

THE RELATION BETWEEN PARENTS' CHARACTERISTICS/PRACTICES AND CHILDREN'S EARLY LITERACY SKILLS DURING THE COVID-19 PANDEMICS

Jerusa Fumagalli de Salles, Gabriella Koltermann, & Érica Prates Krás Borges

Institute of Psychology, Graduate Program in Psychology, Federal University of Rio Grande do Sul (Brazil)

Abstract

Relations between parental variables and children's early literacy skills allow for preventive interventions and effective public policies in health and education. The present study aims to investigate the relation between parents' characteristics (parental literacy expectations and attitudes, number of books at home) and parents' practices (formal and informal literacy activities - shared book reading - and parental involvement) and children's early literacy skills (word/pseudoword reading, spelling, knowledge of the alphabet, oral language) during the Covid-19 pandemic. Thirty-five first grade children aged between 6 and 7 years old ($M = 6.29$; $SD = 0.45$) from private Brazilian schools took part in this study. The number of books at home predicted 16% of the variance in shared book reading frequency between parents and children. Moderate positive correlations were found between shared book reading frequency and phonological awareness and oral language performances. Parental involvement was strongly correlated with pseudoword reading performance, word/pseudoword spelling, letter writing and phonological awareness. Shared book reading explained 16.5% of the variance in phonological awareness performance and 11.8% in oral language. Parental involvement explained 28% of the variance of children's performance in phonological awareness. Family practices, especially shared book reading and parental involvement in children's learning processes seem to promote phonological awareness and oral language skills development during a period of school closures and remote teaching/learning. These metalinguistic and oral language skills are important predictors of success in learning to read and spelling and can therefore be promoted through parenting practices.

Keywords: *Parenting, reading, spelling, children, pandemic.*

1. Introduction

Contributions of the family environment to children's specific predictors of linguistic, reading and spelling skills are commonly referred to as home literacy environment (HLE; Niklas & Schneider, 2013). The characterization of the components of family literacy environment is still not unanimous and different components of this construct tend to associate in different ways with cognitive-linguistic outcomes in childhood, depending on the family's socioeconomic status (SES), the school context, the assessed outcome, and the child's age, for instance (Niklas et al., 2021). The frequency of enriching activities which parents get involved with their children, such as book reading, number or letter practice and sharing observations about the world, is associated with parents' endorsement to statements related to early education. Although parents' attitudes result in actions such as getting involved in enriching activities with their children, they may be limited by the socioeconomic context, showing complex relations among these variables (Hendry et al., 2022). Opportunities for children to explore and learn at home, including the availability of books, toys and materials to play with, is one of the pillars for children's early development. Children's books available at home are likely to promote stimulating interaction between the caregiver and the child, developing literacy skills (Manu et al., 2019).

Family factors have the potential to promote learning in childhood. Relations between parental variables and children's early literacy skills promote preventive interventions and effective public policies in health and education. During the Covid-19 pandemic and school closure, the participation of families was even more decisive in order to make children follow their reading and writing learning process (Laguna et al., 2021).

2. Objectives

The present study aims to investigate the relation between parents' characteristics (socioeconomic status – SES -, components of home literacy environment – HLE-, parental literacy expectations and attitudes, number of books at home) and parents' practices (formal and informal literacy activities - shared book reading - and parental involvement) and children's early literacy skills (word/pseudoword reading, spelling, knowledge of the alphabet, oral language) during the Covid-19 pandemic.

3. Methods

Thirty-five first graders aged between 6 and 7 years old ($M = 6.29$; $SD = 0.45$) from private Brazilian schools took part in this study. All of them were Brazilian Portuguese speakers, with no record of neurodevelopment alterations or uncorrected visual/auditory impairments (reported by parents/guardians). The access to the Internet and computer to participate in the survey were also considered as inclusion criteria in the study. Due to the Covid-19 pandemic, all data collection was carried out remotely and online in 2021 (May to October), partly synchronous and partly asynchronous. The parents answered questionnaires about socioeconomic status - SES and components of the home literacy environment - HLE). Children was assessed through tasks about emergent writing (write the alphabet letters; spontaneous word spelling), alphabet knowledge (letter names and sounds), expressive vocabulary (naming figures), phonological awareness (alliteration, syllabic manipulation) and written language (word/pseudoword reading and spelling). The whole assessment with the children was carried out on a videoconference of about 50 minutes. Spearman correlations were performed within and between family and children variables. Subsequently, Multiple Linear Regression analyses were carried out with the previously correlated variables in order to estimate the impact of family variables on children's performance.

4. Results

The number of books and the socioeconomic status (SES) were associated with the knowledge of parents/guardians of what is expected for the development of literacy before the child starts first grade. The number of books at home predicted 16% of the variance in shared book reading frequency between parents and children. The number of books seems to be a variable that promotes the highest frequency of shared reading between parents-children, and vice versa. Moderate positive correlations were found between shared book reading frequency and phonological awareness and oral language performances. Parental involvement was strongly correlated with pseudoword reading performance, word/pseudoword spelling, letter writing and phonological awareness tasks. Phonological processing skills, such as phonological awareness and reading of pseudowords (i.e., the phonological route of reading) and spelling (spelling of letters, spontaneous writing and words/pseudowords spelling) were the most influenced by family factors, mainly socioeconomic status (SES) and family practices. Shared book reading explained 16.5% of the variance in phonological awareness performance and 11.8% in oral language. Parental involvement explained 28% of the variance of children's performance in phonological awareness.

5. Discussion and conclusions

Family practices, especially shared reading books and parental involvement in children's learning processes seem to promote phonological awareness and oral language skills development during a period of school closures and remote teaching/learning. These metalinguistic and oral language skills are important predictors of success in learning to read and spelling and can therefore be promoted through parenting practices.

It is important to remember that these children have been through pre-school as Emergency Remote Teaching and were starting their literacy process during the Covid-19 pandemic (year 2021), having their exposure to environments outside the family setting limited. The effects of this situation may have been maximized due to the pandemic setting and the closure of schools and Emergency Remote Teaching - ERT (Laguna et al., 2021; Panaoura, 2020). Especially in the Covid-19 pandemic setting, a study (Bao et al., 2020) demonstrated that daily book reading in the family context would reduce by 10.5% the loss of literacy skills during the school closure period (Bao et al., 2020). Evidence from previous studies have already suggested that shared book reading between parents and children supports a number of cognitive-linguistic skills, such as phonological awareness (Grolig, 2020).

A meta-analysis review (Bondt, Willenberg & Bus, 2020) which gathered studies that investigated distribution programs of family books concluded that they promote a literacy family environment (effect size = 0.31). The participation of the family in a book donation program has a significant effect on children's behavior (interest in reading) and literacy skills (effect size = 0.29). The authors of the meta-analysis study support the theory that the early start of book reading promoted by book distribution programs brings about a "snowball effect", i.e., they foster children's early literacy skills which, presumably, increase children's interest in book reading and may encourage parents to keep book reading routines within the family context (Bondt et al., 2020). Interventions that provide access to books and promote positive family practices, such as shared book reading, are necessary for the development of reading and spelling skills in children. This study presents some limitations, such as a small sample (n = 35, especially in the parental involvement variable, n = 17), limiting the statistical analyses.

References

- Bao, X., Qu, H., Zhang, R., & Hogan, T. P. (2020). Modeling reading ability gain in kindergarten children during COVID-19 school closures. *International Journal of Environmental Research and Public Health*, *17*(17), 6371.
- Bondt, M., Willenberg, I. A., & Bus, A. G. (2020). Do book giveaway programs promote the home literacy environment and children's literacy-related behavior and skills? *Review of Educational Research*, *90*(3), 349-375.
- Grolog, L. (2020). Shared storybook reading and oral language development: A bioecological perspective. *Frontiers in Psychology*, *11*, 1818.
- Hendry, A., Gibson, S. P., Davies, C., Gliga, T., McGillion, M., & Gonzalez-Gomez, N. (2022). Not all babies are in the same boat: Exploring the effects of socioeconomic status, parental attitudes, and activities during the 2020 COVID-19 pandemic on early Executive Functions. *Infancy*, *27*(3), 555-581.
- Laguna, T. F. D. S., Hermanns, T., Silva, A. C. P. D., Rodrigues, L. N., & Abaid, J. L. W. (2021). Educação remota: desafios de pais ensinantes na pandemia. *Revista Brasileira de Saúde Materno Infantil*, *21*, 393-401.
- Manu, A., Ewerling, F., Barros, A. J., & Victora, C. G. (2019). Association between availability of children's book and the literacy-numeracy skills of children aged 36 to 59 months: secondary analysis of the UNICEF Multiple-Indicator Cluster Surveys covering 35 countries. *Journal of global health*, *9*(1), 010403.
- Niklas, F., & Schneider, W. (2013). Home literacy environment and the beginning of reading and spelling. *Contemporary educational psychology*, *38*(1), 40-50.
- Niklas, F., Cöhrssen, C., Lehrl, S., & Napoli, A. R. (2021). Editorial: Children's Competencies Development in the Home Learning Environment. *Frontiers in Psychology*, *12*, 706360.
- Panaoura, R. (2020). Parental involvement in children's mathematics learning before and during the period of the COVID-19. *Social Education Research*, *2*(1), 65-74.