Research in specific speech impairment

Yvonne Wren and colleagues ask, what questions should we be posing?

Table one: Themes of research ideas and ranking scores

<table>
<thead>
<tr>
<th>Theme</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumental tools</td>
<td>4</td>
</tr>
<tr>
<td>Co-morbidity</td>
<td>8</td>
</tr>
<tr>
<td>Bilingualism</td>
<td>9</td>
</tr>
<tr>
<td>Views of the child</td>
<td>13</td>
</tr>
<tr>
<td>Using research</td>
<td>19</td>
</tr>
<tr>
<td>Direct versus other provision</td>
<td>36</td>
</tr>
<tr>
<td>Prognostic indicators</td>
<td>41</td>
</tr>
<tr>
<td>Generalisation</td>
<td>43</td>
</tr>
<tr>
<td>Intelligibility/connected speech/generalisation</td>
<td>55</td>
</tr>
<tr>
<td>Classification and subgrouping</td>
<td>65</td>
</tr>
<tr>
<td>Service delivery</td>
<td></td>
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</tbody>
</table>

Post workshop activity

While the prioritisation activity suggested service delivery was the area which attendees felt needed research most, it was clear from comments made that this category included a number of sub-themes. A post-workshop meeting of the SSSI Network allowed a second review of the questions. This confirmed that the initial broad categorisations remained valid.

However, we added an additional theme of ‘Approaches to intervention’ and subdivided the ‘Service delivery’ into 13 subthemes based on the research questions generated in the workshop (figure one).

We shared this revised categorisation with workshop attendees by email and asked them to submit new priorities. To widen participation, we also invited members of the clinical excellence networks (CENs) in speech from London, the south west and the north east, and clinicians interested in speech sound disorders, contacted via the RCSLT links system in Northern Ireland, to indicate their preferred priorities for research. From a total of 31 responses, research questions which address ‘Approaches to intervention’ received the highest priority ranking with questions relating to ‘service delivery – dosage’ and ‘prognostic indicators’ also rating highly (figure one).

What’s next?
The primary aim of this workshop activity was to inform the research community about the key priorities for research in the field of specific speech impairment. The SSSI Network will use the individual clinicians’ questions, which led to the development of the themes, as indicators of need and drivers for future research programmes. Moreover, the attendees of the workshop, together with members of the CENs, are and will continue to be valued colleagues to the network, as we seek to involve practitioners in the process of research at all stages – from identifying research priorities and setting questions, through to data collection and analysis, and on to disseminating the results.

However, one notable finding from the workshop was the number of questions proposed for which some research evidence already exists. It wasn’t possible during the workshop to explore whether the questions were suggested because individuals were unaware of the relevant research or whether they regarded the evidence as weak (ie, either lacking or ambiguous).
With regard to research awareness, new initiatives such as the RCSLT journals collection and The Communication Trust’s ‘What Works?’ database are helping to enable SLTs to access the evidence base but time constraints and difficulties with reconciling conflicting sources of information can make it difficult for clinicians to integrate this knowledge into everyday practice. While the evidence base is expanding all the time, the evidence for many issues remains at a relatively low level with few systematic reviews and meta-analyses available. It is, therefore, not surprising that workshop attendees included these questions within their priorities for research.

**Patient and public involvement**

The workshop enabled the SSSI Network to engage with clinicians about their priorities for research. Whilst the network also includes specialist clinicians, there is a danger that with a small group of researchers, biases regarding research priorities can creep in. The workshop will help the network to ensure future research in the field focuses on the most important and relevant questions.

Nevertheless, clinician opinion alone is insufficient as a base to research activity.

Patient and public involvement in any NHS research (NIHR) is a must today and indeed, knowing what matters most to the parents and children we work with is crucial to our understanding of where research efforts should be targeted. As the range of people who commission our services increases, there is a need for funded research to answer clinical questions that have greatest relevance for all stakeholders. Researchers within the network will seek to better understand these clinical uncertainties in order to identify an overarching plan of research priorities in the field of developmental speech impairment that has maximum impact.

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**References & resources**


RCSLT Journals Collection. www.rcslt.org/members/research_centre/journals_library_service

The Communication Trust. ‘What Works’ database. www.thecommunicationtrust.org.uk/whatworks

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**Figure one:** Categorisation of research questions/ideas into themes and subthemes (numbers in brackets show the scores for the prioritisation task)

- **K Approaches to intervention (88)**
  - J Using research (19)
- **I Bilingualism (18)**
- **H Intelligibility/connected speech/generalisation (58)**
- **G Co-morbidity (8)**
- **F Prognostic indicators (78)**
- **E Views of the child (8)**
- **D Instrumental tools (1)**
- **A Classification and Subgrouping (30)**
  - B1 Age of child (59)
  - B2 Specialist support (19)
  - B3 Dosage (71)
  - B4 Group therapy (12)
  - B5 Assessment (28)
  - B6 Criteria for service provision (25)
  - B7 Outcomes (48)
  - B8 Prevention (22)
  - B9 General development (0)
  - B10 Phonics teaching (14)
  - B11 Duration of intervention (24)
  - B12 Speech in children with speech and language needs (5)
  - B13 Model for service provision (69)
  - B14 Direct versus other provision (67)
- **B Service delivery:**
  - B15 Direct versus other provision (67)