

Better Start Bradford Innovation Hub

Language Evidence Briefing 01:

Early language delay in Better Start Bradford

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This is an evidence briefing provided by the Better Start Bradford Innovation Hub (BSBIH), describing the proportion of language delay in 2-year-old children in three areas of Bradford, UK (Better Start Bradford reach areas) pre-COVID19. It is intended to provide information for professionals interested in children's early speech, language, and communication needs about the work we have been conducting on early language delay in Bradford.

The data cover the period March 2016 - November 2019 and are sourced from the Born in Bradford's Better Start (BiBBS) research cohort. The paper that reports this project in full is Cheung, et al. (2023) *BMJ Paediatrics Open* and can be accessed by contacting the Better Start Bradford Innovation Hub (<https://borninbradford.nhs.uk/contact-us/>).

*A previous copy of this report ((10/11/23) was published. The current copy contains references to the published paper; and should be used as the up-to-date version

Executive summary

We assessed a sample of 712 children pre-COVID-19 for language delay in three wards of Bradford, a minority ethnic, majority bilingual, deprived population.

Key findings

At 2-years-old in Better Start Bradford:

- Approximately 1 in 4 children were classified as late talkers – double the rates found elsewhere in the UK.
- Approximately 1 in 2 children screened for language delay were assessed as needing referral for intervention.



What does this mean for practice?

Bradford has high levels of delayed language skills at 2-years-old. Risk factors for late talking include being of Pakistani heritage, being male at birth, having parent-reported hearing concerns, having a delay in understanding words, and not yet using language in everyday settings as expected (e.g. not yet combining words or asking Wh- questions like 'where' or 'what', family not understanding the child).

Talking Together (BHT Early Education & Training), a Bradford-based intervention, screens and delivers support at home for families in English and in home languages, and has evidence of promise in improving vocabulary and parent-child warmth [1]. Other interventions often do not accommodate for bilingual children or children whose main language is not English.

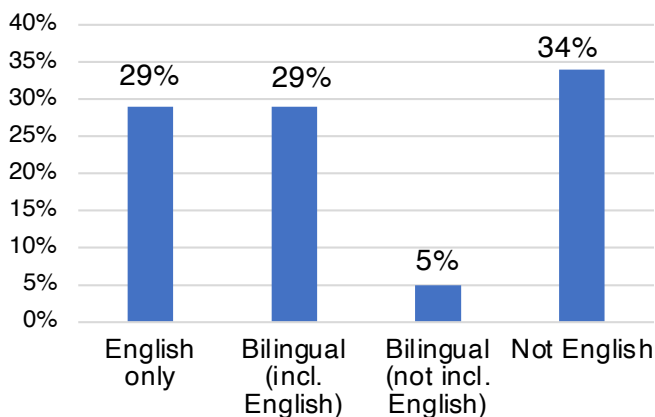
Areas of high deprivation and ethnic diversity likely need targeted, additional support and consistent funding to potentially intervene for early language delay before children get to school, and must also consider the needs of non-English speaking and bilingual families.

[1] <https://www.niesr.ac.uk/projects/otter-outcomes-talking-together-evaluation-and-results>

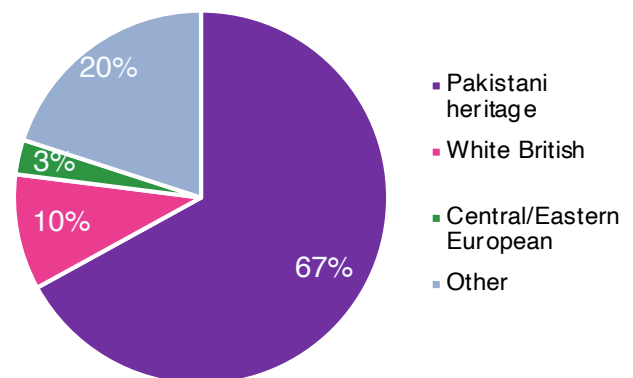
Background

Better Start Bradford is one of five sites funded by the National Lottery’s ‘A Better Start’ project, a 10-year £215 million project. It funds early interventions for children aged 0 – 4 in three areas of Bradford: Little Horton, Bowling and Barkerend, and Bradford Moor. These areas are highly multi-cultural, with over 50 different languages spoken. Almost 84% of families live in the most deprived deciles (IMD), and the majority are from a minority ethnic backgrounds. BiBBS (Born in Bradford’s Better Start) [2] is a research cohort that runs alongside Better Start Bradford’s early interventions. BiBBS recruits women from pregnancy, following them and their children up over time, including what interventions they take part in.

BiBBS mother first language [2]



BiBBS mother ethnicity [2]



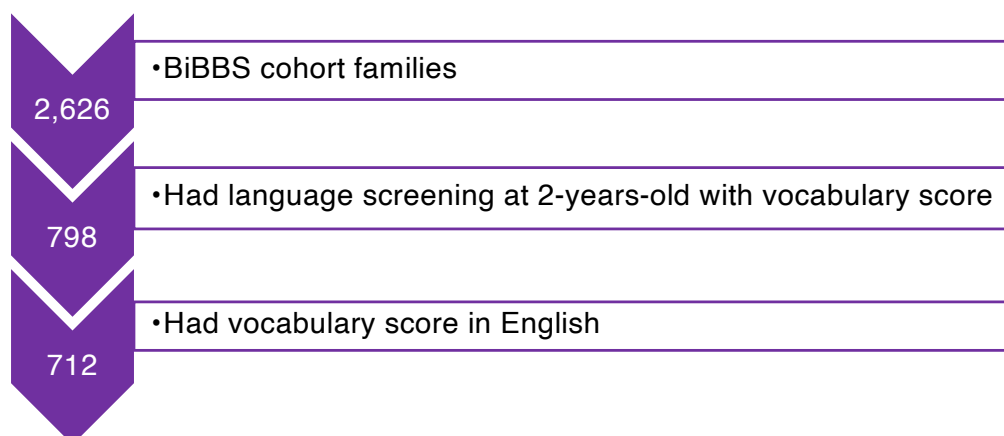
One of the BiBBS interventions is Talking Together. Designed and delivered by BHT Early Education and Training, Talking Together uses health visiting data to identify all children who are approaching their second birthday in the Better Start Bradford reach areas. All 2-year-old children are then offered a screening visit for language delay. Following screening, BHT provide a six-week home-based language intervention for children in need of extra support.

[2] Dickerson, et al. (2022) Wellcome Open Res, 7:244

Reason for study

Children who have stronger preschool language skills have better academic and socioeconomic outcomes [3]. However, children from deprived areas experience a gap in language skills and academic outcomes as compared to their peers [4]. Children in Bradford are below their peers when tested on Early Years Foundation Profile Scores at primary school [5]. No previous UK research has identified preschool language delay in deprived, bilingual, minority ethnic populations. This information essential to help plan early years services and to make commissioning decisions within Bradford. It will also be useful for similar areas elsewhere in the UK, e.g. highly deprived areas that include a high proportion of bilingual families.

Methods



We used a sample of 712 of BiBBS families and compared the vocabulary scores of children in the three areas of Bradford to the expected vocabulary score at 2-years-old for English-only speaking children (Oxford CDI Short [6]) and bilingual children (UKBTAT [7]). We also looked at how many children were referred for intervention by the service (BHT). We used statistical analyses (hierarchical and general linear regression) to identify what factors were associated with late talking.

[3] Clegg, J., et al. (2015). *Journal of Child Psychology and Psychiatry*, 56(1), 67–75.

[4] Law J., et al. (2017). *Early Education Foundation/Public Health England*.

[5] Department for Education, National Statistics, UK Government. (2019) *EYFPS results: 2018-2019*.

[6] Hamilton, A., et al. (2000). *Journal of Child Language*, 27(3), 689–705.

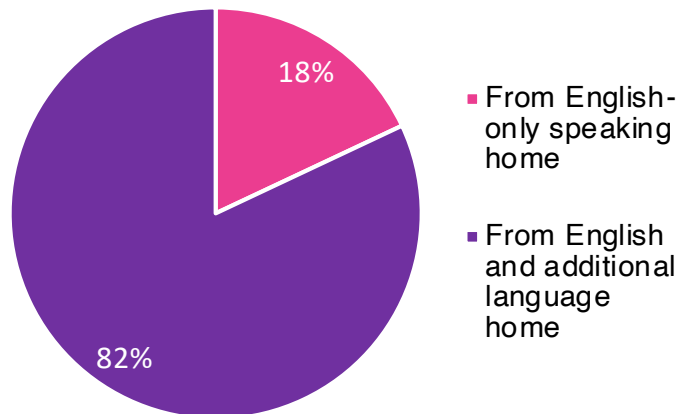
[7] Floccia, C., et al. (2018). *Monographs of the Society for Research in Child Development*, 83(1).

Key findings

At 2-years-old in our sample:

- 25% of children were ‘late talkers’ – i.e. very delayed in how much they say
 - This is approximately double the proportion of children aged 2-years-old found in elsewhere in England [9]
- 15% of children were very delayed in how many words they understood
- Overall, 30% of children were delayed in how much they said or understood.

Children’s language background



- 23% of the sample were not yet combining words in any language (elsewhere in the UK, this is approximately 19% for English-only speaking children [10])
- There was also a high proportion of children needing intervention when assessed by the service (BHT) – nearly half of those who were screened were referred on (47%).
- Characteristics such as demographics (ethnicity, languages spoken at home) were limited in predicting delay, whereas characteristics closer to the child had good predictive value. This included male sex, hearing concerns, delays in how much children understand predicting early language delay, but also use of language in every day settings:
 - Children who did not yet use verbs like ‘eat’ or ‘drink’, ask questions like ‘what’, ‘Where’, or ‘Who, or whose family did not understand what they said – were more likely to be late talking. These kinds of measures are often used ‘on the ground’ by speech and language teams to identify children at risk of being delayed, but are less used in population-level cohort research.

[9] Dale, P. S., et al. (2003). *Journal of Speech, Language, and Hearing Research* 46(3), 544–560.

[10] Roulstone, S., et al. (2002). *Early Child Development & Care*, 172(3), 259–268.

Limitations

- As we used a specific sample, although the BiBBS sample is representative of the larger region, we cannot be sure that our findings are the same for all individuals in other populations. For example, our sample contained families who were screened only in English and had consented for screening.
- Families who were aware of children's difficulties might also be more likely to take up screening, and although we identified if children were from monolingual or bilingual families, we could not test the amount of each language they heard.
- However, this briefing provides a practical estimate to help inform local service planning.

Conclusions

Children's early language ability is a core component of how ready they are for school [11], and can predict their later academic achievements [12]. In conclusion:

- Approximately 1 in 4 children in the Better Start Bradford reach areas were classified as late talking at 2-years-old and around 1 in 2 children seen by early years service BHT were found to need further support for speech, language and communication.
- This means that children in these wards in Bradford are already at a disadvantage in their language skills from as early as 2-years-old when compared to other children in England, and that there is high demand for early intervention.
- Early intervention before children get to school may help mitigate the language skill gap in deprived communities that are at risk of lower academic and socioeconomic outcomes [13]. This therefore requires targeted services for these higher risk communities that takes into account children learning more than one language and that are from diverse environments.

[11] Floccia, C., et al. (2018). *Monographs of the Society for Research in Child Development*, 83(1).

[12] Williams, P. G., et al. (2019). *Pediatrics*, 144(2), e20191766.

[13] Bleses, D., et al. (2016). *Applied Psycholinguistics*, 37(6), 1461–1476.

[14] Field, F. (2010) *Report for UK Gov Independent Review o Poverty and Life Chances*.