Undergraduate Research Opportunities Programme

University of Reading

An evaluation of an evidence based-service delivery model for children with language disorder

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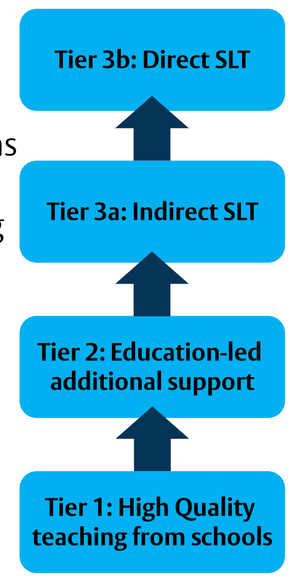
Overview of Project

Aim: to evaluate the implementation of a tiered service delivery method of speech and language therapy support (Ebbels et al. 2019) for children with language disorder attending mainstream schools within Buckinghamshire.

Background

Ebbels et al. (2019) developed a 3-tier service delivery model for speech and language therapy (SLT).
Tier 1: high-quality and effective teaching and interactions for all pupils.
Tier 2: Education-led small group interventions, following set language programmes
Tier 3a: SLT monitored and planned by the speech and language therapist, but delivered by parents or member of education staff, who have been trained to do so.
Tier 3b: Direct individualised SLT, delivered and planned by the speech and language therapist

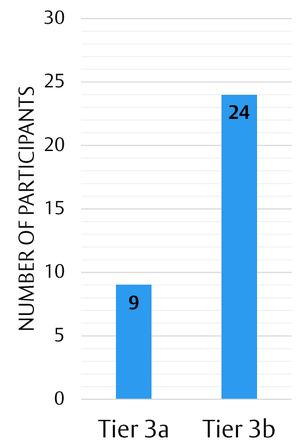


There is currently limited evidence of success when applied to real-world scenarios. This was the motivation for the project.

About the Data

131 children with language disorder have accessed the pathway in total. Data extraction focused on children receiving 3a and 3b SLT in 2022-23. Children who did not have language-based targets were excluded. As were those who did not have a review session.

The final data set contained 33 participants who had received 3a or 3b delivery. Therefore, Approximately 75% did not receive therapy in line with the Ebbels et al, 2019, tiered approach.



Each of these participants were assigned 3 or more targets .
Outcomes for these targets were recorded at the end of each episode of care.

Question

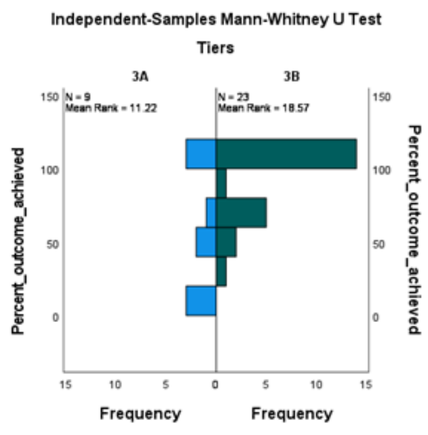
Can <u>indirect</u> (Tier 3a) and <u>direct</u> (Tier 3b) speech and language therapy achieve similar outcomes?

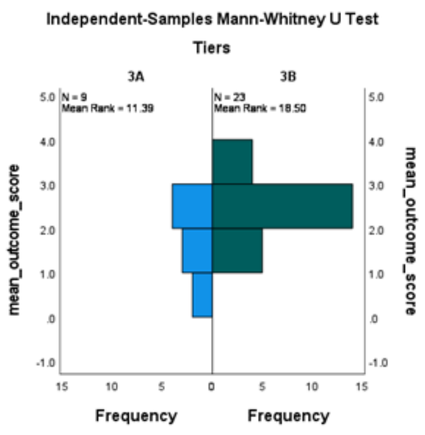
Methods

1. Data was extracted from electronic patient records (tier, targets, outcomes, reviews)
2. Online questionnaires completed by school staff on delivery of the service delivery model

Results

The outcome measures were:
1. The percentage of outcomes of targets achieved or exceeded
2. The mean outcome scores of all targets

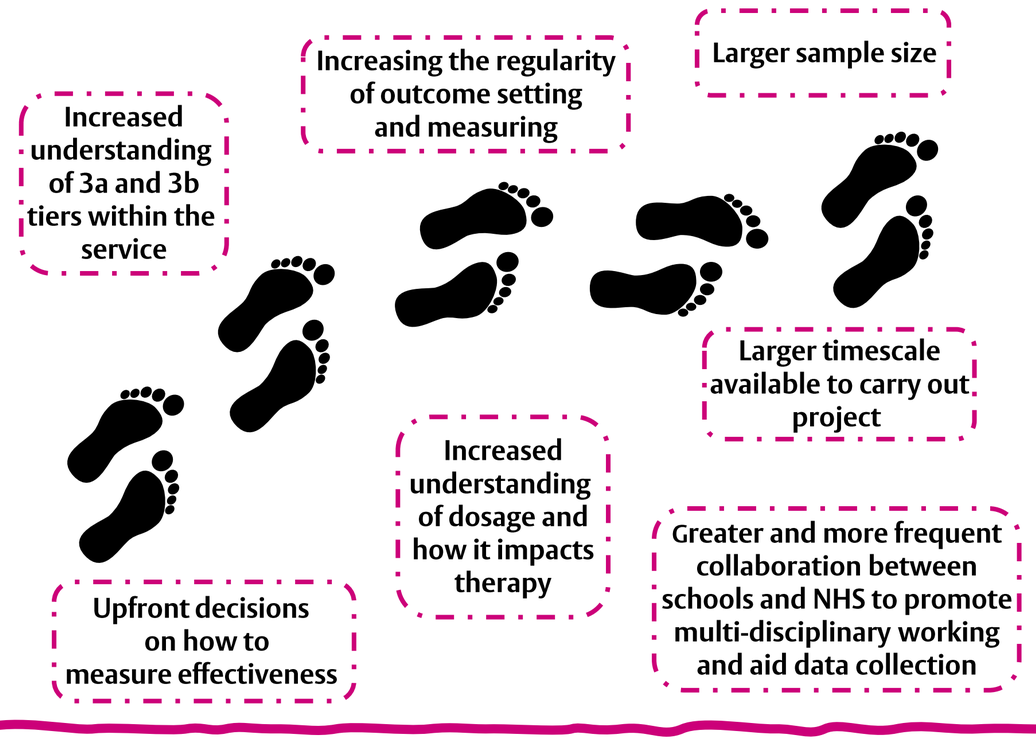




The above Mann-Whitney Tests demonstrate that the results are statistically significant when the outcomes of the 3a and 3b pathways are compared.

However, this information must be viewed with caution due to the small sample sizes of both tiers, and the disparity between the size of the sample groups.

Next Steps



Service Improvements

Since the project concluded the NHS service has:

- Carried out staff training to ensure that all clinicians fully understand the differences between 3a and 3b tiers
- Renamed the pathway involving 3a and 3b tiers, increasing education staff's understanding as to what provision the child is receiving
- Reminded staff of the appropriate note-taking proformas, so data collection is less time-consuming
- Increased internal provision of face-to-face therapy within the pathway, to better support children and their schools
- Re-emphasized the importance of review sessions at the end of tier 3 intervention and prescribed a desired timescale for this occurring

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