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Prelectocat. Catalan screening tool for early detection of reading difficulties in childhood

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Abstract

Literacy is a basic and key learning in Primary Education, and difficulties in its learning have been related to a higher probability of academic failure. In Spain, there are no screening tests in official languages other than Spanish to detect these difficulties early. The aim of this study was to create and analyse the psychometric characteristics of a new screening test for the early detection of problems in reading in Catalan (Prelectocat). A total of 459 5-year-old children in the last year of Preschool Education were administered the reading screening test. This test assesses phonological awareness, sound-grapheme correspondence, phonological memory, verbal sequencing/lexical retrieval, and writing. The results show good construct reliability and validity. Normative values are indicated in percentiles and cut-off points to identify children at risk. Several early indicators allow us to detect those children who are at risk of having difficulties in these areas in Primary Education. This type of test can be used as a universal screening tool for all students aged 5-6 years in order to initiate early intervention and therefore contribute to the reduction of academic failure.

Keywords: Early detection; reading difficulties; writing difficulties; screening tests; Catalan; Preschool Education.

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Prelectocat. Prueba de cribado en catalán para detectar tempranamente dificultades lectoras en la infancia

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Resumen

La lectoescritura es un aprendizaje básico y clave en la Educación Primaria y las dificultades en su aprendizaje se han relacionado con una mayor probabilidad de fracaso escolar. En España, no existen pruebas de cribado en otras lenguas oficiales distintas al español que detecten de manera temprana estas dificultades. El objetivo de este estudio fue crear y analizar las características psicométricas de una nueva prueba de cribado para la detección temprana de problemas en la lectoescritura en catalán (Prelectocat). Se llevó a cabo la prueba de cribado de lectura a un total de 459 niños de 5 años, del último curso de Educación Infantil. Esta prueba evalúa la conciencia fonológica, la correspondencia sonido-grafía, la memoria fonológica, las secuencias verbales/evocación léxico y la escritura. Los resultados muestran una buena fiabilidad y validez de constructo. Se indican valores normativos en percentiles y los puntos de corte para identificar menores con riesgo. Diversos indicadores precoces permiten detectar niños con riesgo de tener dificultades en estas áreas en la Educación Primaria. Se recomienda utilizar este tipo de pruebas como herramienta de cribado universal a los 5-6 años para iniciar una intervención temprana y así contribuir a la reducción del fracaso escolar.

Palabras clave: Detección temprana; dificultades en la lectura; dificultades en la escritura; pruebas de cribado; catalán; Educación Infantil.

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INTRODUCTION

Learning to read and write involves the transformation of written language into spoken language (reading) or vice versa (writing). Children with strong oral language skills learn to read and write better than those who experience difficulties (Snowling & Hulme, 2021). In this regard, general oral language ability in Preschool Education (ages 3-5) can be considered a single predictive factor for future development of reading and writing skills in Primary Education (ages 6-12) (for a review, see Hjetland et al., 2020).

Given the importance of oral language in acquiring reading and writing skills, various studies have sought to determine which oral abilities best predict subsequent reading and writing development. According to the "simple view of reading" (Gough & Tunmer, 1986), reading involves two fundamental skills. One is the ability to translate printed words into speech (a process known as decoding) and the other is the ability to understand what is read (a process known as reading comprehension).

Longitudinal studies have provided valuable insights into the risk factors for difficulties in reading and writing skills. These risk factors can be classified into three levels: biological, cognitive and environmental (Pennington, 2006). It is well established that the likelihood of developing a reading disorder has a strong genetic component, and that a child with a family history of dyslexia is highly likely to inherit it (Soden et al., 2015).

The environment plays a critical role from a very early stage. What has been called the "home literacy environment" has a direct effect on the development of pre-literate skills (Sénéchal & LeFevre, 2014). Regarding cognitive factors, various cognitive skills and tasks have been reported to predict the acquisition and subsequent development of reading and writing in different languages. With respect to reading, many studies have examined the role of phonological awareness (the ability to manipulate the sounds of one's own language) and alphabet knowledge (knowing the names of letters and their corresponding sounds) during the preschool years as predictors of decoding skills (Caravolas et al., 2019; Ehri et al., 2001; Georgiou et al., 2012; Landerl et al., 2019; Melby-Lervåg et al., 2012; Lervåg et al., 2019; Suarez-Coalla et al., 2013; Torgesen, 2002; Whitehurst & Lonigan, 1998). Moreover, other skills have also demonstrated significant predictive effects. These include phonological memory; i.e., the retrieval of phonological information stored in long-term memory (Gathercole et al., 1994; De Jong & Van der Leij, 1999) and short-term memory, which is generally assessed using digit or pseudoword repetition tasks (Baddeley et al., 1998; Christopher et al., 2012; Kibby & Cohen, 2008; Sesma et al., 2009; Vellutino et al., 2004).

Previous studies have shown that verbal sequencing tasks in preschool, such as reciting the days of the week, naming colours and identifying geometric shapes, can serve as effective predictors of later reading performance (Bowers & Swanson, 1991; Lonigan et al., 2000; Wolf et al., 2000). These tasks tap into fundamental skills necessary for reading development, including phonological processing, verbal memory and rapid automatized naming (RAN). For example, reciting sequences such as the days of the week requires children to organise and retrieve language-based information in a fixed order, paralleling the sequential processing involved in reading (Schatschneider et al., 2004; Wagner et al., 1997). Similarly, tasks involving naming colours and geometric figures engage both vocabulary retrieval and rapid naming, processes closely linked to RAN, which has been consistently associated with reading fluency (Denckla & Rudel, 1976; Norton & Wolf, 2012). Studies suggest that children who demonstrate competence in these verbal sequencing tasks tend to develop stronger decoding and word recognition skills (Torgesen et al., 1997; Kirby et al., 2003). Consequently, assessing verbal sequencing abilities in preschool provides valuable information about children's potential literacy trajectories, enabling early identification of those who may benefit from targeted reading interventions.

Overall oral language comprehension ability is a strong predictor of reading comprehension (Cain et al., 2000; Diakidoy et al., 2005; Protopapas et al., 2012; Tilstra et al., 2009). Specifically, vocabulary has been identified as a key factor in the development of later reading comprehension (Diakidoy et al., 2005; Protopapas et al., 2012; Tilstra et al., 2009).

Finally, with regard to writing, few studies have focused on early predictors of later writing development, although emergent writing skills, such as writing one's name, letter knowledge and early spelling, are reported to be critical components of early writing development (e.g., Butler et al., 1982; Lonigan et al., 2000; Missall et al., 2007; Papadimitriou & Vlachos, 2014).

In particular, there are few studies in Spanish that have analysed the predictive value of these variables. For example, Suárez-Coalla et al. (2013) found that phonological awareness was the best predictor of accuracy in reading and writing, while rapid naming of pictures predicted reading speed in children in Preschool Education.

These data indicate that it is possible to forecast the acquisition of reading and writing skills before formal instruction (Suárez-Coalla et al., 2013). Therefore, the availability of screening tasks at early ages may facilitate early intervention for children at risk of difficulties in reading and writing skills, maximising their potential. Furthermore, such screening tasks are fundamental for dynamic approaches such as the Response to Intervention (RtI) educational model or Multi-Tiered Systems of Support (MTSS), which are educational frameworks designed to provide high-quality support to students according to their varying levels of need. These approaches generally consist of three levels, each offering progressively more intensive intervention. At Level 1, all students receive universal instruction based on research-supported practices. Those who do not respond adequately to this general classroom instruction receive Level 2 support, consisting of targeted small-group interventions to address learning difficulties or gaps in specific skills. For students who continue to face challenges, Level 3 provides individualised support, often delivered in one-to-one sessions tailored to their specific needs. In this context, adjusting the intensity of instruction begins with assessment using a universal screening tool, termed "universal" because it is applied to all students with the purpose of identifying those who may benefit from additional support at Levels 2 and 3.

Accordingly, a growing number of studies have highlighted the usefulness of screening tests in Preschool Education for predicting later reading and writing achievement, especially because early predictors play a crucial role in laying the foundation for successful reading and writing development (Bishop, 2003; Bishop & League, 2006; Butler et al., 1982; Butler et al., 1985; Einarsdóttir et al., 2016; Gaab & Petscher, 2022; Lonigan et al., 2000; McNamara et al., 2011). Butler et al. (1982) and Butler et al. (1985) published pioneering longitudinal studies examining early prediction of performance. Their research demonstrated the long-term predictive validity of early screening tests, such as the Sheppard School Entry Screening Test (SSEST). These studies reinforced the idea that screening tools applied during the preschool years can provide strong indicators of future literacy success or failure, emphasising the importance of early intervention. Following these seminal works, numerous studies, the majority in English, have investigated the use of screening tools in Preschool Education to predict later reading difficulties (Bishop, 2003; Bishop & League, 2006; Einarsdóttir et al., 2016; Gaab & Petscher, 2022; Lonigan et al., 2000; McNamara et al., 2011). Gaab & Petscher (2022), in a systematic review, provided a comprehensive overview of screening tests and their role in identifying literacy difficulties. The authors showed that screening tests assessing key early reading skills, such as phonological awareness, alphabet knowledge and vocabulary, are effective in identifying children at risk of reading difficulties.

In the Spanish-speaking context, various tools have been developed to predict later reading development in Spanish-speaking children in Preschool Education, such as the Prolexia test (Cuetos et al., 2020). This test includes early screening assessments for children aged 4 to 6 and comprises six subtests, including phonological awareness activities, phonological short-term memory and rapid naming tasks. However, this test lasts approximately 30 minutes and is designed for clinical application by psychology professionals rather than as a universal screening tool in schools. Whereas, Cuetos et al. (2015) created a test for the early detection of reading and writing learning difficulties in Spanish, which is easy to administer and score and can be applied as a universal screening tool by teachers in the classroom to four-year-old children.

However, in other official languages of Spain, such as Catalan, Galician or Basque, which are the first language of many children and the official languages of instruction in their respective autonomous

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regions, universal screening tests do not exist. In this regard, the aim of this study was to develop a universal screening test for the early detection of reading and writing learning difficulties in Catalan, designed to be quick and straightforward for teachers to use, enabling the identification at age five of children at risk before they start Primary Education and thereby facilitating early intervention. To this end, collaboration was established between the Sant Joan de Déu Hospital (School Learning Disorders Unit, UTAE) and Fundació Privada Educativa Vedruna Barcelona, formalised in an agreement signed in July 2013, and subsequently extended to all its schools in Catalonia through a partnership with Fundació Vedruna Catalunya Educació in May 2017. Vedruna schools are publicly funded, privately managed schools (*concertadas*) distributed throughout Catalonia.

METHOD

Test

The Prelectocat screening tool was developed by the team at the School Learning Disorders Unit (UTAE) at the Sant Joan de Déu Hospital in Barcelona. At the same time, indicators considered important for identifying potential reading and writing difficulties were jointly selected by teaching and educational psychology teams from the Vedruna school network in Catalonia. A comprehensive literature review was conducted to identify the most commonly used predictors of reading and writing performance, focusing on key aspects of reading development. From this review, the team selected skills that could be assessed in a short period of time to include in a screening tool; namely, phonological awareness, sound-grapheme correspondence, phonological memory, verbal sequencing/lexical retrieval, and writing. Five core domains emerged from the literature and professional practice as critical for successful reading development. These are outlined below. For each domain, representative tasks were selected for assessment purposes. The selection process was carried out by a group of reading experts with over 10 years' experience and reviewed by educational psychologists from the participating schools. The screening tool includes 31 items1:

- Domain 1. Phonological awareness (11 items). Identifying phonemes within a word; i.e., naming words that begin with a given sound, determining whether two words begin or end with the same sound, forming new words by combining sounds and changing the initial sound in a word.

- Domain 2. Sound-grapheme correspondence (6 items). Identifying the grapheme-phoneme correspondence for vowels, frequent consonants and all graphemes, and reading three simple monosyllabic words.

- Domain 3. Short-term/phonological memory (6 items). Repeating sequences of 2 to 4 digits or 2 to 4 non-meaningful syllables.

- Domain 4. Verbal sequencing/lexical retrieval skills (4 items), humming the days of the week, reciting a phonetic count from 1 to 20 and naming colours and geometric shapes.

- Domain 5. Writing (4 items): Writing one's name and three simple, high-frequency words (CVC and CVCV structures) using uppercase or cursive letters.

Each item is scored on a scale from 0 to 3. For each item, the manual specifies scoring criteria based on both accuracy and response speed. The total possible score ranges from 0 to 93. The screening takes approximately 10 minutes to administer.

Participants

The study sample comprised a total of 459 children, 222 girls (48.4%) and 237 boys (51.6%), who were in their final year of Preschool Education (ages 5 and 6). No exclusion criteria were applied. The

children were enrolled in 31 schools belonging to the Fundació Vedruna educational network, located in different towns and cities in all four provinces of Catalonia. These schools reflect a broad geographical diversity, including both urban and rural settings. Urban areas were represented by schools in major cities such as Barcelona and in densely populated towns like Terrassa and Sabadell. These schools are situated in environments with ready access to a wide range of educational and cultural resources. The sample also included schools in smaller or more rural municipalities such as Bellpuig, l'Espluga de Francolí and Santa Coloma de Queralt, where population density is lower and access to educational and cultural services more limited. The geographic distribution further encompassed mountain regions, including towns such as Puigcerdà and Ripoll, which pose specific challenges related to connectivity and access to resources. Additionally, coastal towns such as Cambrils and Palamós were included, offering insights into socio-economic contexts shaped by tourism and maritime economies.

Procedure

The Prelectocat screening was always administered during the third trimester of the school year by the classroom teacher and/or the school's educational psychologist. Each child was assessed individually in a quiet, distraction-free space. The screening process involved all the materials included with the Prelectocat tool: an answer sheet, support materials (including the letters, colours and shapes the child is asked to recognise) and a manual with detailed instructions for administration and scoring. Each item has its own specific instructions. Participant responses were recorded on the answer sheet. The completed answer sheets were later entered into spreadsheets for statistical analysis.

RESULTS

Descriptive

Descriptive statistics were calculated for the total test score as well as for each of the five assessed domains (table 1). A histogram was created to show the distribution of scores for each domain and for the overall test. In all graphs, the distribution was skewed to the left (figure 1). Percentile ranks were computed using data from all 459 participants (table 2). Scores considered to indicate risk were defined as those one or more standard deviations below the mean. The cutoff for this threshold corresponds to a raw score of 60, equivalent to the 13th percentile.

Differences in scores based on sex were also examined. Table 3 presents descriptive statistics and the results of the test, comparing the values. No significant differences were found between the two groups.

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Table 1

Mean values and standard deviations for the total Prelectocat score

	Mean	Standard deviation	Minimum	1st quartile	Median	3rd quartile	Maximum
Total score	76.87	15.08	22	70	82	88	93
Domain 1. Phonological awareness	24.23	8.69	0	18	27	31	33
Domain 2. Sound-grapheme	15.40	3.30	1	15	16	17	18
Domain 3. Phonological memory	15.27	2.86	3	14	16	18	18
Domain 4. Verbal sequencing / lexical retrieval	11.32	1.37	1	11	12	12	12
Domain 5. Writing	10.65	2.18	0	9	12	12	12

Figure 1

Graphical representation of total and domain scores for the Prelectocat in the sample of 459 children. Each variable was normalised relative to its maximum possible score

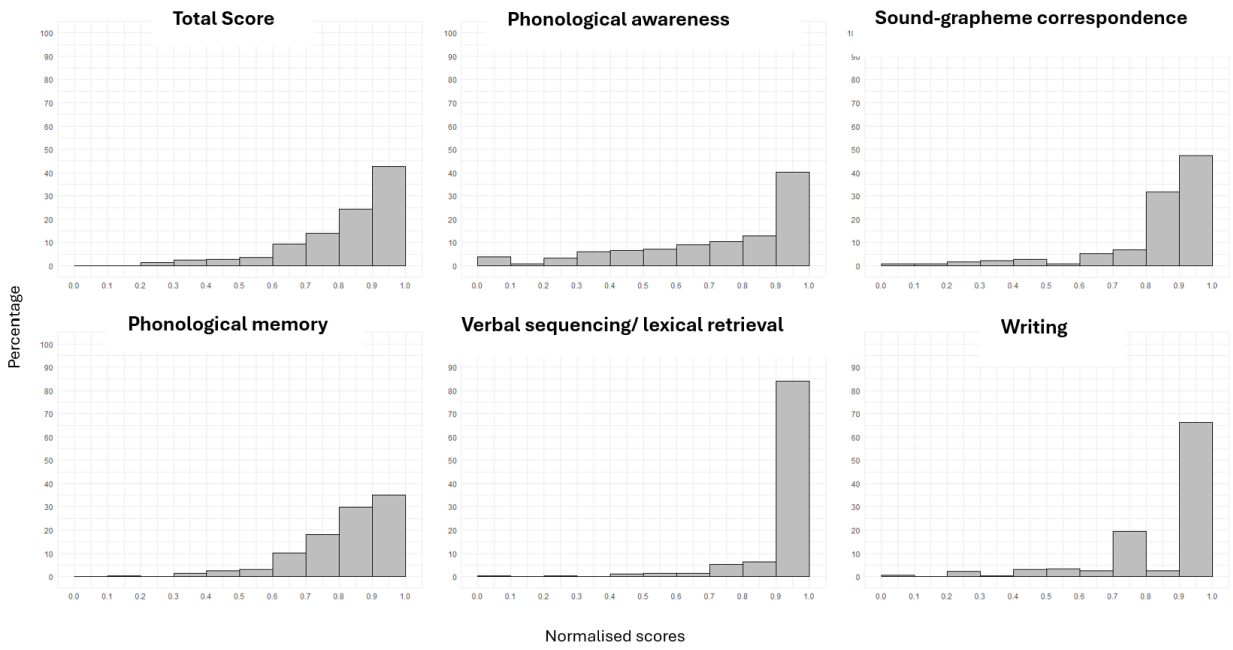

Table 2

Percentile ranks for total Prelectocat score

Total score	Percentile
27	1
55	9
58	11
60	13
62	14
63	15
64	16
65	18
67	21
68	23
69	24
70	25
71	28
73	30
74	32
75	33
76	35
77	38
78	40
79	42
80	45
81	48
82	51
83	55
84	59
85	63
86	70
87	74
88	78
89	83
90	87
91	91
92	94
93	100

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Table 3

Descriptive statistics for the domains and total score of the Prelectocat, grouped by sex, and results of the Mann-Whitney U test used to compare scores between the two groups

	Sex	Mean	Stat. Dev.	Min.	C1	Median	C3	Max.	Mann-Whitney U Test	
									W	p-value
Total score	**F**	77.7	14.3	23	77.3	82	88	93	27501	0,400
	M	76.1	15.8	22	68	81	87	93		
Domain 1. Phonological awareness	**F**	24.6	8.2	0	21	27	31	33	26883	0,684
	M	23.8	9.2	0	18	27	31	33		
Domain 2. Sound-grapheme	**F**	15.6	3.2	1	15	16	18	18	27933	0,244
	M	15.2	3.4	1	15	16	17	18		
Domain 3. Phonological memory	**F**	15.2	2.9	3	14	16	18	18	25923	0,781
	M	15.3	2.8	6	13	16	18	18		
Domain 4. Verbal sequencing / lexical retrieval	**F**	11.4	1.3	1	11	12	12	12	27799	0,201
	M	11.2	1.5	3	11	12	12	12		
Domain 5. Writing	**F**	10.8	2.0	3	9	12	12	12	28355	0,098
	M	10.5	2.3	0	9	12	12	12		

Reliability

Cronbach's alpha was calculated to assess the internal consistency of the test. The resulting value was 0.906, with a confidence interval ranging from 0.89 to 0.92. Internal consistency was also examined using the split-half method, in which a score was computed based on the even-numbered items and another based on the odd-numbered items. A Spearman correlation of 0.811 was found between the two sets of scores. These values indicate that the test has good reliability, as the confidence interval falls within the range considered to represent good to excellent results (Nunnally, 1978; 1994). Additionally, internal consistency within the scale was examined by analysing the correlations between the different domains. Since the data did not follow a normal distribution, non-parametric Spearman correlations were used (see table 4).

As shown in table 4, all correlations are positive and statistically significant, meaning that higher scores in one domain tend to be associated with higher scores in the other domains. The strongest correlations were found between Domain 1 (phonological awareness) and Domain 2 (sound-grapheme correspondence), with a coefficient of 0.526, and between Domain 1 and Domain 5 (writing skills), with a coefficient of 0.556. These results therefore suggest strong internal consistency between domains.

Table 4

Correlation table between Prelectocat domains

	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5
Domain 1. Phonological awareness	1	0.526***	0.427***	0.452***	0.556***
Domain 2. Sound–grapheme	0.526***	1	0.300***	0.347***	0.373***
Domain 3. Auditory memory	0.427***	0.300***	1	0.277***	0.304***
Domain 4. Verbal sequencing / lexical retrieval	0.452***	0.347***	0.277***	1	0.486***
Domain 5. Writing	0.556***	0.373***	0.304***	0.486***	1

*** The correlation is significant at level < 0.001

Validity

A confirmatory factor analysis was conducted to assess whether the data collected aligned with the domain structure originally proposed when developing the tool, thereby testing its construct validity. The model is built using maximum likelihood estimation. Table 5 presents the results of the model fit.

The confirmatory factor analysis results yielded a significant χ^2 value. However, this value is highly sensitive to the large sample size available to build the model. The RMSEA value was below 0.08, indicating an acceptable model fit. Finally, the CFI was below 0.90, which also indicates a good fit (see table 5).

Table 5

Fit coefficients for the confirmatory factor analysis of Prelectocat

Chi-square	RMSEA	CFI
χ^2 = 1478.055 df = 424 p < 0.001	0.074	0.813

DISCUSSION

The aim of this study was to develop and analyse the psychometric properties of a new screening test for pre-literacy skills in Catalan (Prelectocat), designed for a population of Catalan students in Preschool Education. The test was designed to identify children aged 5-6 who may be at risk of experiencing difficulties in the process of learning to read and write, enabling early prevention and intervention.

Its development encompassed five task domains (phonological awareness, sound-grapheme correspondence, phonological memory, verbal sequences/lexical retrieval, and writing) that have been identified in the literature as having predictive value for later reading and writing development. The results showed no differences between boys and girls, either in the total score or in any individual domain.

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They also demonstrated high internal consistency based on reliability indices, as well as good consistency across the five domains. With regard to construct validity, the coefficients indicated acceptable values and a good fit between the data and the proposed five-domain model. While these findings support the overall structure and robustness of the instrument, the distribution of scores tended to be skewed towards higher values, particularly in domains 4 and 5. This skew suggests that some tasks may be relatively easy for a portion of the sample, which could reduce the test's ability to discriminate among higher-performing children. It would therefore be advisable to review certain items in future revisions of the test to improve its sensitivity. Based on the findings of this study, it is proposed that children whose scores fall one standard deviation or more below the mean, equivalent to a raw score of 60 or less, be considered at risk, and should be closely monitored, supported and evaluated, particularly during the first cycle of primary education, where a strong emphasis is placed on acquiring reading and writing skills.

The test was designed to provide teachers with a universal assessment tool. This type of assessment is aligned with the Response to Intervention model, which promotes educational evaluation within inclusive schooling (Ainscow et al., 2006; Coll, 2015; Echeita & Ainscow, 2011; Giné, 2020), and supports the provision of psychoeducational and speech and language therapy services (Acosta-Rodríguez, 2006; 2008; Archibald, 2017). This intervention model is based on prevention and the identification of specific educational support needs through assessment of how pupils respond to the interventions implemented. It involves a continuous cycle of assessment and intervention aimed at ensuring pupils reach their full potential. Through frequent and systematic evaluations of pupil progress, interventions should be adjusted and refined as needed, with levels of support added or removed in response to the needs identified (Adlof & Hogan, 2019; Ebbels et al., 2019; Law et al., 2013).

In this context, Prelectocat is a quick and easy-to-administer test that we consider well suited for systematic implementation in schools as a universal screening tool during the final term of the last year of Preschool Education. This would allow teaching staff to identify pupils at risk and provide appropriate support during the early years of primary education. In doing so, personalised support plans could be developed, appropriate follow-up conducted, and the necessary evaluations ensured to support the development of reading and writing skills, essential for academic success.

CONCLUSIONS AND LIMITATIONS

The implementation of Prelectocat represents a significant advance in the early detection of reading and writing difficulties within the Catalan educational context. This study demonstrates that the tool has strong psychometric reliability and validity, consolidating it as a practical and effective resource for identifying children aged 5-6 years who are at risk of experiencing challenges in learning to read and write. The ability to conduct quick and simple universal screening in the classroom allows teachers to adopt a proactive role in preventing academic failure by intervening at a key stage in children's development.

Among the limitations identified is the asymmetrical distribution of scores in the histogram, which may affect the test's sensitivity in distinguishing between the highest and lowest levels of performance. This suggests the need to revise certain items or incorporate new tasks in future versions of the tool to allow for better differentiation. This limitation is noted in the test manual to guide accurate interpretation of the results. Furthermore, no socioeconomic data were available for the sample, although the variety of contexts represented by the participating schools, including urban, rural, mountainous and coastal areas, has been documented. In addition, it will be essential to conduct longitudinal studies to evaluate the predictive capacity of Prelectocat in identifying reading and writing difficulties at later stages. At the time of administering the Prelectocat screening instrument, no standardised norm-referenced test existed in Spanish that assessed the same skills. As a result, it was not possible to analyse the content and criterion validity of the instrument. Future studies should assess the test's predictive capacity and evaluate it across the different domains, allowing for the identification of specific difficulty profiles and determining which domain(s) underlie the difficulties observed in each child.

Despite these limitations, we consider that Prelectocat has the potential to be implemented as a universal screening instrument at the end of the final year of Preschool Education. Its use would enable the planning of personalised support and appropriate monitoring to ensure optimal reading and writing development, promote academic success and support educational inclusion.

AUTHOR CONTRIBUTIONS

Anna López-Sala: Project administration; Conceptualisation; Writing – original draft; Writing – review and editing; Research; Methodology; Resources; Supervision; Validation; Visualisation.

Mari Aguilera: Conceptualisation; Writing – original draft; Writing – review and editing; Research; Methodology; Visualisation.

Nadia Ahufinger: Conceptualisation; Writing – original draft; Writing – review and editing; Research; Methodology; Visualisation.

Cristina Martínez-García: Conceptualisation; Writing – original draft; Writing – review and editing; Research; Methodology; Visualisation.

Roser Colomé-Roura: Conceptualisation; Writing – review and editing; Resources; Validation; Visualisation.

Ismael Perálvarez: Formal analysis; Data curation; Software.

Sol Balsells: Formal analysis; Data curation; Methodology; Software; Visualisation.

Daniel Cuadras: Formal analysis; Data curation; Methodology; Software; Visualisation.

Llorenç Andreu: Conceptualisation; Writing – original draft; Writing – review and editing; Research; Methodology; Resources; Supervision; Validation; Visualisation; Funding acquisition.

ETHICAL STATEMENT

This study was approved by the Ethics Committee of the Universitat Oberta de Catalunya (UOC). It was also conducted in accordance with the ethical standards set out in the 1964 Declaration of Helsinki and its subsequent amendments (WMA. World Medical Association, 2013).

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NOTE

[1]The Prelectocal assessment tool is stored in the OSFHome data repository. It includes the test record sheet and instructions (Appendix 1), as well as the interpretation and scoring sheet (Appendix 2). Available at: López-Sala, A. et al. (2025, June 12). *Prelectocat. Catalan screening tool for early detection of reading difficulties in childhood.* https://doi.org/10.17605/OSF.IO/3GPVU

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