

Language Skills of Adults and Adolescents with Cleft Lip and/or Palate: A Scoping Review

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Introduction

Cleft lip and/or palate (CL/P) occurs when the lip and/or the roof of the mouth do not fully close together during development. This can cause difficulties with **eating, drinking** and **speech**. CL/P can occur as part of an **additional syndromic diagnosis**, but in about 70% of cases occurs in isolation.

Research into the cognitive skills of children with non-syndromic CL/P (NSCL/P) shows a pattern of **lower language skills** unrelated to syndromic diagnoses or hearing impairments (van Eeden & Stringer, 2020).

Children with CL/P struggle more with **reading comprehension** (Lancaster et al, 2022) and have lower **language skills** (Lancaster et al, 2020) than their peers, therefore potentially impacting **academic achievement**.

Despite growing research in a paediatric population, it is not clear whether language difficulties continue into adulthood in individuals with CL/P. This leads to a **lack of knowledge and clinical support** for adults and adolescents with both CL/P and language disorders.

Aims and Objectives

To report:

- The **quantity** of research in this area
- The **variety** of this research
- And the **outcomes** of this research

Methodology

Relevant databases were searched using a combination of key words. These were broken down into subtopics using the PCC framework (Peters et al, 2021): **Population** (adults with CL/P), **concept** (language skills) and **context** (any country, any year).

After **duplicate papers** were removed, **titles and abstracts** were screened. Irrelevant papers were then excluded. This was completed separately by two researchers and conflicts were discussed and resolved.

Further papers were excluded at full text screen. A PRISMA diagram of the process can be seen in Fig. 1.

We recorded key study features (**year, country, study type**), participant characteristics (**number, sex, age, cleft type, socioeconomic status, syndromic diagnosis**), **results found** and the **outcome measures** used.

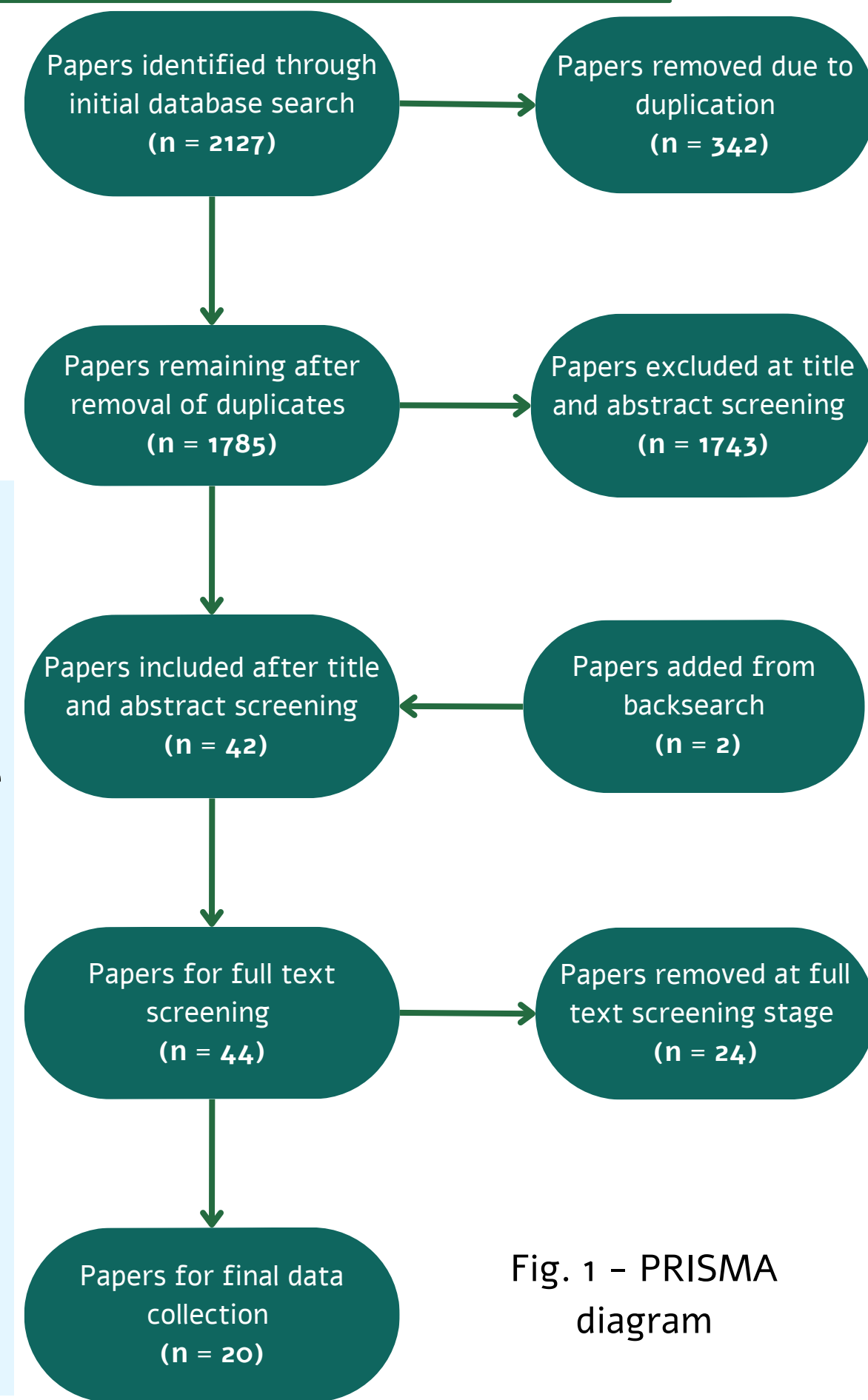


Fig. 1 - PRISMA diagram

Results and Analysis

Fig. 2 - Diagram to show categories of study designs and outcome measures used. Darker boxes indicate a higher concentration of papers.



There were **20 papers** available for final data analysis. Only three papers were published prior to 2000 demonstrating **some increased interest** in this topic in recent years.

The majority of papers were from **North America** and the **UK**, where English is the majority language. However the language spoken by participants was **not explicitly reported** in any study. **Socioeconomic status** was also an underreported participant characteristic, stated in only **24%** of papers.

We excluded studies involving participants under the age of 16. All **case studies** reported participant age, with a total range between them of **16 to 46** and a mean of **23**. Just over half (**55%**) of **case control** studies reported a **mean age** of participants and **63%** reported an **age range**.

Conclusion

- **More robust research is needed** from a broader range of backgrounds.
- The limited evidence found in this study suggests that **language difficulties** are **ongoing into adulthood** within this population.
- **40% of studies** found were **single case studies**, only reporting qualitative comments as outcome measures.

References

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