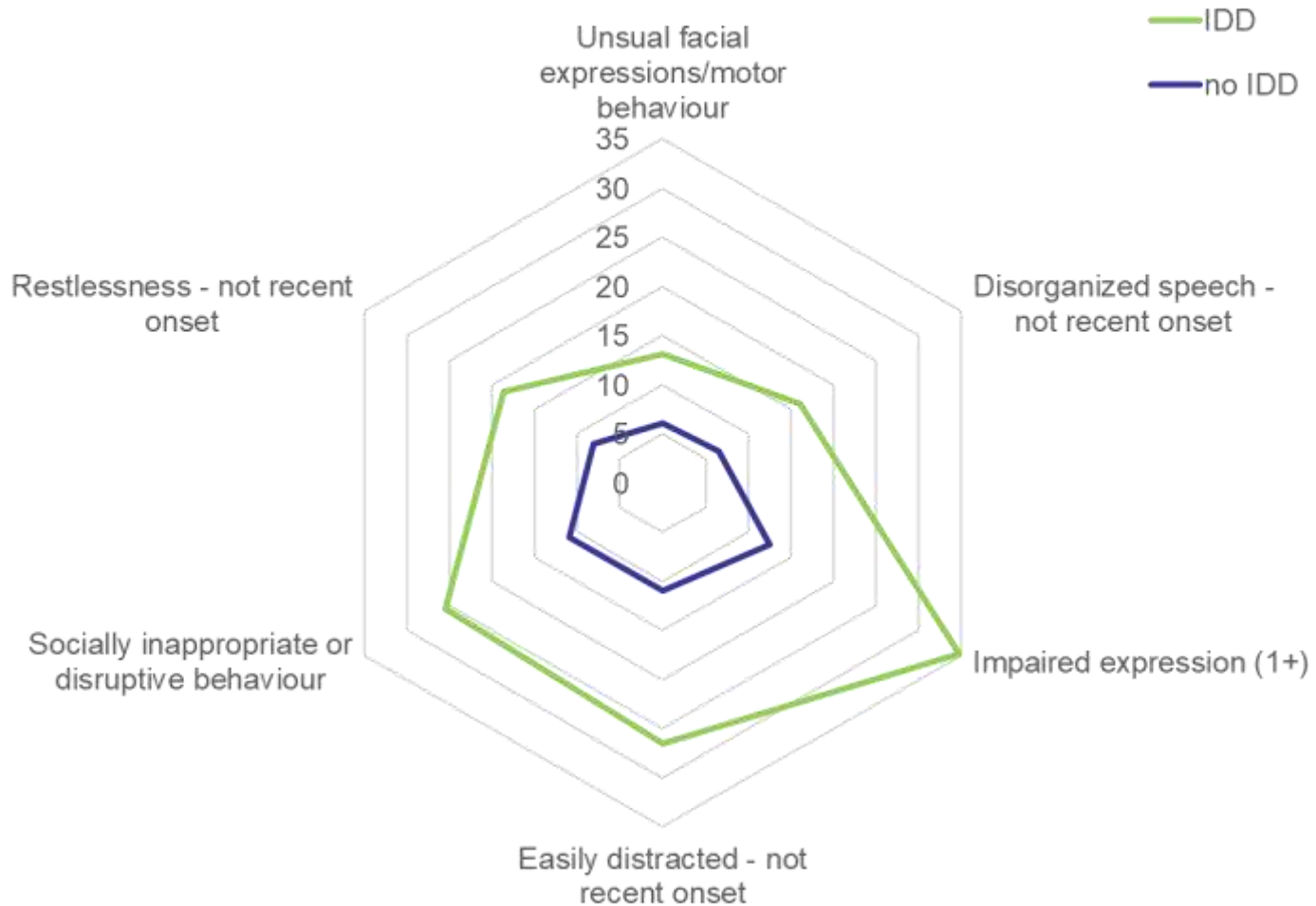
Literature Review on IDD & screening instruments
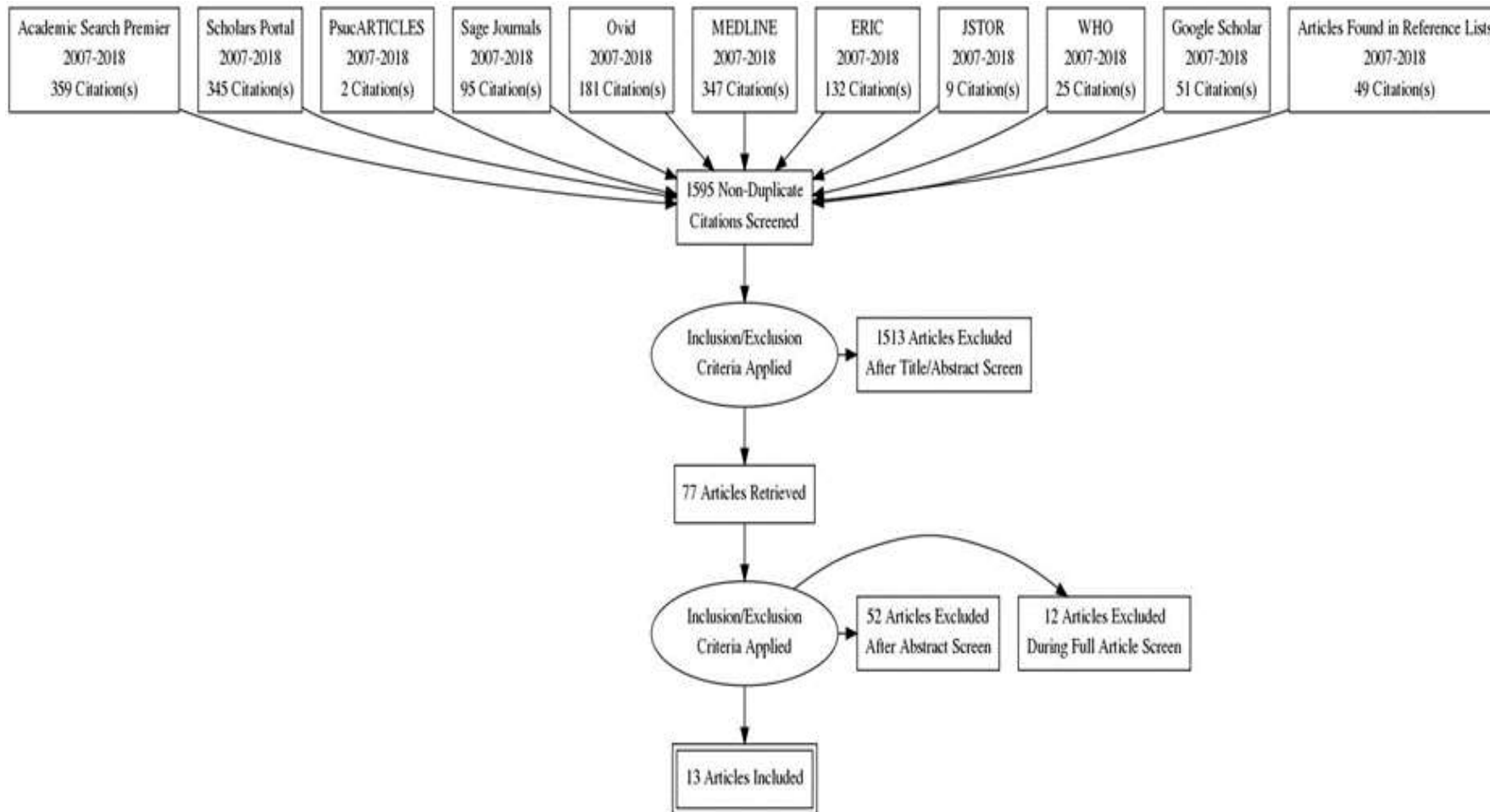
Inclusion Criteria

(1) available in English;

(2) designed for adult population;

(3) designed for nonclinical use (i.e., practical enough to be completed by front line police officers);

(4) no attempt to diagnose DD (rather, provides evidence to suggest referral for a complete assessment);

(5) short and relatively easy to complete; and most importantly,

(6) evidence of sound psychometric properties.

IDD Instruments

- ***Hayes Ability Screening Index*** **(HASI)** (Hayes, 2000, 2001)

- ***Learning Disability Screening Questionnaire*** **(LDSQ)** (McKenzie, & Paxton, 2006; McKenzie, Michie, Murray, & Hales, 2012; Paxton, McKenzie, & Murray, 2008)

- ***Rapid Assessment of Potential Learning Disabilities*** **(RAPID)** (Ali & Galloway, 2015)

- ~~***Learning Disabilities in Probation Services*** **(LIPS)** (Mason, & Murphy, 2002)~~ No validation studies

- ~~***Leicestershire Intellectual Disability Tool*** **(LIDS)** (Tryer, McGrother, Thorp, Taub, Bhaumik, & Cicchetti, 2008)~~ No validation studies

- ~~***Screener for Intelligence and Learning Disabilities*** **(SCIL)** (Geijsen, Kop, & Ruiter, 2016)~~ No English translation

Conclusions

- Only three items on the BMHS could differentiate IDD from no IDD (in about ¼ of the cases):
  - inappropriate /disruptive behavior,
  - diminished cognitive skills for daily decision-making, and
  - low insight into mental health

- However, the central issue is that the three items pertain mainly to mental health issues.

- No major items from the currently available instruments were practical enough to be used in the field by police officers

Recommendations

Police officers employ a two-stage process:

1. Observe behavioural cues:
   - inappropriate /disruptive behavior,
   - diminished cognitive skills for daily decision-making
   - Lack of insight into their mental health issues

2. Ask the following questions:
   - Have you been diagnosed with IDD/learning disability/ADHD/ autism/ dyslexia?
   - Have you ever accessed services for above/do you live in a group home supported by an IDD service?
   - Have you been involved in special schooling or assistance while in school?
   - Do you have difficulty reading, writing, or activities of daily living such as meal preparation or taking public transportation?

Recommendations

- If answer is yes, refer to IDD service agencies for follow-up assessment.

- Additional research should seek to validate the above questions.

Thank you

ronhoffman@nipissingu.ca