Development of a clinical tool: The Early Sociocognitive Battery (ESB) in research and practice

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Learning outcomes

• What is the ESB and why is it relevant?

• The journey from research to clinical practice: a shared enterprise.

• Next steps
We use the term ‘sociocognitive skills’ to mean very basic skills in engaging with other people and inferring intentions and meanings behind their actions and words.

Early sociocognitive skills will affect early language development and predict later difficulties with social communication.

- Crucial for early language development
Sociocognitive skills

These skills are:

- Early developing – emerge at 8-15 months
- Associated with language development
- Impaired in young children with ASD

(Tomasello, 1995; Charman et al., 2005; Toth, Munson, Meltzoff & Dawson 2006).
What is the ESB?

• The ESB is a new assessment of social cognition in pre-school children developed by Professors Penny Roy and Shula Chiat.

• Initially developed as part of the Very Early Processing Skills (VEPS) project.
Research Background: Very Early Processing Skills

Participants

- Referred to clinical services with concerns about language (not speech) at 2-3
- English first language
- No identified hearing loss or developmental disorders including ASD
- Seen at age 4-5 years and 9-11 years
Key findings: the evidence base

- The ESB was a strong predictor of social communication problems at 9-11 years.
- It was equally predictive of T3 language as T1 language.
- It was the best predictor of children receiving SLT in their last year of primary school.
- Children with the lowest ESB scores were the most vulnerable: all had problems at outcome, and the majority had a diagnosis of ASD (see Chiat & Roy, 2008, 2013; Roy & Chiat, 2014; and http://www.city.ac.uk/health/research/centre-for-language-communication-sciences-research/veps-very-early-processing-skills for full details).
ESB Assessment:

• Comprised of three subtests:
  - Social responsiveness
  - Joint attention
  - Symbolic comprehension
ESB: Social responsiveness

Measures children’s responsiveness to expression of feelings by an adult
(based on Sigman, Kasari, Kwon & Yirmiya 1992)
ESB: Joint attention

Measures gaze alternation, gaze following and point following
(Carpenter, Nagell & Tomasello, 1998)
ESB: Symbolic understanding

Measures children’s understanding of gestures
ESB: Symbolic understanding

Measures children’s understanding of miniatures
ESB: Symbolic understanding

Measures children’s understanding of substitute objects which are used to stand for a target object.
What does the ESB tell us?

• ESB can pick up social communication difficulties that are likely to be long term.

• Signposts priorities for intervention

• Helpful tool for discussion with parents and other professionals
Potential of the ESB

• High compliance rate in very young children

• Quick to administer

• Mainly nonverbal, not dependent on spoken language level/ use of English - suitable for children with EAL

• Informative about nature of children’s problems at referral and in the longer term
Clinical implications

Case study 1:
- 2:6 year old girl referred to community SLT with concerns regarding delayed language.
- Initial SLT assessment highlighted concerns with social communication including poor response to joint attention, flat affect, poor eye contact.
- Subsequently referred to child development service for ASD assessment.
- ESB used as part of a second opinion SF did not score low on ESB – no concerns regarding sociocognitive skills.
- Implications for therapy provision, parental anxiety and waiting lists.
Clinical implications

Case study 2:

- HP, 2.1 year old boy referred to SLT with queries around social communication, language and play. Non verbal with history of glue ear and intermittent hearing loss.
- Seen by paediatrician, slight delay to non-verbal skills.
- SLT used ESB as part of assessment to inform therapy and management.
- HP showed difficulties across all areas of ESB
A shared enterprise: between researchers and SLT’s

**RESEARCH TOOL**

- Trialling of ESB in clinical practice
- Positive feedback from SLT’s
- Collaboration has enabled development of ESB
- SLT’s currently involved in data collection and wider dissemination and training

**CLINICAL ASSESSMENT**
Next steps: from research tool to clinical assessment

- Aim to make ESB available to clinics, nurseries and schools

- Progress to date
  - Marketable product including training video
  - Normative data
  - Training programme developed and available as a City one day course (next bookable session: January 2018).

- Ongoing
  - Submission for publication
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