

Institution: City University London

Unit of Assessment: 3 Allied Health Professions, Dentistry, Nursing and Pharmacy

Title of case study: Supporting children and young people with language and communication needs

1. Summary of the impact

Language and communication disorders affect about 7% of children in countries where assessments are undertaken such as the UK and USA. Difficulties with language and communication severely limit children's social participation, school attainment and life chances, with repercussions for their families and wider society. Research at City University London has had major impacts on clinical and educational policy and practice and the support available to children of all ages with language and communication needs. For example:

- It has supported the planning, commissioning and delivery of services for language-impaired school children through incorporation in the Royal College of Speech and Language Therapists (RCSLT) Resource Manual for Speech, Language and Communication Needs and elsewhere.
- It has been influential in supporting Government to provide training to school staff in language therapy, resulting in enhanced educational attainment and improved behaviour.
- It has led to improved support for children and their families, including the development with the National Deaf Children's Society (NDCS) of a new Family Sign Language Curriculum (FSLC).

It has led to a validated tool for school-based professionals working with deaf children to identify, monitor and evaluate the needs of those with poor language skills.

2. Underpinning research

Young children who do not develop language as expected are a major concern for their parents and for clinical services to which they are referred. Problems that persist vary widely: some children struggle with words and sentences, some have social communication impairments characteristic of children with autistic spectrum disorders (ASD) and some have both. Early identification in deaf children is even more of a challenge. Deaf children are known to be at risk of language delay. More severe difficulties with language are all too readily attributed to their hearing impairment, overlooking the possibility that they may also have a language disorder. Secondary school presents children with new academic and social demands posing unique challenges for those with weak or impaired language and communication skills.

Research in Language and Communication Science has been a major strength at City University London for over 25 years. The team of academic staff who led the research underpinning the impacts presented here, with the support of research staff, comprises Chiat (at City 1983–2000 and since 2006) and Roy (at City since 1983), focusing on pre-school children; Herman (at City since 1985), Morgan (at City 1998) and Woll (at City 1995–2005), focusing on deaf children; and Joffe (at City since 2001) and Botting (at City since 2005, in collaboration with Conti-Ramsden at the University of Manchester, UK), focusing on secondary school children.

Chiat and Roy's original research (1996 to date)^{1,5} has given rise to two new assessments of early skills, the Early Sociocognitive Battery (ESB) and Preschool Repetition Test (PSRep), which help to address the challenges of early diagnosis. In a follow-up study of children referred to clinical services at two to three years of age, Chiat and Roy found that:

- The ESB is a strong indicator of longer term problems with social communication and risk of ASD.
- The PSRep reveals problems with speech output whose impact on language is relatively short term unless accompanied by problems with language comprehension.

This evidence is crucial for clinicians, demonstrating how the ESB and PSRep help to identify children's specific needs at the earliest stage of clinical referral and decision-making.

Pioneering research by Herman, Morgan and Woll (1993 to date)^{2,6} has laid the foundations for diagnosing language disorders in the deaf population. Their work has established typical ages and stages of development in British Sign Language (BSL) and produced theoretically and empirically motivated assessments of early vocabulary and school-age language in BSL and normative data on these assessments. The team have used their assessments to identify deaf children with

Impact case study (REF3b)



language impairments and characterise the heterogeneous nature of the deficits and estimated prevalence, which appears to be similar to that found among hearing children. Their cumulative research has shed further light on language acquisition in the deaf population.

The scale and repercussions of problems in secondary schools have gained recognition from the team's work. Joffe's 'Enhancing Language and Communication in Secondary Schools' (ELCISS) project (2005 to date)^{3,7} and Botting's collaborative research^{4,8} detailing the profiles, pathways and needs of language-impaired children through the school years have exposed often hidden and unsupported language and communication problems in secondary schools. Both projects have demonstrated links with social, emotional and behavioural difficulties. Materials and training appropriate to the teenage years were needed. Joffe's two new intervention programmes targeting narrative skills and vocabulary, developed and evaluated in a randomised controlled trial, have filled an important gap. Together, these projects have provided a better understanding of the needs of children during the secondary school years at all levels from school to Government and have improved support for vulnerable teenagers.

3. References to the research

Our research has been published in top clinical academic journals that apply a rigorous peer review process, for example:

- Chiat, S., & Roy, P. (2008). Early phonological and sociocognitive skills as predictors of later language and social communication outcomes. *Journal of Child Psychology and Psychiatry*, 49, 635-645. 10.1111/j.1469-7610.2008.01881.x Selected for inclusion in Special Virtual Issue of *Journal of Child Psychology and Psychiatry*: Speech, Language, Communication and Adolescent Mental Health, edited by D. V. M. Bishop; http://tinyurl.com/jcpp-sl.
- 2. Mason, K. *et al.* (2010). Identifying specific language impairment in deaf children acquiring British Sign Language: implications for theory and practice. *British Journal of Developmental Psychology*, 28, 33–49 10.1348/026151009X484190
- 3. Joffe, V., & Black, E. (2012). Social, Emotional, and Behavioral Functioning of Secondary School Students With Low Academic and Language Performance: Perspectives From Students, Teachers, and Parents. *Language, Speech and Hearing Services in Schools*, 43, 461–473 10.1044/0161-1461(2012/11-0088)
- 4. Botting, N. & Conti-Ramsden, G. (2008). The role of language, social cognition, and social skill in the functional social outcomes of young adolescents with and without a history of SLI. *British Journal of Developmental Psychology*, 26, 281–300 10.1348/026151007X235891

The research has been supported by grants from the leading funding bodies in the field (three from the ESRC, four from the Nuffield Foundation), and voluntary sector and local authority funds, for example:

- 5. Chiat (Primary Investigator [PI]) & Roy. Very early processing skills as predictors of later language disorders. ESRC (R000-23-0019), 2002–2006, £174,221.
- 6. Herman (PI) & Woll (then at City). £35,000 from NHS Research and Development Fund for development of materials to assess BSL Development, 1995.
- Joffe (PI). Enhancing language and communication in secondary school children with specific language impairment through two intervention programmes: narrative and vocabulary enrichment. The Nuffield Foundation, 2006–2009, £321,085; Redbridge Local Authority, 2010– 2013, £95,000; Barking and Dagenham Local Authority, 2010–2013, £75,000.
- 8. Botting (PI). Specific language impairment (SLI): cognitive, narrative and linguistic development. ESRC Postdoctoral Fellowship (RES-000-27-003), 2003–2006, £149,000.

4. Details of the impact

Concerns about developmental language and communication problems and repercussions for children's education, well-being and future employability have received increasing attention since the Government commissioned the Rt. Hon. John Bercow MP to review services for children with speech, language and communication needs (SLCN). Bercow's 2008 report and subsequent reports of the Government-funded Better Communication Research Project and the All Party Parliamentary Group on Speech and Language Difficulties (established in response to the Bercow review), have drawn attention to issues at the heart of our research: the importance of early identification particularly in at-risk groups and the scale and impact of SLCN in secondary schools.



Government, professional and voluntary sector bodies have drawn on our research for **policy documents and practice guidelines**. Botting's collaborative research features in the RCSLT Resource Manual for Commissioning and Planning Services for SLCN (published 2009, still current) and in the online SLCN commissioning tools (published 2011, still current) of the Communication Trust (a coalition of nearly 50 voluntary and community SLCN organisations set up in 2007 by Afasic, British Telecom, the Council for Disabled Children, and I CAN, the lead voluntary sector organisation in children's communication). Both resources support the planning, commissioning and delivery of services in line with Government and local priorities to deliver the best return for a given investment over time. The research also features in a 2008 I CAN report examining issues for children with SLCN in primary schools and forms part of I CAN's online resources for practitioners¹⁰.

Outcomes of Joffe's research have been influential in Government promotion of support for language and communication in secondary schools. In a speech at the House of Commons launch of the Children's Communication Coalition (an alliance of national organisations, experts and service users representing children in contact with youth justice services), MP and Communication Ambassador Adrian Bailey 'praised the work of SLTs in this field, and paid particular reference to City's Enhancing Language and Communication in Secondary Schools (ELCISS) research programme'¹¹. He went on to promote the programme in the House of Commons: 'I was privileged to see at first hand the work of the ELCISS-enhancing language and communication in secondary schools project in Dagenham schools, where speech and language therapy is provided and training given to school staff, resulting in enhanced educational attainment and improved behaviour. Will my Right Hon. Friend assure me that the outcome of that project will be examined, so that it can be rolled out in other areas?'¹².

Joffe's work also features in the Government-funded Better Communication Research Programme reports published by the Department of Education in 2012 as part of its high-quality evidence base to inform policy development and delivery. Through her research and dissemination, Joffe has attained national recognition as an expert adviser: she was invited to address a meeting of the All Party Parliamentary Group on SLCN in 2009; has served on the Advisory Board of the Communication Trust since its inception; and has played key roles in the professional body (RCSLT), as Adviser and Chair of the national clinical excellence network for SLCN issues in older children and young people since 2009, and as research and development councillor and trustee since September 2011.

As well as influencing policy, our evidence-based guidelines, assessments and intervention materials have led to **improved support for children and their families**. Herman, Morgan and Woll worked with the NDCS to develop and evaluate a new resource for families, the FSLC¹³. Morgan has been involved in training deaf and hearing professionals to deliver this curriculum to parents throughout the UK, and as a continuing professional development course at City, running training sessions for 20–25 participants one day per month over the last three years. Training is oversubscribed, with bookings up to 2015. The direct involvement of researchers in the training has maximised the translation of the research findings for stakeholders, as has the delivery of the training in BSL rather than through interpreters. This was possible since the researchers are bilingual and many of the NDCS trainers were deaf. In 2011 Botting, Herman, Woll and Morgan carried out an evaluation of the effects of the FSLC on deaf children's language development, showing significant gains for children whose parents were on the course versus those with parents who did not opt in. Our deafness research has thus influenced the content and provision of a training package that has led to demonstrable increases in the skills of parents with deaf children and is highly sought after and highly valued.

As the only norm-referenced and published tests of any sign language in the world, Herman's two language assessments in BSL^{14,15} have enabled a breakthrough in services for deaf children and their families. For the first time, school-based professionals working with deaf children have a validated tool to identify those with poor language skills, monitor their language development and evaluate outcomes of interventions. The uniqueness of these BSL tests is evidenced by the translation of both into other sign languages (American, German, Spanish and Danish), benefiting professionals working in these sign language communities and the children and families they support. Likewise, Chiat and Roy's assessments are the first to enable a rigorous evaluation of early processing skills in clinically referred two- to three-year-olds. These assessments (one

Impact case study (REF3b)



published by Pearson Assessment¹⁶, the other available on our research website¹⁷) grew out of a close collaboration with clinicians, combining informal clinical insights with research evidence to create precise and informative clinical measures. These help professionals to identify children who need support, the nature of their problems and the type of support they need. The impact of the assessments is demonstrated by requests for presentations and training sessions in the UK and beyond (including London, Dublin, North Wales, Warsaw and Copenhagen) and their increasing use in research evaluating intervention, which is essential for evidence-based practice.

Joffe's ELCISS intervention programmes¹⁸ for secondary school children have filled a key gap in resources to support young people struggling with language and communication and promote the language skills needed for school and future employment. Information on ELCISS is available on a dedicated website¹⁹, which has received over 16,500 visits from, for example, the UK, Europe, the Philippines, the USA, Australia, India and Pakistan. The ELCISS programmes are used across the UK: 1,330 copies have been sold to schools and therapy departments since their publication in 2011. The impact of these programmes is evidenced by many reports and comments from clinical managers, local authorities, head teachers, special education officers and the young people who have benefited from them. For example, a Group Manager for Inclusion and Special Educational Needs in Barking and Dagenham says, 'The Local Authority has been involved in the above, very innovative, project [ELCISS], which is currently in 90% of our schools. Feedback from the schools, parents and young people has been extremely encouraging. Parents have seen positive progress. Staff have reported that training and materials are of high quality and have enabled them to be effective in supporting individual pupils through developing their skills and understanding of speech, language and communication needs. The Local Authority has valued the project because of its high engagement of schools, the positive progress of children and young people with communication needs and the promotion of inclusive practice. The project has contributed to The Director of Children's Services' focus on the Empowered Voice. 20 Comments from 12-year-olds typify feedback from participants: 'I really liked the story telling best, it helps me with my talking,' 'I used to feel nervous but now I can express myself much more.'

Our research has had significant impacts on support for children with language and communication needs, demonstrated by the extensive use of our evidence in high-profile policy documents and statements; the wide-reaching take-up of our research-based assessments and intervention programmes by leading international publishers in the field; requests for training sessions and use of these materials across the UK and internationally; and positive feedback from professionals in the voluntary, clinical and educational sectors. Through these impacts, our research has benefited professionals, children and their families.

5. Sources to corroborate the impact

- 9. RCSLT Resource Manual for Commissioning and Planning Services for SLCN (2009). http://www.rcslt.org/speech and language therapy/commissioning/aac plus intro
- Speech, Language and Communication Needs and Primary School-aged Children (2008). www.ican.org.uk/en/What_is_the_issue/I%20CAN%20Evidence.aspx.
- 11. RCSLT Bulletin, February 2010, issue 694, p. 7.
- 12. www.publications.parliament.uk/pa/cm200910/cmhansrd/cm100125/debtext/100125-0002.htm
- 13. http://www.familysignlanguage.org.uk/.
- 14. http://www.ncb.org.uk/early-support/resources/developmental-journals/monitoring-protocol-for-deaf-babies-and-children/.
- 15. Herman, R., Holmes, S., & Woll, B. (1999). Assessing British Sign Language Development: Receptive Skills Test. Coleford: Forest Books.
- 16. Seeff-Gabriel, B., Chiat, S., & Roy, P. (2008). *The Early Repetition Battery*. London: Pearson Assessment.
- 17. www.city.ac.uk/health/research/research-areas/lcs/veps-very-early-processing-skills/.
- 18. Joffe, V. (2011). *Narrative Intervention Programme and Vocabulary Enrichment Intervention Programme*. Milton Keynes: Speechmark.
- 19. www.elciss.com/.
- 20. Letter dated 17 October 2008 from Group Manager, Inclusion Special Education Needs, School Improvement Service, London Borough of Barking & Dagenham.