



## INTRODUCTION

### Communicative Development Inventories (Fenson et al, 2007) are ideal tools for:

- Clinical assessment especially where clinicians are not qualified SALTs
- Research where lab assessment of vocabulary size/composition is impractical
- Large scale research
- Parent report accesses communication skills otherwise hard to assess directly (e.g. some types of vocabulary, where children are reluctant to interact with a stranger, Fenson et al (2007))

### CDIs in English so far:

- US English standardised
- UK English non-standardised
- Infant (Hamilton et al., 2000), toddler and 3/4y versions
- Also many, many versions for specific labs
- No standardised UK versions

### UK health professionals using US norms:

#### Why is this a problem?

→ UK parents report lower vocabulary sizes than US parents

→ Inappropriate use of US norms for UK children

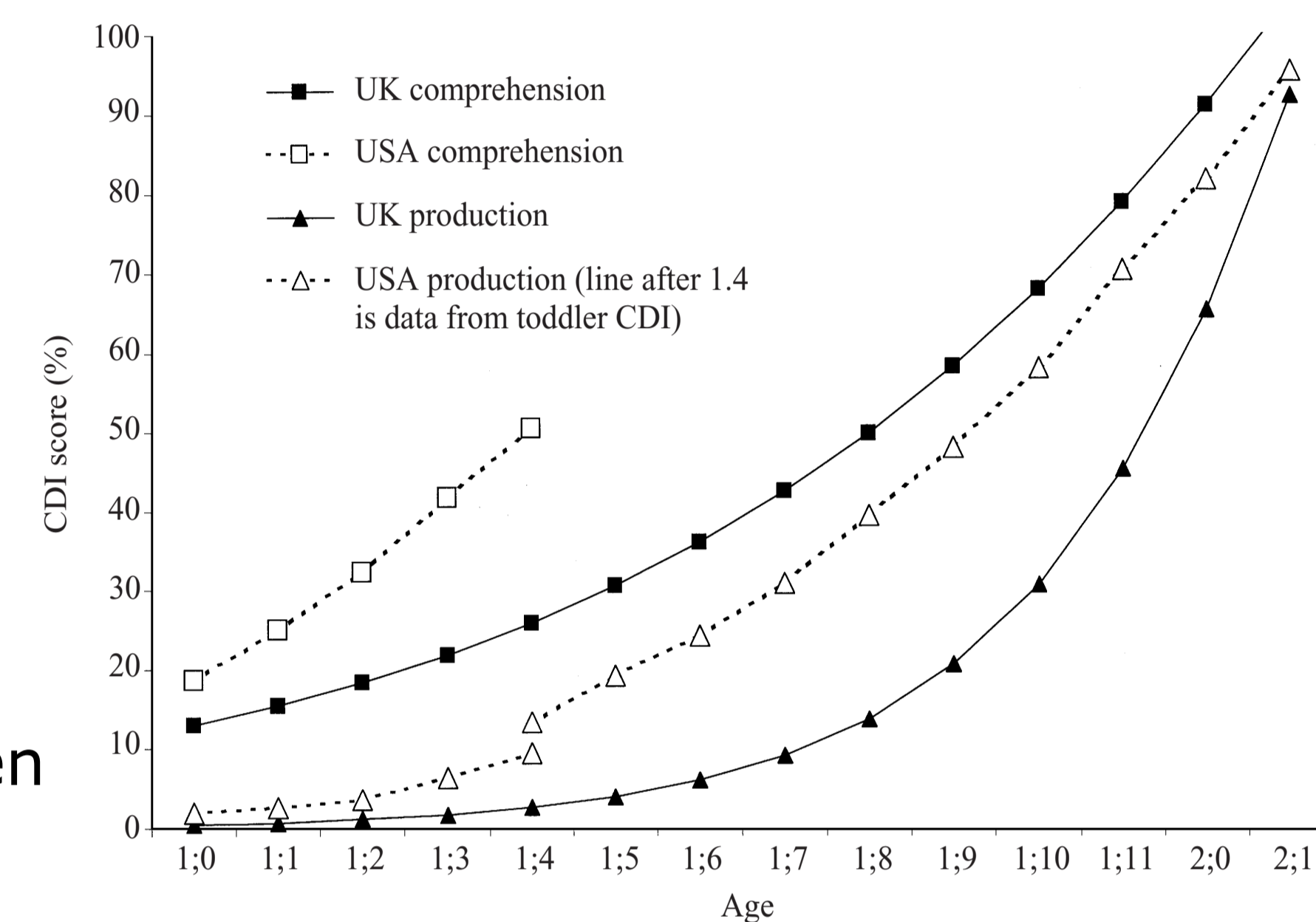


Fig. 8. Median comprehension and production vocabulary in the USA and the UK.<sup>a</sup>

<sup>a</sup>US data is redrawn from Fenson et al. (1994), Figures 2, 3 and 4. Data for the American infants production score after age 1;4 is derived from the MacArthur 'toddler CDI'.

### New UK-CDI

(Alcock, Rowland, Meints, Christopher, Just & Brelsford, in prep.)

- Long and Short CDI – Words and Gestures – 8-18 months
- Score sheets
- Manual with norms
- Stratified sample by region and SES as well as other factors
- Online database accessible for all

## PILOTING

1. Authorisation from CDI board
2. Pilot construction
  - a. Used data from other UK Babylabs
  - b. Wide variety of CDIs in circulation
  - c. Words where comprehension correlated significantly with age were included
4. Two rounds of piloting
  - a. Included items if correlated with age and rest of scale
  - b. Also if known better by low SES group (round 2) and some v high frequency or specialist words
5. Also created demographic/medical questionnaire, the Family Questionnaire
  - a. Piloted and focus groups with special groups e.g. young mums
  - b. Wording adjusted several times and some groupings e.g. groups of age more acceptable to parents than raw age.

## NORMING

### Participants

- Recruitment
  - **successful methods:** via other babylabs (81% participation); through targeted ads on social media (56% participation, using commercial algorithms)
  - **less successful methods** included via Health Visitors/NHS (10%); in person: baby groups/Children's Centres (34%)
- Exclusion: more than 10 hours a week of another language
- No exclusion for disability: instead sample balanced to represent UK

### Procedure

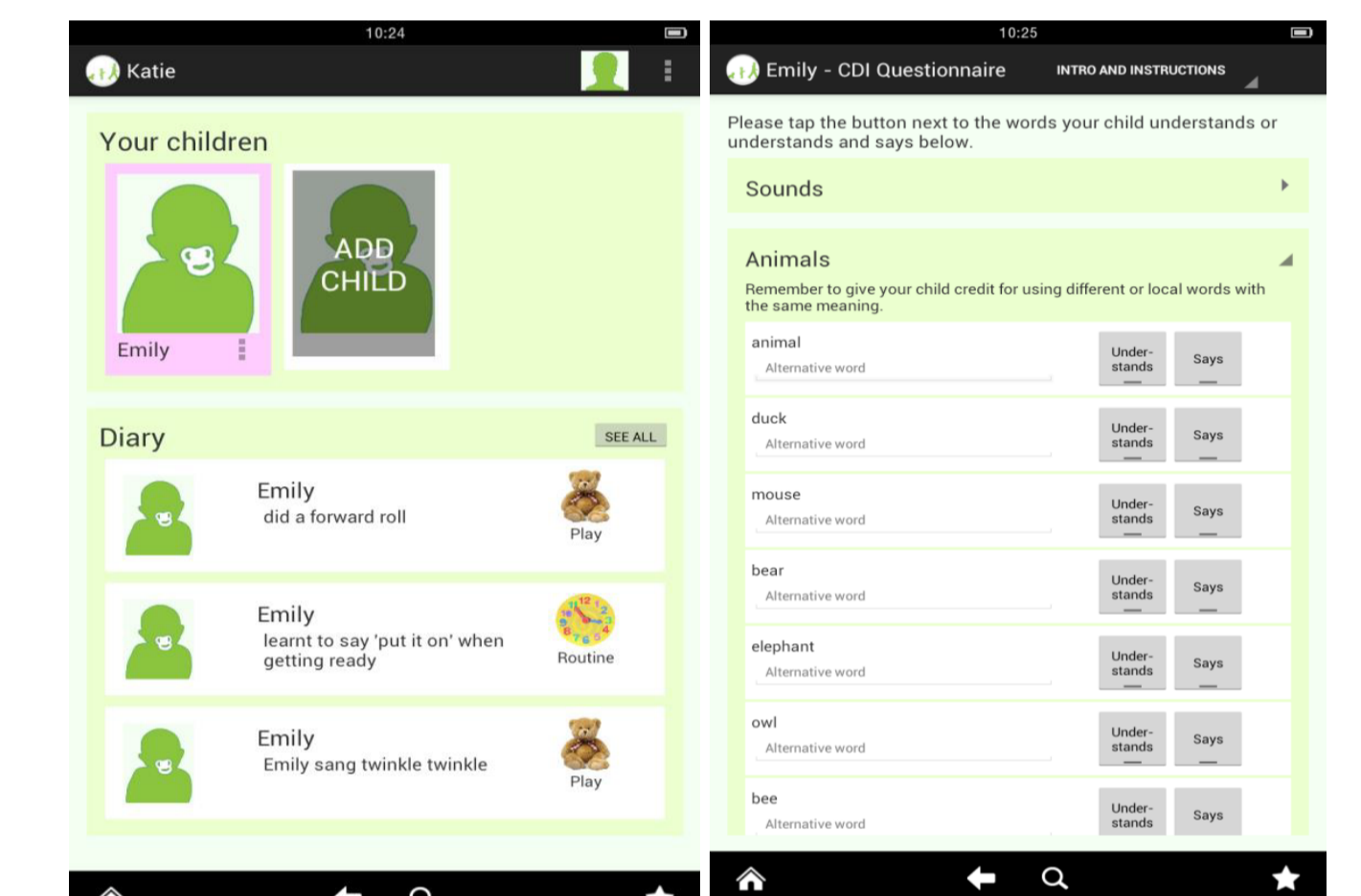
- Sign up via flyer/web
- Receive paper or online questionnaire
- If we have postal address:
  - Memento (laminated) ->
  - And/or £5 supermarket voucher for low income families
- Online methods
- Survey Monkey, now Qualtrics
- Invite by email or set up participation link
- Babytalk app (in preparation)

### Validation

- Inter-form, paper vs online
- Test- re-test
- CDI vs lab testing – PLS-5, object selection, gesture task

### Short form

- 91 words and 29 gestures that range in age of acquisition and correlate well with age



## RESULTS AND DISCUSSION

### Stratification

- Stratified N = 1218
- Regions, gender, age balanced as far as possible
- Reliability (internal/inter-scale)
- Validity (inter-form)
  - > 0.9 correlation between online and paper

### We have a new tool! New UK-CDI:

- Highly internally valid
- Good correlation with age
- Length (moderately) acceptable to parents
- Online completion helps
- Recruitment via Social Media company ads very productive

### References:

- Alcock, K.J., Meints, K., Rowland, C. F., Christopher, A. Just, J. & Brelsford, V. (in prep). The UK Communicative Development Inventory: Words and Gestures.
- Hamilton, A., Plunkett, K., & Schafer, G. (2000). Infant vocabulary development assessed with a British communicative development inventory. *Journal of Child Language*, 27(3), 689-705.
- Fenson, L., Marchman, V. A., Thal, D., Dale, P. S., Reznick, J. S., & Bates, E. (2007). *MacArthur-Bates Communicative Development Inventories (CDIs), Second Edition (Vol. 59)*. Baltimore, MD: Brookes.

Variable	UK	Our sample
Ethnicity (Home language English only)	13.7% non-white	8.6% non-white
Education	42.6% degree or higher	52.2% degree or higher
Income	50% below median	42.9% below median

	Age	Comprehension	Production
Comprehension	.67		
Production	.48	.67	
Gesture	.79	.78	.56

## ACKNOWLEDGEMENTS

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