NOW YOU'RE TALKING
SUPPORTING SPEECH, LANGUAGE & COMMUNICATION, BUMP TO 3

REGIONAL CONFERENCE
24 OCTOBER 2013
EVERGLADES HOTEL
DERRY LONDONDERRY
TALK WITH ME!
AS WAS HIS LANGUAGE
SO WAS HIS LIFE

Seneca (5BC-65AD)
Tony Rodgers
Assistant Director of Social Care
Health and Social Care Board
Welcome
CHILDREN & YOUNG PEOPLE’S STRATEGIC PARTNERSHIP

Purpose

To put in place integrated planning and commissioning across agencies and sectors ………. aimed at improving the well-being of and the realization of the rights of children in Northern Ireland in relation to the six outcomes for children.
OUTCOMES FOR CHILDREN

- Healthy
- Enjoying, learning and achieving
- Living in a society which respects their rights
- Experiencing economic and environmental well-being
- Contributing positively to community and society
- Living in safety and with stability
“Intervening early and as soon as possible to tackle problems emerging for children, young people and their families or with a population at risk of developing problems. Early intervention may occur at any stage in a child’s life”

(Grasping the Nettle Report 2009)
CHILDREN & YOUNG PEOPLE’S STRATEGIC PARTNERSHIP

CYPSP

5 x Outcomes Group

Locality Planning

Family Support Hubs
Alderman Gary Middleton
Deputy Mayor

Welcome
John O’Dowd MLA
Minister for Education
Opening Address
Marie-Louise Muir
Conference Facilitator
James Law
Professor of Speech and Language Science, Newcastle University.
“Now you’re talking”

Reflections on some key issues about early language development

James Law
Professor of Speech and Language Science

“Now you’re talking” Conference, Everglades Hotel, Londonderry
10.13
Areas we will be covering

• Why is early language delay important?
• Is language delay associated with socio-demographic factors?
• What do we know about intervention and effectiveness?
• Some implications for practice and policy
Genie
And a word on the context in England
Some background

The Rt Hon John Bercow MP

The Bercow Report
A Review of Services for Children and Young People (0–19) with Speech, Language and Communication Needs
Some background
<table>
<thead>
<tr>
<th>BERCOW REVIEW</th>
<th>BETTER COMMUNICATION ACTION PLAN</th>
<th>The Better Communication Research Programme</th>
<th>Appointment of the Communication Champion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Year of Communication (2011)</td>
<td>&quot;Hello&quot; Campaign</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Hello&quot; Campaign</td>
<td>The Communication Trust</td>
</tr>
</tbody>
</table>
Areas we will be covering

• Why is early language delay important?
• Is language delay associated with socio-demographic factors?
• What do we know about intervention and effectiveness?
• Some implications for practice and policy
The questions

• What are the outcomes of early language delays at school entry in adulthood in a whole population (rather than subsamples of those with “clinical” difficulties)?
• What are outcomes of choice?
• Do children with more “specific” language difficulties at school entry have different outcomes from those with “typically“ developing skills or those with generally lower skills?
Long term outcomes?

- British Cohort Study (BCS70), one of Britain's richest research resources for the study of human development;
- Over 18,000 persons living in Great Britain who were born in one week in April 1970;
- Data available about the cohort members at birth, 5, 10, 16, 26, 30 and most recently in 2004 when aged 34 years;
- Wide range of information collected from parent’s report, school report, tests and medical examinations;
- Excluded children whose first language was not English and whose ethnicity was not white European.
The measures at 5 years

– The English Picture Vocabulary Test (EPVT)

– The Copying Designs Test

– Rutter Behaviour Scale
The participants?

3 discrete groups.

“Typical Language Group” (TL) had EPVT and Copying scores falling within the normal range on BOTH assessments;

“Non-Specific Language Impairment Group” (N-SLI) had EPVT scores two or more standard deviations below the mean and scores of at least one standard deviation below the mean on the Test of Copying Skills.

“Specific Language Impairment Group” (SLI) also had scores of two or more standard deviations below the mean on the EPVT and scores of more than one standard deviation above the mean (ie. within the normal range) on the Test of Copying Skills.
Sample derivation

- Number of cohort members in database BCS70 at birth: n = 17196
- Completed EPVT & Copying designs: n = 11330
- English spoken at home & White European: n = 12099
- Completed EPVT & Copying designs: n = 11330
  - TL: n=8726
  - N-SLI: n=195
  - SLI: n=211
  - Good EPVT/ Poor copying: n=939
The “exposures” of interest

- **Distal factors**
  - Child gender
  - Age mother left school before 16 years
  - Mother single parent

- **Proximal factors**
  - Persons per room ratio (more than 1 per room)
  - Child had some kind of pre-school
  - Parent read to child in past week
  - Parent a poor reader

- **Biological and developmental “risk”**
  - Mother smoked during pregnancy
  - Child small for gestational age
  - Child behavioural difficulties
  - Child seen a speech and language therapist
The outcomes at 34 years

• **Literacy**
  – above level 2 in the UK National Curriculum (measured at 34). Level 2 = equivalent to GCSE A-C.

• **Mental health**
  – 3 or more signs of having had a mental health problem (four scales)
    • Rutter Malaise Inventory
    • Satisfaction with life scale
    • Measure of perception of control over life
    • Measure of self efficacy

• **Employment**
  – More than twelve months unemployment before 34 years
At thirty four years (final models/OR) * \( p<.05 \) **\( p<.01 \) ***\( p<.001 \)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reading</th>
<th>Mental health</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific language impairment</td>
<td>1.59</td>
<td>1.50</td>
<td>2.24</td>
</tr>
<tr>
<td>Non-Specific language impairment</td>
<td>4.35</td>
<td>2.90</td>
<td>1.88</td>
</tr>
<tr>
<td>Gender</td>
<td>1.05</td>
<td>0.96</td>
<td>2.05</td>
</tr>
<tr>
<td>Maternal education</td>
<td>1.66</td>
<td>1.22</td>
<td>0.97</td>
</tr>
<tr>
<td>Mother single parent</td>
<td>1.39</td>
<td>1.33</td>
<td>1.92</td>
</tr>
<tr>
<td>Overcrowding</td>
<td>1.36</td>
<td>1.64</td>
<td>1.59</td>
</tr>
<tr>
<td>Pre-schooling</td>
<td>1.24</td>
<td>1.22</td>
<td>1.33</td>
</tr>
<tr>
<td>Parent reads to child</td>
<td>1.21</td>
<td>1.03</td>
<td>0.94</td>
</tr>
<tr>
<td>Parent history of reading difficulties</td>
<td>1.64</td>
<td>1.92</td>
<td>1.54</td>
</tr>
<tr>
<td>Mother smoked during pregnancy</td>
<td>1.15</td>
<td>1.27</td>
<td>1.14</td>
</tr>
<tr>
<td>Small for dates</td>
<td>1.35</td>
<td>1.43</td>
<td>1.18</td>
</tr>
<tr>
<td>Behaviour - neurotic</td>
<td>1.07</td>
<td>2.13</td>
<td>1.16</td>
</tr>
<tr>
<td>Behaviour – anti-social</td>
<td>1.40</td>
<td>2.08</td>
<td>1.45</td>
</tr>
<tr>
<td>Seen a speech-language therapist</td>
<td>1.41</td>
<td>1.28</td>
<td>1.46</td>
</tr>
</tbody>
</table>
Areas we will be covering

• Why is early language delay important?
• Is language delay associated with socio-demographic factors?
• What do we know about intervention and effectiveness?
• Some implications for practice and policy
The premise

Data from England
The Millennium Cohort Study (MCS)
Data from Scotland
Growing up in Scotland
Data from Australia
The Early Language in Victoria Study (ELVS)
and for Northern Ireland?
MCS - Naming vocabulary at 3 years
MCS - Bracken
School Readiness at years)
Areas we will be covering

- Why is early language delay important?
- Is language delay associated with socio-demographic factors?
- What do we know about intervention and effectiveness?
- Some implications for practice and policy
# The public health model

<table>
<thead>
<tr>
<th>Type of prevention</th>
<th>Population</th>
<th>Aims</th>
<th>Terms used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary prevention</td>
<td>All</td>
<td>Prevents problem manifesting</td>
<td>Universal</td>
</tr>
<tr>
<td>Secondary prevention</td>
<td>Those with identified need</td>
<td>Removes problem from identified group</td>
<td>Targeted</td>
</tr>
<tr>
<td>Tertiary prevention</td>
<td>Those likely to have persistent life long difficulties</td>
<td>Reduces the occurrence of additional problems/helps adaptation</td>
<td>Specialist</td>
</tr>
</tbody>
</table>
does SLT meet criteria for inclusion in Public Health programmes?

Understanding of what constitutes a disability have changed over the past century – in “white collar” societies communication disabilities have become paramount at least as far as employability is concerned;

*During most of human history a person with a communication disorder was not thought of as “disabled”. The shepherds, seamstresses, plowmen, and spinners of the past did not require optimal communication skills to be productive members of their society, as they primarily depended on their manual abilities. Today a fine high-school athlete—a great “physical specimen”—who has no job and suffers from poor communication skills is not unemployed, but, for the most part, unemployable. On the other hand, a paraplegic in a wheelchair with good communication skills can earn a good living and add to the wealth of the society. For now and into the 21st century, the paraplegic is more “fit” than the athlete with communication deficits.*

(Ruben 2000, p. 243)
Speech and language therapy interventions for children with primary speech and language delay or disorder (Review)

Law J, Garrett Z, Nye C

This is a report of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in The Cochrane Library 2010, Issue 5

Differences from earlier version

• Searches conducted for the original (2003) version of this review identified 634 records;
• Three sets of comprehensive searches were run subsequently (in 2006, 2009 and 2011) in which a further 987 records were identified.
• 2003 version – 33 studies (25 in meta-analysis)
• 2011 version – 64 studies (54 in meta-analyses)
• 3872 participants
Phonology
(Speech development)
1.1.1 Production of target sound

Murro 1998 10.14 9.26 7 1.98 2.46 4 100.0% 0.98 [0.36, 2.31]
Subtotal (95% CI) 7 4 100.0% 0.98 [0.36, 2.31]

Heterogeneity: Not applicable
Test for overall effect: Z = 1.45 (P = 0.15)

1.1.2 Variability in production of target sound

Murro 1998 11.57 9.74 7 3.13 5.13 4 100.0% 0.91 [0.41, 2.23]
Subtotal (95% CI) 7 4 100.0% 0.91 [0.41, 2.23]

Heterogeneity: Not applicable
Test for overall effect: Z = 1.35 (P = 0.18)

1.1.3 Measures of overall phonological development (single word)

Almost 1998 48.2 10.9 15 34.7 7.9 15 9.5% 1.39 [0.57, 2.19]
Boullion 1973 10.36 7.76 34 0.4 9.1 9 10.0% 0.24 [0.50, 0.90]
Dene 2005 12.53 7.47 9 7.12 5.48 10 7.5% 0.80 [0.15, 1.74]
Fay 1998 -31.05 7.41 4 -39.75 9.59 8 4.1% 0.99 [0.47, 2.25]
Ologowska 2000 -27.2 22.76 71 -34.35 28.86 8 24.4% 0.27 [0.04, 0.50]
Lancaster 1991 -36.59 18.17 10 -45.6 12.51 5 6.0% 0.48 [0.01, 1.56]
Mather 1978 -6.62 2.39 16 -8.87 3.23 8 8.3% 0.91 (0.08, 1.69)
Murro 1998 75.14 14.14 7 60.25 5.45 4 4.7% 0.53 [0.73, 1.79]
Shelton 1878 7.55 5.45 30 9.7 11.2 15 13.5% -0.27 [0.09, 0.37]
Wren 2005 61.87 15.31 22 59.73 12.77 11 11.1% 0.14 [0.08, 0.87]
Subtotal (95% CI) 218 171 100.0% 0.42 [0.13, 0.72]

Heterogeneity: Tau² = 0.07; Chi² = 13.32, df = 9 (P = 0.15); P = 32%
Test for overall effect: Z = 2.91 (P = 0.005)

1.1.4 Percentage of consonants correct in conversation

Almost 1998 72.5 9.6 15 50.4 12.6 15 50.3% 1.92 [1.03, 2.81]
Dene 2005 91.8 10.41 9 92.05 3.76 10 49.7% -1.29 [2.29, -0.27]
Subtotal (95% CI) 24 25 100.0% 0.33 [-0.21, 3.47]

Heterogeneity: Tau² = 4.89; Chi² = 21.81, df = 1 (P < 0.00001); P = 95%
Test for overall effect: Z = 0.21 (P = 0.84)

1.1.5 Re-telling a story with target sound

Murro 1998 50.43 42.67 7 1.25 2.17 4 100.0% 1.28 [0.11, 2.69]
Subtotal (95% CI) 7 4 100.0% 1.28 [0.11, 2.69]

Heterogeneity: Not applicable
Test for overall effect: Z = 1.80 (P = 0.07)
Expressive language
(vocabulary and grammar)
### 1.6.1 Number of different target words learnt

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment</th>
<th>Control</th>
<th>Weight</th>
<th>Std. Mean Difference (IV, Random, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girolametto 1996a</td>
<td>3.9</td>
<td>1.5</td>
<td>8</td>
<td>37.7%</td>
</tr>
<tr>
<td>Girolametto 1996b</td>
<td>5.9</td>
<td>3.3</td>
<td>12</td>
<td>62.3%</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td>20</td>
<td>21</td>
<td>100.0%</td>
<td>0.93 [0.27, 1.58]</td>
</tr>
</tbody>
</table>

Heterogeneity: \( \tau^2 = 0.00; \chi^2 = 0.06, df = 1 (P = 0.81); I^2 = 0\%

Test for overall effect: \( Z = 2.78 \) (\( P = 0.005 \))

### 1.6.2 Measures of overall expressive vocabulary development

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment</th>
<th>Control</th>
<th>Weight</th>
<th>Std. Mean Difference (IV, Random, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buschmann 2009</td>
<td>51.6</td>
<td>43.9</td>
<td>24</td>
<td>20.1%</td>
</tr>
<tr>
<td>Cohen 2005</td>
<td>-30.898</td>
<td>-25.7</td>
<td>50</td>
<td>21.7%</td>
</tr>
<tr>
<td>Gallagher 2005</td>
<td>17.25</td>
<td>16.375</td>
<td>8</td>
<td>16.4%</td>
</tr>
<tr>
<td>Gibbard 1994a</td>
<td>15.7</td>
<td>3.2</td>
<td>18</td>
<td>17.5%</td>
</tr>
<tr>
<td>Wake 2011</td>
<td>90.4</td>
<td>90.1</td>
<td>158</td>
<td>24.2%</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td>266</td>
<td>219</td>
<td>100.0%</td>
<td>0.50 [-0.10, 1.10]</td>
</tr>
</tbody>
</table>

Heterogeneity: \( \tau^2 = 0.37; \chi^2 = 26.87, df = 4 (P < 0.0001); I^2 = 85\%

Test for overall effect: \( Z = 1.62 \) (\( P = 0.10 \))

### 1.6.3 Different words in language sample

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment</th>
<th>Control</th>
<th>Weight</th>
<th>Std. Mean Difference (IV, Random, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gibbard 1994a</td>
<td>14.2</td>
<td>8.1</td>
<td>18</td>
<td>45.0%</td>
</tr>
<tr>
<td>Girolametto 1996b</td>
<td>64.5</td>
<td>25.2</td>
<td>12</td>
<td>30.5%</td>
</tr>
<tr>
<td>Robertson 1999</td>
<td>15.1</td>
<td>8.5</td>
<td>11</td>
<td>24.5%</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td>41</td>
<td>41</td>
<td>100.0%</td>
<td>1.08 [0.61, 1.55]</td>
</tr>
</tbody>
</table>

Heterogeneity: \( \tau^2 = 0.00; \chi^2 = 0.10, df = 2 (P = 0.95); I^2 = 0\%

Test for overall effect: \( Z = 4.51 \) (\( P < 0.00001 \))

### 1.6.4 Parent report of vocabulary

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment</th>
<th>Control</th>
<th>Weight</th>
<th>Std. Mean Difference (IV, Random, 95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gibbard 1994a</td>
<td>225.3</td>
<td>49.4</td>
<td>18</td>
<td>15.8%</td>
</tr>
<tr>
<td>Girolametto 1996a</td>
<td>79.5</td>
<td>68.9</td>
<td>8</td>
<td>14.5%</td>
</tr>
<tr>
<td>Girolametto 1996b</td>
<td>187.7</td>
<td>65.4</td>
<td>12</td>
<td>16.0%</td>
</tr>
<tr>
<td>Law 1999</td>
<td>23.22</td>
<td>21.44</td>
<td>28</td>
<td>17.0%</td>
</tr>
<tr>
<td>Robertson 1999</td>
<td>76.2</td>
<td>51.4</td>
<td>11</td>
<td>15.5%</td>
</tr>
<tr>
<td>Wake 2011</td>
<td>34.5</td>
<td>34.4</td>
<td>158</td>
<td>21.1%</td>
</tr>
<tr>
<td>Subtotal (95% CI)</td>
<td>235</td>
<td>234</td>
<td>100.0%</td>
<td>0.70 [0.05, 1.35]</td>
</tr>
</tbody>
</table>

Heterogeneity: \( \tau^2 = 0.51; \chi^2 = 28.18, df = 5 (P < 0.0001); I^2 = 82\%

Test for overall effect: \( Z = 2.11 \) (\( P = 0.04 \))
Receptive language
(comprehension)
1.7.1 Measures of overall receptive vocabulary development

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment Mean</th>
<th>Treatment SD</th>
<th>Treatment Total</th>
<th>Control Mean</th>
<th>Control SD</th>
<th>Control Total</th>
<th>Weight %</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallagher 2005</td>
<td>27.94</td>
<td>6.07</td>
<td>16</td>
<td>17.25</td>
<td>4.62</td>
<td>8</td>
<td>16.9%</td>
<td>1.83 [0.81, 2.85]</td>
</tr>
<tr>
<td>van Kleeck 2006</td>
<td>90.93</td>
<td>10.99</td>
<td>15</td>
<td>74.07</td>
<td>12.93</td>
<td>15</td>
<td>19.4%</td>
<td>1.37 [0.56, 2.17]</td>
</tr>
<tr>
<td>Bouillion 1973</td>
<td>1.07</td>
<td>25.87</td>
<td>34</td>
<td>1.88</td>
<td>33.39</td>
<td>9</td>
<td>20.2%</td>
<td>-0.03 [-0.76, 0.71]</td>
</tr>
<tr>
<td>Law 1999</td>
<td>75.95</td>
<td>10.54</td>
<td>28</td>
<td>74</td>
<td>9.06</td>
<td>10</td>
<td>20.4%</td>
<td>0.19 [-0.54, 0.91]</td>
</tr>
<tr>
<td>Cohen 2005</td>
<td>-26.68</td>
<td>18.2</td>
<td>50</td>
<td>-24.22</td>
<td>13.57</td>
<td>27</td>
<td>23.2%</td>
<td>-0.15 [-0.61, 0.32]</td>
</tr>
<tr>
<td><strong>Subtotal (95% CI)</strong></td>
<td><strong>143</strong></td>
<td><strong>69</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.57 [-0.14, 1.28]</strong></td>
<td></td>
</tr>
</tbody>
</table>

Heterogeneity: Tau² = 0.51; Chi² = 19.65, df = 4 (P = 0.0006); I² = 80%
Test for overall effect: Z = 1.57 (P = 0.12)

1.7.2 PLAIn inferred meaning

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>PLAIn Mean</th>
<th>PLAIn SD</th>
<th>PLAIn Total</th>
<th>Weight %</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>van Kleeck 2006</td>
<td>31.47</td>
<td>11.04</td>
<td>15</td>
<td>100.0%</td>
<td>0.92 [0.16, 1.68]</td>
</tr>
<tr>
<td><strong>Subtotal (95% CI)</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
<td><strong>0.92 [0.16, 1.68]</strong></td>
</tr>
</tbody>
</table>

Heterogeneity: Not applicable
Test for overall effect: Z = 2.38 (P = 0.02)
1.5.1 measures of overall receptive syntax development

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment Mean</th>
<th>SD</th>
<th>Total</th>
<th>Control Mean</th>
<th>SD</th>
<th>Total</th>
<th>Weight</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bishop 2006a</td>
<td>73.08</td>
<td>13.03</td>
<td>24</td>
<td>75.56</td>
<td>13.08</td>
<td>9</td>
<td>10.3%</td>
<td>-0.19 [-0.95, 0.58]</td>
</tr>
<tr>
<td>Cohen 2005</td>
<td>72.22</td>
<td>7.575</td>
<td>50</td>
<td>72.44</td>
<td>5.77</td>
<td>27</td>
<td>21.7%</td>
<td>-0.03 [-0.50, 0.44]</td>
</tr>
<tr>
<td>Gallagher 2005</td>
<td>31.69</td>
<td>8.67</td>
<td>16</td>
<td>23.38</td>
<td>7.75</td>
<td>8</td>
<td>7.9%</td>
<td>0.96 [0.06, 1.86]</td>
</tr>
<tr>
<td>Given 2008</td>
<td>6.078</td>
<td>10.426</td>
<td>52</td>
<td>4.15</td>
<td>11.19</td>
<td>13</td>
<td>15.0%</td>
<td>0.18 [-0.43, 0.79]</td>
</tr>
<tr>
<td>Glogowska 2000</td>
<td>87.3</td>
<td>15.89</td>
<td>71</td>
<td>84.26</td>
<td>15.49</td>
<td>88</td>
<td>33.8%</td>
<td>0.19 [-0.12, 0.51]</td>
</tr>
<tr>
<td>Law 1999</td>
<td>71.05</td>
<td>5.32</td>
<td>28</td>
<td>73.4</td>
<td>4.55</td>
<td>10</td>
<td>11.2%</td>
<td>-0.45 [-1.18, 0.28]</td>
</tr>
<tr>
<td><strong>Subtotal (95% CI)</strong></td>
<td>241</td>
<td></td>
<td></td>
<td>155</td>
<td></td>
<td></td>
<td>100.0%</td>
<td>0.09 [-0.18, 0.36]</td>
</tr>
</tbody>
</table>

Heterogeneity: Tau² = 0.03; Chi² = 6.89, df = 5 (P = 0.23); I² = 27%
Test for overall effect: Z = 0.66 (P = 0.51)

1.5.2 ERRNI - ideas recalled

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment Mean</th>
<th>SD</th>
<th>Total</th>
<th>Control Mean</th>
<th>SD</th>
<th>Total</th>
<th>Weight</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bishop 2006a</td>
<td>82.25</td>
<td>17.87</td>
<td>24</td>
<td>96.44</td>
<td>11.85</td>
<td>9</td>
<td>100.0%</td>
<td>-0.84 [-1.63, -0.04]</td>
</tr>
<tr>
<td><strong>Subtotal (95% CI)</strong></td>
<td>24</td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td>100.0%</td>
<td>-0.84 [-1.63, -0.04]</td>
</tr>
</tbody>
</table>

Heterogeneity: Not applicable
Test for overall effect: Z = 2.06 (P = 0.04)

1.5.3 ERRNI - comprehension

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Treatment Mean</th>
<th>SD</th>
<th>Total</th>
<th>Control Mean</th>
<th>SD</th>
<th>Total</th>
<th>Weight</th>
<th>Std. Mean Difference IV, Random, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bishop 2006a</td>
<td>78.96</td>
<td>18.22</td>
<td>24</td>
<td>78.89</td>
<td>9.16</td>
<td>9</td>
<td>100.0%</td>
<td>0.00 [-0.76, 0.77]</td>
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<tr>
<td><strong>Subtotal (95% CI)</strong></td>
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<td></td>
<td></td>
<td>9</td>
<td></td>
<td></td>
<td>100.0%</td>
<td>0.00 [-0.76, 0.77]</td>
</tr>
</tbody>
</table>

Heterogeneity: Not applicable
Test for overall effect: Z = 0.01 (P = 0.99)
And narrative reporting?

Is speech and language therapy effective for children with primary speech and language impairment? Report of a randomized control trial - Broomfield et al
Since the review i.

The Language for Learning (L4L)

- 200 4 years olds with delayed language development, generated from a known population sample
- Intervention is standardised and replicable but flexible enough to respond to the needs of different children
- Intervention designed to promote narrative skills, vocabulary and grammar, and phonological awareness and pre-literacy skills;
- Outcomes standardised measure of language plus school readiness measures five and six years
- RESULTS: Feasible and acceptable with significant positive results for phonological awareness and letter knowledge at five and phonological awareness at six.
Since the review….ii

The Social Communication Intervention Programme

• Focusing on 85 children with “pragmatic language impairment” 8-11 years receiving Intensive intervention in one school term (20 sessions) compared to 28 controls who received “treatment as usual”

• SCIP includes a tailored combination of interventions to promote Language Processing, Pragmatics and Social understanding and social interpretation

• Outcomes standard language test plus a variety of measures of interaction taken from teachers and parents

• RESULTS – Significant positive results for pragmatics, and teacher report of child communicative behaviour
The “What Works for SLCN” resource

• Its one thing to identify the evidence base – quite another to use it
• To promote the uptake of evidence we sought to combine the data from the review with an understanding of what people do
• On-line survey of speech and language therapists and others
• Identifying the best quality readily available interventions in the literature and combining these with the most commonly used interventions for which we could find evidence.
Practitioner experience

• 536 complete responses to on-line survey about practice;
• 3 most commonly used interventions then examined in detail;
• 75% of SLTs reported their most common age ranges were within the 2-7 years range;
• Primary SLCN with language as the primary difficulty was the most common area reported (36%). Primary SLCN with speech as the primary area was reported by 19% and Autism Spectrum Disorder (ASD) by 11.4%;
• Mainstream schools were reported most frequently (35%) followed by community clinics (17%) and special schools (12%);
• 38 published programmes and 126 home grown specified. A further 163 ‘Other published programmes’ mentioned without details.
Integrating evidence base and the practitioner experience

The *What works for SLCN Resource*;
57 interventions either currently in use or published in the research literature plus 3 “Up and coming”;
3 (5%) were found to have the strong level of evidence, 32 (56%) had moderate evidence and 22 (39%) had indicative evidence;
Most interventions focus on work with preschool and primary school children;
30% of the interventions were specifically relevant for improving a child’s speech, 39% targeted language, and the remainder were aimed at a combination;
Five were universal interventions, 13 were clearly targeted and 16 specialist.
TALK OF THE TOWN is an integrated, community led approach to supporting speech, language and communication in children from 0-18 years in south Manchester;

**Universal**
- Elements of “Thinking Together” at the universal level (see intervention # 53);
- Audit of practice using the BCRP Communication Supporting Classrooms Observation Tool with guidance on developing best practice. Use of Living language vocabulary approaches (#24)
- Use of word wizard approaches to support vocabulary at universal and targeted levels (#57)
- Use of “Talking Time” nursery intervention. (# 50)
- Teaching children to listen (#52)

**Targeted**
- A narrative intervention by Becky Shanks Narrative Intervention (# 1);
- Talk Boost (#48)
- Focused stimulation techniques (#15)
- Comprehension monitoring approaches within mainstream classrooms (#5)
- Elements of colourful semantics programme (#3)
- Language for thinking for children in key stage 2 (#20)
- I CAN secondary talk (#18)
- Joffe vocabulary enrichment programme (#58)

**Specialist**
- Makaton training for staff to use with pupils with SLCN (#25)
- Psycholinguistic framework to support phonological awareness (#41)
And the “What works” (WW) for children with speech and language needs

'What Works': Interventions for children and young people with speech, language and communication needs

James Law¹, Wendy Lee², Sue Roulstone³, Yvonne Wren⁴, Biao Zeng¹ & Geoff Lindsay⁴

¹ Newcastle University
² The Communication Trust
³ Bristol Speech and Language Therapy Unit and the University of West of England, Bristol
⁴ CEDAR, University of Warwick

All the other Better Communication Research Programme reports:
http://www.education.gov.uk/researchandstatistics/research/better
And the “What works” (WW) for children with speech and language needs

and the Communication Trust WW interactive website:-

http://www.thecommunicationtrust.org.uk/schools/what-works
WHAT DO WE WANT?
EVIDENCE-BASED CHANGE
WHEN DO WE WANT IT?
AFTER PEER REVIEW
Areas we will be covering

• Why is early language delay important?
• Is language delay associated with socio-demographic factors?
• What do we know about intervention and effectiveness?
• Some implications for practice and policy
Practice

- Growing body of evidence
- Increasing understanding of the role of context
- Some areas clearly mutable, others less so
- Need to raise understanding and application of the use of evidence
- Need more replications of studies with the most positive outcomes
- Need more evaluations of universal interventions
- Need to explore the potential for roll out
- Health and educational commissioners need to make explicit use of available evidence.
Policy: All Party Parliamentary Group on Speech and Language

- Over 2012 APPG took evidence on the links between SLCN and social disadvantage
- Resulted in a report in February 2013
- Closely tied into the BCRP (although not reliant on it)
- Has led to calls for discussion of the BCRP in the House of Commons
- Role played by The Communication Trust
Language delays in the UK

- 2012 Report commissioned by Save the Children
- Draws heavily on the BCRP
- Likely to lead to a programme of work around this issue in the UK
And in conclusion...

- Early communication skills clearly important in themselves but also BECAUSE they are linked to later performance;
- Clear socio-demographic gradient – if you take whole populations;
- Argument for inclusion as part of public health programmes;
- Most interventions are targeted or specialist rather than universal;
- An immensely creative field which continues to generate new studies, incorporating new measures and new interventions;
- Need more practitioner researchers contributing to the field;
- Public health/preventative model is a helpful starting place;
- Needs strong links between services and universities in formulating the research questions, seeking out funding etc;
- Critical that the best interventions make their way onto the international stage so that people round the world can test your ideas.
Thanks to:

Robert Rush
Queen Margaret University, Edinburgh

Ingrid Schoon,
Centre for Longitudinal Studies, Institute of Education, London

Sam Parsons
Centre for Longitudinal Studies, Institute of Education, London

And with funding from the UK’s Economic and Social Research Council
Acknowledgements

• The funders

• Professor Geoff Lindsay - University of Warwick
• Professor Julie Dockrell – Institute of Education, University of London
• Professor Sue Roulstone – University of the West of England

A number of other staff of whom the most relevant to today’s discussion are:-

• Professor Jenny Beecham, London School of Economics
• Dr Yvonne Wren, Speech and Language Therapy Research Unit, Frenchay Hospital, Bristol
• Drs. Ioanna Bakapoulou, Sarah Spencer, and Baio Zeng, Institute of Education, London, Sheffield and Newcastle Universities
TIME TO TALK
Anna Newell
Artistic Director
Replay Theatre Company
www.replaytheatrequ.co.org
WOBBLE: a dance show for 2-4s
THE SCHOOL UNDERNEATH
a thriller for 7-11s
“I think Replay was great. I was killed with excitement. It was as good as it could get.”

PUPIL
A BOY AND HIS BOX
for children everywhere playing in cardboard boxes....
THE SCHOOL UNDERNEATH
MARIANNE DREAMS
for 11-13s
WOBBLE
a dance show for 2-4s
“wonderful...amazing...totally engaging”

“I love taking my girls to things like this that will inspire them”

PARENTS
WOBBLE
a dance show for 2-4s
“ENJOYFULL!!!”

M, aged 4 and a bit
BLISS
BABBLE
BABBLE
Video
BABBLE
www.replaytheatreco.org
and we’re on facebook and twitter too!
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REGIONAL CONFERENCE
24 OCTOBER 2013
EVERGLADES HOTEL
DERRY LONDONDERRY
TALK WITH ME!

AS WAS HIS LANGUAGE
SO WAS HIS LIFE
Seneca (5BC-65AD)
LUNCH
NOW YOU'RE TALKING
SUPPORTING SPEECH, LANGUAGE & COMMUNICATION, BUMP TO 3

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SO WAS HIS LIFE

Seneca (5BC-65AD)
Anita Robinson
Teacher, Writer and Broadcaster
Janet Cooper

Team Leader for Community Paediatric Speech and Language Therapy, Stoke and Manager for ‘Stoke Speaks Out’.
Stoke Speaks Out
Acting together... achieving change

Janet Cooper
Early Language and Communication Programme Manager
SSOTP/Stoke on Trent City Council
Stoke on Trent
Stoke Speaks Out

A multi-agency approach to tackling the high incidence of speech and language deficit in Stoke on Trent
Evidence of need: Baseline Measures

2000 Government targets for local Sure Start programmes to ‘reduce by 5 percentage points the number of children requiring specialist intervention for their speech and language by the age of 4 years’
How we interpreted this in Stoke-on-Trent

- No previous measures to reflect on or compare with
- Only local measure was referrals to SLT- these are often unreliable measures
- No National assessment tool
- Anecdotal evidence suggested under-referral rather than over-referral to Speech/Language Therapy
Establishing a baseline

- Assessment of children entering nursery age 3;6 to 4 years
- Standardized assessments- comprehension of language, word finding vocabulary and speech
- Criteria= Age, Parental consent and Sure start postcode
- Attending a nursery in the Sure Start areas
Initial findings

• Whole population deficit - 64% of children assessed were significantly delayed with language skills
• Lack of early identification
• Culturally accepted norms
• Supporting observations from settings
• Some specific ‘SLI’ identified but majority delayed - all lumped together
Children with delayed language in line with general developmental delay and/or poor stimulation

Children at risk of delay (due to insecure attachment, inconsistent parenting model or lack of opportunities)

Specific speech/language problems (10%)

Tackling the root of the problem
Process
What did we do?

• Gathered lots of evidence (parents questionnaires, practitioner questionnaires, talked to wide range of people, attended forums and shared our findings)

• Developed a core multi-agency team of specialists to look at the underlying issues and plan a way forward

• Decided to embed the skills within the Children’s workforce rather than deliver a new service
What did we develop?

• Multi-agency training programme to ensure communication is ‘everybody’s business’
• Develop quality resources with reliable key messages for parents, carers and practitioners
• Supported current provision such as toddler groups, ante-natal classes etc. to enhance their practice
• Created a ‘buzz’ around early communication
So what has changed?

- Training
- Embedding good practice
- Shared understanding and vision
- Sharing responsibility
- Sharing best practice
- Attachment and communication on all agendas
- Earlier identification
Training

• 5 tier training framework: written, delivered and received by a multi agency group
• Level 1 shared vocabulary, shared good practice, shared tools
• Level 2 changes in practice
• Level 3 extending knowledge
• Level 4 Setting award- Communication Friendly
• Level 5 Enhanced practitioner award
Embedding good practice

- Expectation that basic good practice has been applied before children can be referred to SLT
- Quality improvement team expect high quality interaction in settings
- Setting award - evidence that best practice is in place
Early Identification

- Increased knowledge of child development
- Tools to support this knowledge
- Confidence in the process to access support
Attachment and communication on all agendas

• Children’s plan
• Early Years Strategy: Priority 1 Closing the gap
• Attachment features strongly in settings and on all Health Visiting plans
• Stoke Reads
SLT changes

Staged Pathway

Triage

Working together
Incidence of comprehension +/- word finding delay City Wide
What has changed?

• Children are entering nursery with better language skills
• City average in 2004 = 64% delay, 2010 39% delay
• Cohorts of children are being tracked through school and are showing an improvement year on year
• Parental and practitioner questionnaires indicate improvement in knowledge and confidence
• Evidence of good practice through practitioner case studies
• More information available to parents
• Case studies show impact from before birth through to school age
• SSO training now on courses locally for midwifery, teacher training, paediatric nursing and childcare courses
• Mandatory part of induction for all Children’s centre staff
Impact and evaluation

There have been many levels to our evaluation:

• Annual child measures in 1 area
• 3 yearly city-wide measures
• 4 year ‘One step at a time programme’ in schools has in-built assessment tool for whole cohort
• Annual questionnaire to parents and practitioners
• Training feedback
• Currently looking at Child development tool across the City and repeating language measures
Validating the evidence

• External consultants used to evaluate first 3 years of the programme - important to have an external view
• Y4-6 multi-agency evaluation with peer review from local university
• Currently planning to repeat language measures with University Support
Where now?

• SSO now part of the Early Years Team
• Training up a wider team to deliver elements of the training
• Joint lead role linked to SLT team leader role
• Funding significantly reduced and part of mainstream funds
• Child development tool
• Sustaining a focus on attachment and early language/communication development
Where next?

- Child development tool to continue to provide evidence of need and supporting implementation of revised EYFS
- Repeat baseline measures 2013
- Focus on early reading take up
- Cohort of level 5s
- Increase and review Level 4 ‘Communication friendly’ settings
- Targeted training (incl. foster carers, social care)
- Communication Champions in every locality
- Focus on Communication Ambassadors
- Language acceleration programme in nursery
- Reviewing whole Children’s Centre offer for SLCN
Current commissioning

- Stoke Speaks Out is now the ‘Early Language and Communication Strategy’ for Stoke on Trent
- This is part of the Local Authority’s structure under ‘Early Years’
- It is funded by the Local Authority but Health remain strong partners in every aspect
- The programme lead is seconded part time from Health to Education and holds a joint role as team leader for Community Paediatric SLT alongside this role
- This ensures seamless support from prevention through to early identification and early intervention
➢ Develop an evidence base
➢ Identify a Champion to lead this work
➢ Use the National data to support this agenda
➢ Share knowledge and practice
➢ Create a hub of good practice
➢ These issues will not go away on their own
➢ Focussing on early attachment and communication things can only get better
1. Expert phase:
   • Develop an evidence base of local need
   • Research the causes
   • Identify ways of addressing this need
   • Develop new ways of tackling the issues
   • Trial and perfect the methods

2. Enabling phase
   Training and supporting the infrastructure to develop skills to support all areas which affect communication development

3. Embedding phase
   Building in the capacity and expertise within agencies to continue to support and address the local need

4. Empowering phase
   Supporting processes for local practitioners to use their skills and link together
   Sharing the expertise beyond the City and ensuring the ongoing work is self-sustaining
Acting together....achieving change
Contact details

• Janet.cooper@stoke.gov.uk

• www.stokespeaksout.org.uk

• Ref: The Early Years Communication Handbook: Pub Practical Pre-school 2010
Gerry Conway
Commissioning Lead,
Early Years and Family Support,
Health and Social Care Board
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