

## Oral language competence and risk in early life

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- Margaret Kent and Rita Cauchi, Research Assistants
- Participants in our studies

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### In today's presentation



- Factors that promote Oral Language Competence (OLC) in early life
- Why does OLC matter across the lifespan?
- Our research on OLC in high-risk young males
- What do these findings mean for the young person at-risk in the early years / already in the justice system?
- So – what can schools do?

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### Oral language competence?

- Everyday speaking and listening skills
- **Auditory processing and comprehension**
- Expressive language skills – semantics (vocabulary) , syntax (grammar), pragmatics (use)
- **Socially and culturally determined rules and practices**
- Important in facilitating the transition to literacy in the early school years, but not just literacy's 'Hand Maiden'

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### Language: Surface and hidden meanings

- ▶ **Similes**
- ▶ **Metaphor**
- ▶ **Idiom**
- ▶ **Jokes**
- ▶ **Sarcasm**



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### Threats\* to the development of OLC

- Neglect – esp socio-emotional
- Abuse
- Parental MH problems e.g. depression, substance abuse
- Social disadvantage / low SES / chaotic family
- Developmental disabilities
- Male gender
- Sensory deficits
- Inadequate / interrupted education – b/c language continues emerge / evolve throughout childhood, adolescence and across the adult life-span



\*Cumulative in nature

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## Why does oral language competence *matter*?

- ▶ The means by which we negotiate the business of everyday life – in personal, social, educational, commercial, professional contexts
- ▶ **The basis for the transition to literacy in early childhood**
- ▶ The basis for the development of a repertoire of culturally appropriate social skills.
- ▶ **Transmission of culture**
- ▶ A tool of self-regulation; planning & organisation of behaviour

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## Communicative competence

- ▶ Rules of turn-taking
- ▶ Conversational rights – asymmetrical in some situations e.g., an investigative interview
- ▶ Perspective taking
- ▶ Conversational repair
- ▶ Monologic Vs. Co-constructed narratives
- ▶ Direct Vs. Indirect Speech Acts
- ▶ Deep Vs Surface meanings: understanding and use
- ▶ Social Cognition



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## Language problems, social marginalisation and mental health

- Anxiety
- Depression
- Social Phobia
- Substance misuse
- Conduct Disorder
- **??difficulties benefiting from verbally mediated psychological therapies (e.g. CBT)**
- **??mis-labelling of behaviours associated with disordered language**
- Longitudinal data



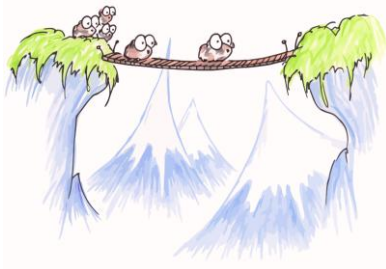
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## Language as a tool of Social Belonging: Social Cognition

- Social Inferencing
- Theory of Mind
- Empathy
- Working memory
- Therapeutic / Healing nature of **relationships**

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## Crossing the Bridge: The transition to literacy



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## The transition to literacy

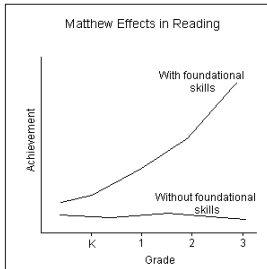
- Promotes
  - academic achievement,
  - school attachment and retention,
  - positive self esteem
- An important **Protective Factor**
- **Learning to Read Vs Reading to Learn**
- The Matthew Effect



NB Radio National *Ockham's Razor* Sunday Jan 24 2010:  
<http://www.abc.net.au/m/ockhamsrazor/stories/2010/2770796.htm>

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## The Matthew Effect



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## Our research

- Extends what is known about social skills and learning disabilities in young offenders, but
- Is specifically concerned with oral language
- Seeks to position OLC more centrally as a protective factor for all young people
- Recognises that level of education is a powerful predictor of health status, social engagement, and economic productivity across the lifespan
- Carried out in Victoria, Australia



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## The Victorian context

- Active diversion of youth offenders from custodial sentences
- Unique “Dual Track” system for 17-20 year-olds
- Lowest rate of youth supervision or detention nationally (Australian Institute of Health and Welfare, 2006)
- Fewer indigenous offenders than other States

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## The “typical” young offender

- Is male
- Leaves school sometime around Year 8 - 9; history of truancy, poor school attachment
- History of learning and **conduct** disorder
- High risk for substance abuse
- Associates with similar peers
- Chaotic family structure; involvement with Child Protection agencies
- 2<sup>nd</sup> generation risk factors
- Higher rates of all-cause mortality
- **Polymorbidity**
- *Was not always an offender – was once a ‘problem child’*

Implications for language development?



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## TWO KEY STUDIES

1. Community-based young offenders
2. Incarcerated young offenders

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## Community Offenders study

(Snow & Powell, 2008)

- n=50 YP on community-based orders
- Mean age\* = 15.8; Mean yrs education = 7.6
- Standardised measures of spoken and receptive language
- A measure of nonverbal IQ
- Data about convictions (violent Vs nonviolent - categorised)
- NB Excluded known Hx of TBI, hearing impairment, major psychiatric diagnoses etc
- **52% LI**

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## Community Study: Key findings

- 52% classified as language impaired according to standardised measures
- Difficulties were pervasive across measures
- Language problems not accounted for by low IQ
- Relationship b/w language skills and type of offending unclear
- 50% of those with LI had been identified for early intervention services
- 41% of those with LI had been diagnosed as ADHD

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## Custodial Sample

(Snow & Powell, in press)

- n=100
- Mean age = 19.03; Mean Yrs education = 9.8
- Standardised measures of spoken and receptive language
- A measure of nonverbal IQ
- Data about convictions (violent Vs nonviolent - quantified)
- Mental Health measure – to examine links b/w language and MH, in particular depression and anxiety
- Child Protection Hx – Out of Home Care Placement
- No exclusions, but all had to have completed the majority of their schooling in an English-speaking country
- No participants identified as being of Aboriginal or Torres Strait Islander origin

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## Measures - 1

### CELF4 (Australian standardisation)

- Recalling Sentences
- Formulating Sentences
- Word Classes (Receptive)
- Word Definitions
- Core Language Score

### Test of Language Competence – Expanded Edition

- Ambiguous Sentences
- Listening Comprehension
- Figurative Language

[Narrative Discourse – analysis pending]

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## Measures - 2

Kaufman Brief Intelligence Test – 2<sup>nd</sup> edition.

- Matrices – for estimate of NV IQ

Depression, Anxiety and Stress Scale (DASS)

Cormier-Lang Crime Index (CLCI)

- Violent Offending
- Non-Violent Offending
- Total Offending scales

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## Measures - 3

### Self-Report on

- Early intervention
- ADHD Diagnosis
- Level of education
- Further training
- Child Protection History – Out of Home Care Placement
- Alcohol and other drug use
- TBI, Hearing Impairment, major psychiatric diagnoses

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## Operationalising LI in the sample

➢ n = 50 were identified as LI on the CELF4 (standard score < 2 SDs below the mean)

➢ n = 59 scored < 2 SDs below the mean on at least two subtests of the TLC-E

➢ A score below this cut-off on 2 of the 3 TLC-E subtests and on the CELF4 Core Language Score was the operational definition of LI

**46% were identified as LI using this definition.**

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## Violent Offending and LI

- History of violence present in 87% of cases
- Quantified using CLCI
- Two subgroups created based on severity median split on CLCI Scales 1 & 2
  - 'High' Offending n = 26
  - 'Not-High' Offending n = 74

*These subgroups differed on years of education but not on nonverbal IQ*

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Measure	High Offending Scores on CLCI Scales 1&2 (n=26)		Not High offending Scores on CLCI Scales 1&2 (n=74)		t	p*	d
	Mean	SD	Mean	SD			
TLC-E Subtest 1 Ambiguous Sentences Standardised Score	4.2	1.9	4.8	2.5	1.1	.14	.27
TLC-E Subtest 2 Listening Comprehension Standardised Score	4.9	2.6	5.2	2.5	.48	.31	.12
TLC-E Subtest 4 Figurative Language Standardised Score	4.2	2.1	5.6	2.8	2.3	.01	.56
CEL4 Recalling Sentences	4.7	2.9	5.4	3.2	.97	.16	.23
CEL4 Formulating Sentences	3.8	3.3	5.6	3.4	2.3	.012	.53
CEL4 Word Classes (Receptive)	4.0	2.6	6.3	3.1	3.3	.00	.80
CEL4 Word Definitions	5.0	3.8	6.5	4.0	1.5	.055	.38
CEL4 Core Language Score	63.7	19.9	74.1	19.1	2.4	.01	.53

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## Violent Offending and LI cont.

Inspection of the 7 cases of *extremely high scores* (>75<sup>th</sup> percentile) on both the CLCI violent and non-violent offending scales, showed that 5 were in the Language Impaired subgroup.

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## Custodial Study: Key findings

- 46% Language Impaired\*
- Significant differences on several language measures between High Offending Group and Non-High Offending Group
- Of the 29 with a history of OHC, 16 (68%) were classified as LI
- No association b/w LI and self-reported MH problems
- Significant correlation between language skills and IQ for the non-LI subgroup, but not for those with LI.
- 62% of those with LI had been identified for early intervention services
- 43% of those with LI had been diagnosed as ADHD
- TBI, psychiatric diagnoses, hearing impairment all occurred with low frequency / overlap with LI

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## Limitations / considerations

- Self-selection into the study => bias?
- Operationalisation of LI – were we too conservative?
- MH measure – sensitivity?
- Minimum Data Set – not part of our thinking 10 years ago, but should have been
- Many may have had Child Protection involvement but without OHC placement – this is difficult to assess via self-report
- Many likely to have trauma backgrounds – difficult to capture, but important developmentally
- Community / Custodial offender distinction is somewhat artificial

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## Take home messages?

- Clinically significant language impairment is present in ~ 50% of young male offenders
- IQ is not an explanatory mechanism
- Early intervention has
  - Not occurred
  - Been inadequate
- Other labels (e.g. ADHD, Conduct Disorder) are likely to be applied
- Early risk (as measured by OHCP) increases vulnerability but is also a missed intervention opportunity
- Undetected LI will make being a witness, suspect or victim more challenging for a young person
- Interpersonal violence instead of prosocial ways of dealing with ambiguity / hostility??



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## Language problems are invisible



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## Language Impairment may masquerade as.....

- Rudeness
- Indifference / lack of concern
- Poor motivation to cooperate
- "Yep, nup, dunno, maybe"...and other minimalist responses
- Suggestibility / Over-compliance



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## What does all of this mean for....

- ▶ Early intervention with high-risk boys?
- ▶ **Forensic interviewing of youth offenders?**
- ▶ Counselling of young offenders?
- ▶ **Restorative Justice conferencing?**
- ▶ Mental Health across the lifespan?
  - ▶ Mastery
  - ▶ Optimism / Hope
- ▶ **Delivery of literacy and social skill interventions within the (youth) justice system?**
- ▶ Young people in the Child Protection system?



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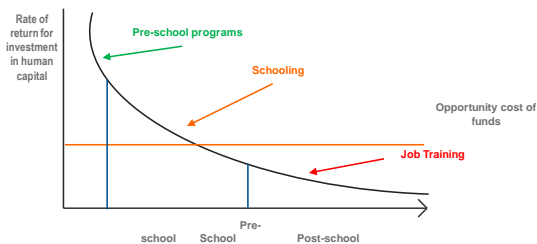
## Early intervention with high-risk boys: What can schools do?

- A focus on oracy
- Evidence-based approaches to teaching literacy
- Recognise that learning to read is a linguistic task
- Recognise comorbidity between language and behaviour problems
- Recognise that behaviour may be a form of communication
- Be critical and vigilant re 'what works'
- Recognise role of complex trauma in interfering with learning
- Don't give up on high-risk kids

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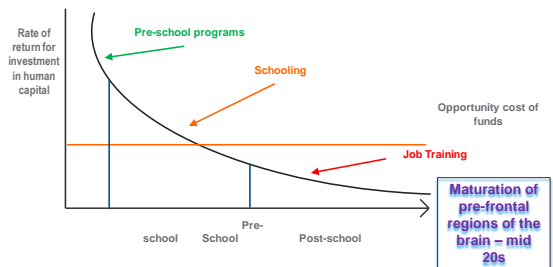
28th February 2011 | 34

## Rates of return from investment in early childhood Heckman & Carneiro (2003) Human Capital Policy



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## Rates of return from investment in early childhood Heckman & Carneiro (2003) Human Capital Policy



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### Selected Publications

- Snow, P.C. & Powell, M.B. (2011) Oral language competence in incarcerated young offenders: Links with offending severity. *International Journal of Speech Language Pathology*.
- Snow, P. C., Sanger, D.D. & Bryan, K. (2011, in press). Listening to adolescents with speech, language and communication needs who are in contact with the youth justice system. In S. Roulstone & S. McLeod (Editors). *Listening to Children and Young People with Speech, Language and Communication Needs*. UK: J&R Press.
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