A Population Level Study of the Language Profiles of Irish Children in Junior Infants in a Low Socio-Economic Area

Authors: *Grace Walsh, Sally O'Sullivan & Katherine Harford (Lets Grow Together! Infant and Childhood Partnerships CLG)*
Emma Hallahan, Dr.Margaret Curtin & Dr. Ciara O'Toole (UCC)

Introduction

Children from disadvantaged areas have been reported to experience increased rates of language difficulties than children from more affluent areas [1]. Literature suggests this is an intergenerational issue that has been the case for children in areas of disadvantage for over fifty years [2]. Children that present with language difficulties at school entry are more likely to experience a decreased level of academic achievement throughout their school years than their peers from a higher socio-economic background [3]. In an Irish study conducted in 2016, it was found that 30.5% of preschool children from disadvantaged areas presented with delays in language development [4], this is higher than the reported rate of between 7 and 15% internationally for children from areas that are not considered to be disadvantaged[5][6]. Let's Grow Together! Infant and Childhood Partnerships CLG (LGT) is a community-based prevention and early intervention programme in an area of disadvantage. The profiling of communication development informs the implementation of innovative local services as part of LGTs Speech, Language and Literacy Strategy.

Aims

This study aimed to add to the research by profiling the receptive and expressive language, pre-literacy skills and speech sound development of children attending four DEIS (Delivering Equality of Opportunity in Schools) Schools within the LGT catchment area at school entry in order to determine the need for the community based SLT services, such as the Speech, Language and Literacy Strategy within LGT

Participants

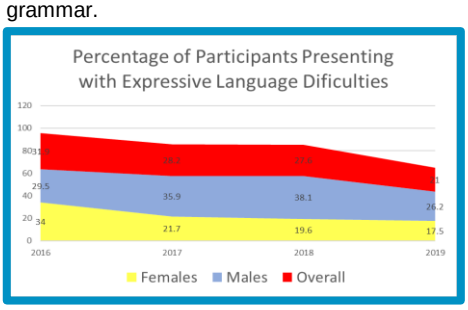
A total of 379 children participated in this study. All participants were Junior Infant pupils. Of the 379 participants, 212 were female (55.9%) and 167 were male (44.1%). Participants ranged in age from 4 years and 7 months to 6 years and 8 months (M= 5;6).

Methodology

All data was collected by the LGT team, as part of a wider programme. The Renfrew Action Picture Test (RAPT); and the Concepts and Following Directions and Phonological Awareness subsets from the Clinical Evaluation of Language Fundamentals–Preschool (2nd edition) (CELF-P2) were completed. All assessments were conducted from April to June of the academic year. The children were assessed on site during school hours by qualified Speech and language Therapists, and all participants were scored according to standardised test scores.

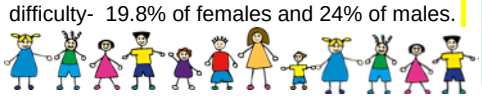
Results

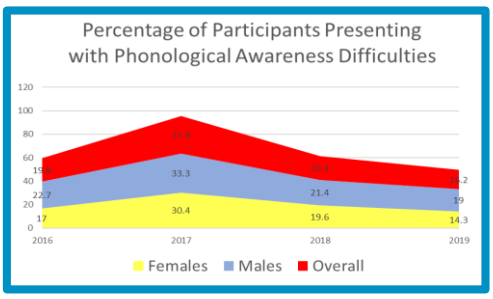
Expressive language: Assessed using the RAPT (n=378), expressive language difficulties were evident in an average of 26.9% of the participants. Overall, 11.3% of children presented with difficulties in both information and grammar subsets. Comparatively, more children presented with difficulties on the information subscale (23%) than the grammar subscale (15.3%). More male participants (32.3%) presented with expressive language difficulties than female participants (22.6%), with 16.2% of males and 7.5% of females showing difficulties in both information and grammar.



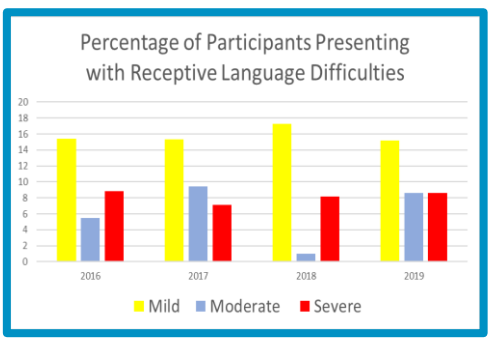
Speech Difficulties: Informally noted and recorded by testers in 12.9% of participants, with 12.3% of females and 13.8% of males presenting with difficulties.

Phonological Awareness: On the CELF-P2 Phonological Awareness scale (n=379), 21.6% of participants assessed presented with difficulty- 19.8% of females and 24% of males.





Receptive language: Assessed using the CELF-P2 Concepts and Follows Directions subscale (n=375). Overall, 8.2% of participants presented with severe difficulty, 6.1% presented with moderate difficulty, 15.8% presented with mild difficulties, 65.2% presented in the average range and 3.7% presented in the above average range. Overall, 18.4% of females showed mild difficulty compared to 12.6% of males; moderate difficulty was evident in 4.2% of females and 8.4% of males, and severe difficulties were identified in 6.1% of females and 10.8% of males.



Discussion

Existing evidence demonstrates that children living in areas of low socioeconomic status present with higher levels of language difficulties than their peers from areas of higher socioeconomic status [7]. The results of this study support this evidence from a local Irish perspective as participants presented with levels of language difficulties higher than expected for children in the general population. Expressive language difficulties were found in 26.9% of participants, a much higher rate than that of similar studies which reported figures of between 2.34 and 4.27% in children ranging in age from 3-7 years [8][9]. Receptive language difficulties also presented more frequently in this cohort, with 30.1% presenting with some level of difficulty (mild, moderate or severe). This is significantly more than the 2.63 to 3.95% of children found in other studies to be presenting with receptive language difficulties [10]. More participants showed difficulty in receptive (30.1%) than expressive language (26.9%) which is consistent with another Irish study that found a significant difference between the expressive and receptive language difficulties of children in a disadvantaged area, where the majority of children (76%) scored higher in expressive rather than receptive language [4].

Conclusions & Recommendations

The results of this study suggest that Irish children living in a low socio-economic area are at an increased risk of experiencing language difficulties at school entry than those in higher socio-economic areas. In order to reduce the incidence and impact of language difficulties for children, particularly those in areas of disadvantage, public health and community-based speech and language services should be engaged. LGT uses a relational and strengths-based prevention, promotion and early intervention targeted universal approach to improve communication outcomes. This approach is guided by the science of early brain development, infant mental health and communication development. The collection of data is vital in order to inform the implementation of local services, and was successfully carried out by the Area Based Childhood programme, LGT.

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