


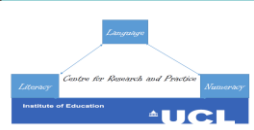
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Assessing Language Skills in Young Children: Identifying the issues for professionals when assessing language skills.

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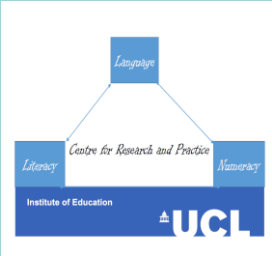


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Purpose

- Raise key issues which practitioners could consider when they examine young children's language skills



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Plan of presentation

1. Language and literacy
2. Language system
3. Why assess language skills
4. Screening v. assessment
5. Ways forward
6. Key practitioner messages

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Language and Literacy



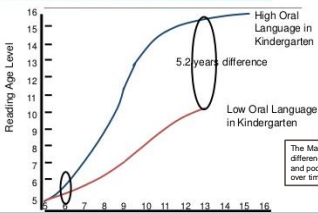
- Language underpins literacy
 - Word decoding
 - Reading comprehension
 - Spelling
 - Text production
- Literacy supports the development of oral language
 - Word
 - Sentence
 - Text level
 - Genres

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The effects of poor language

on Reading Comprehension



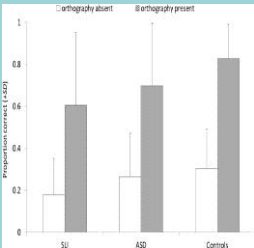
The Matthew Effect: performance differences between good and poor readers may increase over time (Stanovich, 1986)

Hirsch, 1996

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Exposure to orthography benefits vocabulary acquisition



Legend: □ orthography absent, ■ orthography present

Group	orthography absent (%)	orthography present (%)
SLD	~0.18	~0.62
ASD	~0.28	~0.72
Controls	~0.32	~0.82

For typically developing children

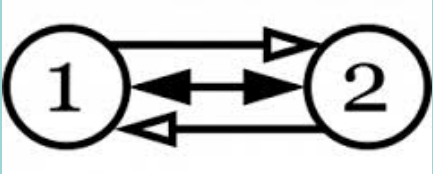
& those with developmental challenges

Stothard, J., Dockrell, J., Patel, N., Charman, T., & Lindsay, G. (2015). Do children with specific language impairment and autism spectrum disorders benefit from the processing of orthography when learning new spoken words? *Journal of Experimental Child Psychology*, 133-141. doi:10.1016/j.jecp.2015.01.016

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Bidirectional relationship



Mutually supportive or mutually limiting?

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KEY QUESTIONS

Which aspects of the language system for

1. Which aspects of reading?
2. Which aspects of writing?
3. Which languages/orthographies?

Today's question which form of assessment?

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The language system -1

- Essential to understand
 - To identify strengths and needs
 - Distinguish between structural and pragmatic aspects of language
- Both develop through an interaction between
 - The intrinsic capacities of the child and the context in which he is developing (Thomas, 2010).
 - Also complex interplays between the subcomponents of the language system (Dixon & Marchman, 2007; Tomblin & Zhang, 2006).
- Draw on other cognitive skills to support language learning e.g. memory

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The language system -2



Structural aspects of the system

- Lexicon (vocabulary),
- Syntax (the rules for combining words into phrases and sentences),
- Morphology (the rules for constructing larger words out of smaller units of meaning),
- Phonology (the sounds that make up words and the rules that combine sounds)

Pragmatics (the rules of social communication).

SO – when we think about language assessment we need to think about which skills at which point in development and in relation to which literacy dimensions

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Language delays and difficulties (1)



- Occur for a range of (not mutually exclusive reason)
 - Social disadvantage
 - Long-standing acknowledgement that poor language skills are associated with social disadvantage
 - Prevalence rates of language delays in disadvantaged populations are high, but rates of identification are often low (King et al., 2005).
 - Moreover, the poorest outcomes are disproportionately associated with the most socially and economically disadvantaged (Washbrook & Waldfogel, 2010)
 - Different dialects and bilingualism
 - Growing concern that children from ethnic minority groups are over-represented in the caseloads of speech and language therapists and are over-identified generally as having speech language and communication needs (Dockrell, Lindsay, Roulstone & Law, 2014).
 - Awareness that non-standard varieties of English differ from the Standard English that language assessments are designed to test.
 - Children should not be viewed as having a speech or language disorder because they speak a variety of English other than the standard dialect

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Language delays and difficulties (2)



- Hearing impairment
 - Children who experience deafness, and even mild or unilateral hearing impairment, typically experience delays in receptive and expressive language development.
- Unexplained difficulties to the language system
 - Large group of children who experience language delays for no obvious reason.
 - Discrepancy criteria (cognitive referencing) used in the past (language skills and non-verbal ability)
 - concerns about measurement and the determination of the appropriate formula for the discrepancy (Aram, Morris & Hatt, 1982; Plante, 1998).
 - Language problems may also impact on children's performance on non-verbal tasks, thereby affecting assessments of non-verbal ability.
 - DSM-5 does not include a discrepancy criterion for language disorders.
 - No differences in response to oral language intervention have been found for children with and without discrepancies between their verbal and non-verbal performance (Bowyer-Crane et al., 2011; Friel-Patti, 1999).

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Why assess children's language skills?

- Part of the curriculum to monitor progress
 - How did you assess speaking and listening
- Screening
- Pre-intervention and post-intervention measures to evaluate the impact of oral language interventions e.g. Talk of the Town.
- Identify potential targets to support attainment and access to the curriculum

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Test properties

- **Reliable**
 - If you give it twice would you get the same result
- **Valid**
 - Measures what it is suppose to measure – name of the test won't tell you enough
- **Fit for purpose**
 - Time, child and location constraints
- **Standardized on an appropriate population**
 - Number of children
 - Social context
 - Recent
 - Standardization sample representative
- **Bus story is a test of narrative recall**

 - 3;6 and 7.
 - assessor tells a story about a naughty bus and the child is asked to repeat it
 - No restrictions
 - Scoring challenges
 - Standardization 513 children south east of England
 - Reliability N = 13
 - Validity on 27 children

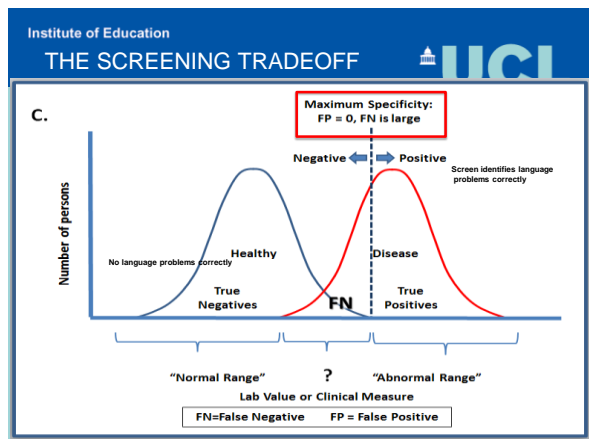
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Screening versus assessment

<p>SCREENING</p> <p>Process to identify whether or not a child is functioning at an expected level</p> <ul style="list-style-type: none"> – Sensitivity accurately identifies children as cases who have language problems – Specificity measure does not identify as cases children who do not have a language problem. <p>Trade off between the two, depending on the purpose of the screening.</p>	<p>ASSESSMENT</p> <ul style="list-style-type: none"> • Characterise nature and extent of the problem <ul style="list-style-type: none"> – What – How severe • Guided by <ul style="list-style-type: none"> – Initial evaluation of the child – Theoretical orientation – Developmental level – Practical constraints
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Screening

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- Many tests do not meet these basic criteria for screening purposes.
- Studies have consistently raised concerns about the ability of screening tests to detect children with **concurrent language problems**, that is problems at the time of testing (de Koning et al., 2004; Laing, Law, Levin, & Logan, 2002).
- Screening measures to **predict the likelihood** of a child experiencing language difficulties in the future is fraught with difficulties.
 - Studies that have attempted this have been unsuccessful in identifying language factors which predict future performance (Law, Rush, Anandan, Cox, & Wood, 2012; Nelson, Nygren, Walker, & Panoscha, 2006a; Wilson, McGaughie, Thompson, & MacConnachie, 2013).
- As Snowling et al (2012) concluded, *regular monitoring is preferable because one-off screenings of aspects of development, including language and reading, have limited power to predict later performance because children's developmental trajectories vary*

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Assessment 1: Standardised tests of oral language

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- Many child language tests are commercially available
 - Oral language composite scores (omnibus measures)
 - Overall standard score – receptive and expressive
 - Target specific components of the language system
 - Phonology, vocabulary, grammar
 - Can be either receptive or expressive
- Often but not always restricted in use to psychologists and speech and language therapists
- Not all standardised in the UK
- You need to think about what you want to know and whether the assessment is ‘fit for purpose’

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Assessment 2: Composite Language Measures

- CELF instruments most commonly used measures of assessing language internationally
 - focus of a number of psychometric studies (Eadie et al., 2014; Spaulding et al., 2006).
 - Overall acceptable levels of specificity and sensitivity data (Spaulding et al.'s, 2006)
 - Recent Australian research has indicated that the CELF-P2 does not demonstrate adequate levels of sensitivity (64%) to identify children with language disorders at age 5 (Eadie et al., 2014).
 - Test-retest measures are good.
 - But reliability of subscales often questionable, in particular Sentence Structure in the CELF-P2 (Eigenbrood, 2007).
- Particular importance when wanting to compare across language and other skills to have tests standardised on the sample population and following same test construction principles
 - Wechsler Individual Achievement Test (3rd edition: WIAT-III) includes both a listening comprehension and oral expression scale.
 - The WIAT-III subtests have strong psychometric properties and there is evidence to support the use of subtests with special populations (Miller, 2010).
 - The WIAT-III has the added advantage of comparing across composite scores such as oral language and reading comprehension.

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Assessment 3: Single elements of the language system

- Single measures of language
 - Inadequate for determining whether a child is developing typically or is experiencing a delay at any age, and they become less reliable the younger the child (Thai & Katch, 1996).
 - When the measures are reliable and valid when combined with other forms of assessment, provide a profile of a child's strengths and needs.
- Vocabulary BPVSI
 - Concurrent validity with other language measures is not high
 - Vocabulary scores cannot be used as though they were indicators of general language ability (Gray, Plante, Vance, & Henrichsen, 1999; Spaulding, Hosmer, & Schechtman, 2013)
 - Some children with language disorders vocabulary scores can be well within the norm, despite wider problems with receptive and expressive language (Fiberg, 2010; Spaulding et al., 2013).
 - Should not be used as the sole measure to identify children with language difficulties (Longo, 2005).

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Assessment 3: Single elements of the language system

- Sentence repetition (sentence imitation and sentence recall)
 - Long history in psycholinguistic research (Rodd & Braine, 1971) and language assessment (Schwartz & Daly, 1978).
 - Assumption is that children will only be able to repeat structures that are part of their language system.
 - Many studies have shown that sentence repetition is significantly less accurate in children with developmental language disorders (see Conti-Ramsden, Botting & Faraighe, 2001; Riches, Loucas, Baird, Charman & Simonoff, 2010).
 - Children who are not native speakers of the test language (Komell & Marshall, 2013).
- Conventional language tests elicit production and test comprehension using artificial tasks. By contrast, narrative tasks provide a more naturalistic setting to examine children's language skills e.g Bus story
 - Much harder to assess
 - Get reliable and valid results

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Assessment 4: Dynamic assessment




- Static tests only give a snapshot in time and do not reveal why children perform poorly.
 - might perform poorly on a test for a variety of reasons, and these differences could potentially be important for intervention.
- Interest in an interactive approach to conducting assessments that focuses on the child's ability to respond to intervention, i.e. his capacity for change or "modifiability".
 - "dynamic assessment", and unlike traditional testing, it employs a test, teach, retest procedure to assess the child's learning processes.
 - Dynamic assessment is considered more culturally fair to those from different linguistic or cultural backgrounds (Lutz & Peña, 2009)
 - More sensitive for measuring change in language over time (Hasson & Botting, 2010).
 - Distinguish between children whose language is delayed, but whose capacity for learning language is not impaired whether monolingual or bilingual (Hasson et al., 2013; Peña, Resendiz & Gillam, 2007).
 - [Dynamic Assessment](#)
- Links well with RTI models
- Can be fine tuned to language in the classroom

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Assessment 5: Checklists language




- Checklists of early language skills, to be completed by parents and professionals, exist.
 - Many of these have not been validated psychometrically in terms of reliability and validity (see for example Mok & Lam, 2011).
 - The best researched are the Communication Development Inventories (see Law & Roy, 2008 for a review).
- Using parental report data can be helpful to gain a broader perspective of a child's language skills and when children are difficult to assess.
 - Checklists are inexpensive to use, and additional training is not required (Hall & Segarra, 2007; Nordahl-Hansen, Kasle, & Ulvund, 2013).
 - Differences between respondents, such as their background, may affect how they report their children's language skills, care needs to be taken in interpreting the results (Pan, Rowe, Spier, & Tamis-LeMonda, 2004).
 - Importantly, given the variability in language trajectories, checklists are not reliable in identifying children who **will go on** to experience language delays (Law & Roy, 2008).

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Key Practitioner message




- Language is a complex system to assess, comprising a range of subsystems
- Regular monitoring of language is preferable; one-off screenings have limited power to predict later performance because children's developmental trajectories vary
- Composite language measures provide more reliable and valid assessments of children's language skills
- Many assessment tools are not suitable for the range of preschool children who experience language delays and problems
- Dynamic assessment is more culturally fair to those from different linguistic or cultural backgrounds and may be more sensitive for measuring change in language over time

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Remember



- If a child can't say it and understand it orally
 - Why would you expect them to be able to write it or understand what they read
- There are an increasing number of effective interventions that support oral language skills
- You can make your classroom/group work a communication supporting environment but its tough!

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Thank you for your attention

- Collaborator Dr. Chloe Marshall



- For further information
 - [Measurement Issues: Assessing language skills in young children](#)

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