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**Declarative Title:** Enhanced Milieu Training Does Not Confer Additional Benefit Over Standard Community Interventions For Toddlers With Language Delay

**STUDY DESIGN**

Design: Randomised control trial.

**STUDY QUESTION**

Setting: Nashville, USA

Patients: 97 toddlers aged 24-42 months with primary language delay.

Exposure: Enhanced Milieu Training (EMT) compared with standard community interventions.

Outcomes: Improvement in language ability at 6 and 12 months.

**MAIN RESULTS:**

Children in both the intervention and control arms showed significant improvement in language ability at 6 and 12 months. There was no significant difference between the two groups, with toddlers in both arms gaining an average of 6 points on the PLS-4 Auditory comprehension test Expressive subscale and 7 points on the Receptive subscale. Toddlers in both arms used an average of 26 new words in a language sample.

**CONCLUSION:**

EMT results in improved language ability at 6 and 12 months, but the result is not significantly better than when standard community interventions are used.

**ABSTRACTED FROM:** Hampton, L.H., Kaiser, A.P. and Roberts, M.Y., 2017. One-Year Language Outcomes in Toddlers With Language Delays: An RCT Follow-up. *Pediatrics*, p.e20163646.

Abstracted by Dr Amanda J Friend, Department of Paediatrics, Leeds General Infirmary, Leeds, UK

The prevalence of language delay in children in the UK is large, with more than 50% of children from socially disadvantaged areas starting primary school with a language delay(1). Addressing this need is crucial: 60% of young offenders have speech, language and communication needs(2), and it has been reported that limited language skills are associated with an increased risk of mental health difficulties(3).

Through a generally robust RCT, this study demonstrated that the Enhanced Milieu Teaching (EMT) intervention had limited impact on improving language outcomes in toddlers with language delay. Initially, participants who received the intervention did make greater gains at 6 months, but by 12 month follow-up, both the intervention group and control group had similar outcomes. Initially, the results appear reliable. The selection of outcome measurements is robust and regularly used in speech and language therapy in practice. In addition, randomisation was adequate, with blinding maintained as much as possible. Analysis appeared thorough, although intention to treat analysis is not discussed, which would be beneficial considering the amount of data not provided in the control group. However, the results of this study contradict the results of other studies that have found EMT to be beneficial(4, 5, 6).

One possibility for this result is that the intervention itself is questionable. The authors describe EMT as including "responsiveness, matched turn-taking, target-language modelling, language expansions, time delays and prompting strategies". As such, this description appears very similar to techniques used in informal speech and language therapy sessions, such as Parent-Child Interaction or Verve Child Interaction therapy. These interventions are very common in speech and language therapy, therefore, although this study found no significant differences between the intervention and the control groups, it may be because the control group was still receiving a similar intervention in their typical community intervention sessions.

What this study does show is that with both the EMT intervention and the typical community intervention, improvements were made. If the study had also included participants with cognitive delay as well as language delay, then further improvements would likely be seen. It is therefore important that should language delay be expected, referral should be made to local speech and language therapy services. Often, it is assumed that children with language delay will 'catch-up' without intervention. However, it is through the specialist skills of a Speech and Language Therapist that any specific needs are identified, such as indications of more complex speech, language or social communication disorders which may not be detectable in time-restricted Paediatrician appointments.

Commentary by Shona J Corker, Specialist Speech and Language Therapist, Department of Paediatric Oncology, Leeds General Infirmary, Leeds, UK

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