

# Letters That Preschoolers Write Most Often

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## Abstract

This study focuses on analyzing letter writing in preschool-aged children, with an emphasis on gender differences and the relationship between letter formation and the ability to write one's own name. The research was conducted with the aim of supporting the achievement of performance standards in letter recognition. The theoretical basis is the concept of emergent literacy, according to which knowledge of letters is a significant predictor of later reading and writing skills. The study had a quantitative design. The research sample consisted of 199 children aged 3 to 6 years attending kindergartens in Slovakia. Data were collected using an early writing test and analyzed via quantitative content analysis. The results showed that children most frequently produced the letters A, O, I, M, N, K, E, while letters such as X, W, Q, Y occurred rarely. These findings highlight the importance of graphomotor simplicity and the frequency of letter occurrence in the linguistic environment. A key finding is the statistically significant difference between children capable of writing their names and those who lack this ability. Children who wrote their names achieved a higher average number of written letters compared to the others. The results suggest that writing one's own name can serve as an indicator of the level of pre-reading skills. The study contributes to our understanding of the early development of written language in the Slovak context and has practical implications for educational assessment. A limitation is the quantitative approach and sample size; future research should also consider qualitative aspects of writing.

*Keywords:* preschool-aged children, qualitative content analysis, early written expressions, writing letters, writing proper names

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## **Introduction**

The aim of this study is to present the results of research on letter writing among preschool-aged children, with a focus on differences between girls and boys and the relationship between letter writing and writing one's own name. The study was developed as part of a project funded by the Cultural and Educational Grant Agency of the Slovak Republic titled "Games with Letters in Preschool Education." Development of methodological materials integrating educational areas (No. 001UMB-4/2025). The rationale for the project and this study stems from the performance standard in the State Educational Program for Pre-primary Education in Kindergartens (2022, p. 35): Identifies some letters of the alphabet, which is located in the educational area Language and Communication, in the sub-area Written Language – Understanding the formal characteristics of written language. Research-based knowledge can support effective pedagogical support for the development of children's written language as early as preschool age.

## **Literature Review**

During this stage of development, children gain experience with written language through contact with print and, accordingly, acquire varying knowledge of letters and how they are used in words and sentences. They begin to use written language for practical communication.

They gradually master the letters of the alphabet in accordance with their individual aptitudes, needs, and interests, as well as depending on the stimuli and demands of the environment in which they live (Lipnická, 2009). Children's early written expressions demonstrate knowledge of the letters of the alphabet as well as letter-writing skills. Knowledge of the alphabet—that is, knowledge of letter names—indicates emerging reading skills, while knowledge of letter shapes indicates emerging orthographic skills (Whitehurst & Lonigan, 1998). Alphabet knowledge upon entering school is one of the strongest predictors of conventional writing skills (Hooper et al., 2010) and long-term academic success (Stevenson & Newman, 1986).

Several researchers have focused on children's ability to write letters of the alphabet. Lewis & Lewis (1964) found that at the beginning of first grade, children wrote some letters easily (L, O, I, V, C) and others with relative difficulty (Q, Z, U, J, K). Puranik et al. (2013) found that the letters C, E, S, I, O, V, X were relatively easy for first-grade children, while the letters Q, Z, G, D, N, J, K, U were the most difficult. Other researchers have studied letter writing in preschool-aged children. Ritchey (2008) described the ability of kindergarten children to write uppercase and lowercase letters of the alphabet. The uppercase letters A, O, X, L were the easiest for children to write, whereas K, Q, C, S, Z, G were more difficult for them. Worden and Boettcher (1990) studied letter writing in children aged 4 to 7 years. Four-year-olds found it easiest to write O, A, H, L, T, and I, while five-year-olds found it easiest to write O, A, T, X, C, F. Children in both age groups had difficulty writing the letters D, G, J, Y, Z. Puranik et al. (2013) found that preschool-aged children found it easiest to write ten letters: O, L, A, B, X, T, H, I, E, P, while they found ten letters more difficult to write: J, K, Z, G, Q, V, U, Y, R, N. They also found that girls' overall scores in letter writing were higher than those of boys.

Children most often write letters that are part of their own names. A child's name is often their first written word. The ability to write names is a good indicator of print and alphabet knowledge in preschool-aged children (Puranik et al., 2011). Writing names correlates with knowledge of the alphabet. The letters of names account for approximately 40% of children's randomly written characters (Bloodgood, 1999). Welsch et al. (2003) also noted this based on

their research. They stated verbatim that name-writing representations predominantly reflect knowledge related to print. Welsch et al. (2003) confirmed that children's knowledge of the alphabet and print concepts accounted for 36% of the variance in name-writing outcomes. Puranik and Lonigan (2011) demonstrated through their research findings that knowledge of letters was strongly associated with children's ability to write their names. Name writing was uniquely associated with phonological awareness even after accounting for knowledge of letter sounds. Drouin and Harmon (2009) found that although name writing was related to letter knowledge (letter name and sound), there were discrepancies between their knowledge of name writing and their knowledge of specific letters in their names. This finding led to the conclusion that writing names did not provide beginning writers with any particular advantage in terms of alphabet knowledge. Writing names may thus reflect mechanical knowledge of letters rather than conceptual knowledge of letters.

### Research Problem and Research Questions

In our study, we focused on the graphomotor skill of writing letters of the alphabet without assessing the ability to read what was written. Specifically, we were interested in which letters of the alphabet (without diacritics) children write most frequently and whether they write mainly those letters that also appear in their own names.

Through our research, we therefore answered two research questions:

- RQ1: Which letters appear most frequently in the written expressions of preschool-aged children?
- RQ2: What is the relationship between the letters they know how to write and the writing of their own names?

### Research Methods and Ethics

The research was conducted using a quantitative approach. The research design was developed and approved as part of a scientific project (KEGA No. 001UMB-4/2025). The research sample consisted of 199 preschool-aged children between 3 and 6 years old (mean age = 5.05 years, SD = 0.928, median = 5 years; 100 girls and 99 boys). All attended kindergartens in various regions of Slovakia.

**Table 1**

*Age Distribution of Children in the Study Sample*

| Age of the children | N   | %      |
|---------------------|-----|--------|
| 3                   | 15  | 7.5 %  |
| 4                   | 32  | 16 %   |
| 5                   | 85  | 42.5 % |
| 6                   | 63  | 31,5 % |
| 7                   | 4   | 2 %    |
| Not specified       | 1   | 0.5 %  |
| Total               | 199 | 100%   |

Source: Own work

Age and region were the stratification variables for the children in the research sample. The selection of children was based on availability, depending on the teachers' willingness to participate in the testing and also on the informed consent of the kindergarten director and the children's parents regarding the research procedure.

The data collection method (October, November 2025) was a test of the children's initial writing skills, specifically the second item from the Test of Children's Readiness for Writing (Lipnická, 2009, p. 45). The instructions for the child were:

Try to write your name and letters or other words you know how to write on this paper. You can also write the names of your parents, siblings, or friends. You can also draw your name in a different way, just as you know how.

The option to draw was added so that children who do not know letters and cannot write would feel a sense of accomplishment. The children were given as much time as needed to complete the task.

The assessment was conducted individually by the classroom teacher, whom the child knew well and trusted. After the child finished writing or drawing, the teacher asked them to read what they had written or to describe what they had created on the paper. The teacher wrote down what the child said about their written or drawn work on the back of the paper, along with the date, the child's name, and age.

The data analysis method (January, February, March 2026) was quantitative content analysis of the children's written work on A4-sized paper using an online coding system. Following the coding manual developed, the children's written work was coded independently by two researchers involved in the scientific project. This study presents selected results of the quantitative content analysis, specifically data on the frequency of letters in the written expressions of the group of children, including by gender and the relationship between writing letters and writing their own names.

Research ethics were ensured throughout the process of data collection, processing, and evaluation. The use of the research tool was an integral part of the preparation and implementation of the research strategy, particularly given the involvement of multiple teachers in data collection. Emphasis was placed on the uniformity of procedures to ensure maximum objectivity and comparability of the collected data. To this end, a manual for testing children was developed, which served as a methodological guide for preschool teachers. The testing was conducted by qualified teachers who knew the children from the early childhood education setting, thereby strengthening trust and eliminating the influence of an outsider on the children's results. Emphasis was placed on ethical principles of communication, respect for the child's individuality, and maintaining a positive emotional atmosphere.

A key principle of the research was the informed consent of kindergarten directors and the children's parents, who were transparently informed about the objectives, process, and use of the research results. At the same time, the anonymity of all participants was guaranteed, as was the option to withdraw at any time without negative consequences. Special attention was paid to the protection of children as a vulnerable group, which required a heightened sense of ethical responsibility on the part of the researchers. The testing process itself respected the principles of the child's well-being, and the goal was not to intrude on their privacy or disrupt their psychological well-being. The children wrote and drew voluntarily, in the scope and form they

themselves chose. The researchers accepted their written work as authentic products, without manipulation or interpretation beyond their intended meaning. During data processing, complete transcripts of the interviews were preserved, ensuring the fidelity and authenticity of the data. The analysis was conducted using open coding with the participation of multiple evaluators, which contributed to increasing the reliability of the interpretations.

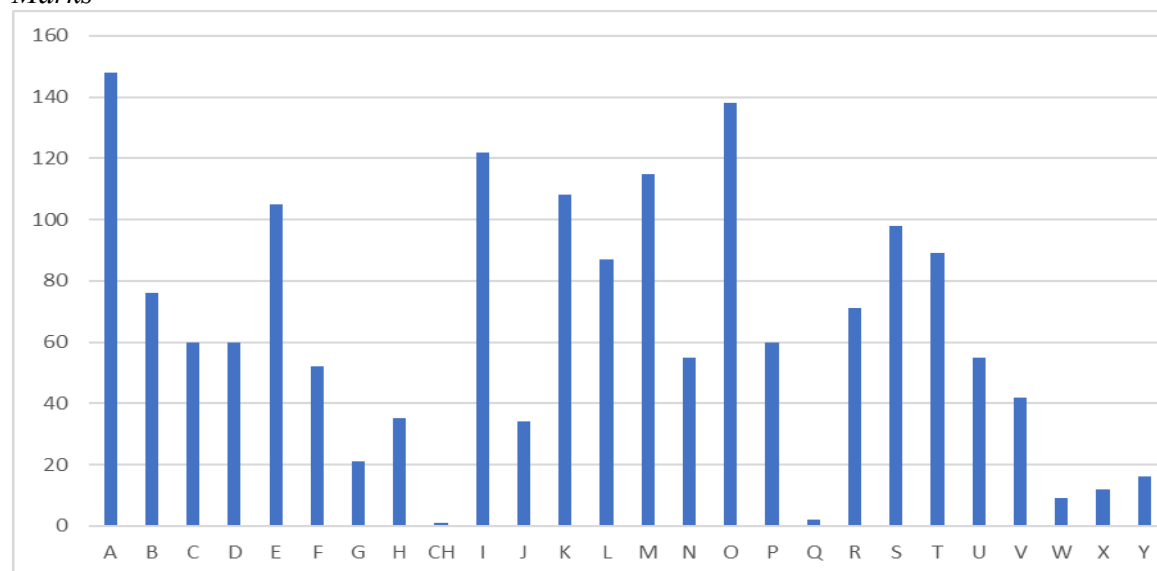
The ethics of presenting the results were based on transparency, accuracy, and respect for the children's anonymity. The findings were grounded in rigorous qualitative analysis and an inductive approach, thereby avoiding unethical generalizations or speculative conclusions. The entire research was conducted with an emphasis on protecting the dignity, rights, and psychological well-being of the child participants, with every step reflecting the principles of professional integrity and a responsible scientific approach.

## Results

### The Letters That Appeared Most Frequently in the Children's Written Work

**Figure 1**

*Number of Children in the Sample Who Write Letters of the Alphabet Without Diacritical Marks*

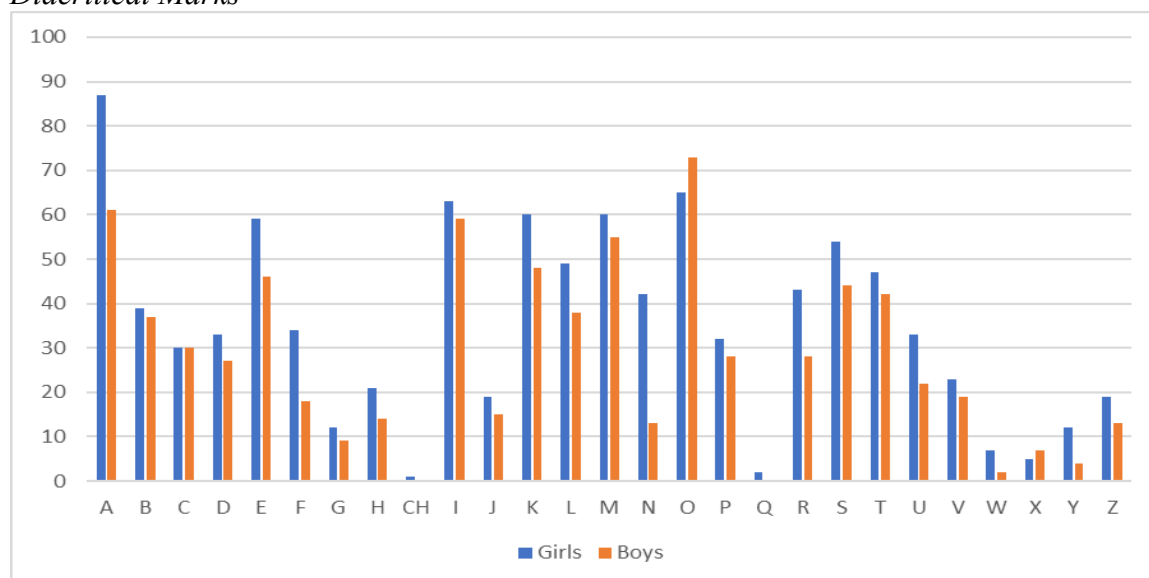


Source: Own work

More than half of all the children most frequently wrote the letters A (74%), O (69%), I (61%), M (58%), N (58%), K (54%), and E (53%). More than 30% of them wrote the letters S (49%), T (45%), L (44%), B (38%), R (36%), C, D, and P (30%). The other letters of the alphabet appeared less frequently in the children's written work: N, U (28%), V (21%), J (17%), Z (16%), Y (8%), X (6%), W (5%), and, very rarely, the letters CH and Q (1%).

**Figure 2**

*Number of Girls and Boys in the Sample Who Write Letters of the Alphabet Without Diacritical Marks*



Source: Own work

More girls wrote letters (951 in total) than boys (752 in total). On average, girls wrote 10 letters and boys wrote 8 letters. The exception was the letter O, which was written more often by boys.

- More than half of the girls in the sample wrote the following letters:  
A (87%), O (65%), I (63%), K, M (60%), E (59%), S (54%).
- More than half of the boys in the sample wrote the letters:  
O (73.7%), A (61.6%), I (59.6%), M (55.6%).
- More than 30% of the girls wrote the letters:  
L (49%), T (47%), R (43%), N (42%), B (39%), D, U (33%), F (34%), P (32%), C (30%).
- More than 30% of the boys wrote the letters:  
K (47.5%), E (46.5%), S (44.4%), T (42.4%), L (38.4%), B (37.4%), C (30.3%).
- Girls wrote the other letters less frequently:  
V (23%), H (21%), J, Z (19%), G, Y (12%), W (7%), X (5%).
- Boys wrote the following letters less frequently:  
R, P (28.3%), D (27.3%), U (22.2%), V (19.2%), F (18.2%), J (15.2%), H (14.1%), N, Z (13.1%), G (9.1%), X (7.1%).
- Girls wrote the following letters only rarely:  
Q (2%) and CH (1%).
- Boys wrote the following letters only rarely:  
Y (4%), W (2%), Q, CH (0%).

### **The Connection Between the Letters Children Can Write and Writing Their Own Names**

Children who can write their names can also write more letters.

Comparison of two groups (those who can and cannot write their names) by number of letters:

Group that can write their names: N = 128, M = 10.68 letters (SD = 4.87)

Group that cannot write their name: N = 71, M = 4.66 letters (SD = 4.47)

There is a statistically significant difference between them –  $t(197) = 8.590$ ,  $p = 0.000$ .

The data indicate a significant relationship between children's ability to write their own names and the level of their graphomotor and pre-literacy skills, as measured by the number of letters they are able to produce. When comparing two groups of children—those who can write their names and those who cannot—a statistically significant difference was found in the average number of letters produced. Children able to write their name ( $N = 128$ ) achieved a higher average number of letters ( $M = 10.68$ ;  $SD = 4.87$ ) compared to children who cannot write their name ( $N = 71$ ;  $M = 4.66$ ;  $SD = 4.47$ ). This difference was statistically significant at a high level of significance ( $t(197) = 8.590$ ;  $p < 0.001$ ). The results suggest that the ability to write one's own name may serve as an indicator of more broadly developed letter-handling skills. Children who can write their names likely possess a larger repertoire of graphic symbols (letters), which may reflect a higher level of phonological awareness, visual-motor coordination, and experience with the written form of language. From a methodological perspective, however, the question remains open as to how best to operationalize the variable "letter knowledge." The mere number of letters written may not fully capture the quality of this knowledge (e.g., distinguishing between vowels and consonants or the accuracy of graphemes). An alternative approach could be to analyze the letters contained in the child's name and compare them with the total repertoire of letters produced, or to focus exclusively on the group of children capable of writing their name and examine the relationship between the length of the name and the number of letters mastered.

## **Discussion**

The findings of our research are consistent with previous empirical studies focusing on letter writing. The prevalence of the letters A, O, I, and L in the written expressions of preschool-aged children corresponds to the findings of several authors (Lewis & Lewis, 1964; Puranik et al., 2013; Ritchey, 2008) who have repeatedly identified these letters as being graphomotorically simpler. The common denominator of these letters is their visual simplicity, symmetry, and lower demands on fine motor coordination (e.g., circular or straight strokes). Conversely, the lower frequency of letters such as Q, X, W, and Y in our dataset is consistent with findings regarding their greater difficulty, which may stem from a more complex graphic structure or lower frequency of occurrence in children's everyday language environment. In this context, it appears that the acquisition of letters is not random but is governed by a combination of graphomotor and frequency factors.

An interesting extension of existing knowledge, however, is the finding of an increased frequency of certain consonants (e.g., M, N, K), which, according to foreign studies, do not always rank among the simplest letters. This difference can be interpreted in a cultural-linguistic context—specifically based on the frequency of these letters in Slovak names and words with which children come into contact. This confirms the importance of environmental stimuli, as Lipnická (2009) has already pointed out, and at the same time supplements the predominantly Anglo-Saxon research framework with local specifics.

Regarding gender differences, previous research (Puranik et al., 2013) points to a higher level of letter writing among girls. Although the presented results do not explicitly include detailed statistics on gender differences, it is appropriate to interpret them in the context of the literature, which often explains these differences by the faster development of fine motor skills, a higher degree of verbal activities, and greater engagement of girls in language activities. At the same time, however, it is important to emphasize that these are differences in means and not deterministic differences, with individual variability remaining high. For future research, it

would be beneficial to analyze these differences in greater detail, for example in relation to letter type (vowels vs. consonants) or the quality of graphomotor execution.

A key contribution of the study is the analysis of the relationship between the ability to write one's own name and the overall level of letter production. The results unequivocally confirm that children capable of writing their own names produce a significantly greater number of letters than children who lack this ability. This conclusion is consistent with research (Bloodgood, 1999; Welsch et al., 2003) pointing to a strong correlation between writing one's own name and knowledge of the alphabet. On the other hand, our findings must also be interpreted in light of critical conclusions (Drouin & Harmon, 2009), according to which writing one's own name may, to some extent, be a mechanical skill without a deeper understanding of the principles of written language.

In this context, our results can be understood as supporting the "indicator" function of writing one's own name, but not as unequivocal evidence of conceptual knowledge of letters. The ability to write one's own name likely reflects a combination of factors—repeated exposure, motivation, visual memory, and, to some extent, phonological awareness. However, the significant difference in the number of letters written suggests that this is a useful diagnostic tool that may signal a broader level of pre-reading competencies.

In conclusion, the study's results confirm continuity with previous research while also providing new insights within the context of the Slovak language environment. They emphasize the importance of the graphomotor simplicity of letters, environmental influences, and personal relevance (the child's name) in the acquisition of written language. The ability to write one's name appears to be a practical and sensitive indicator of the level of pre-reading skills; however, its interpretation requires caution and should be supplemented by more comprehensive diagnostic approaches.

### **Limitations of the Study**

From a methodological perspective, the study also raises an important question regarding the operationalization of the concept of "letter knowledge." Although the use of a quantitative indicator (number of letters written) allows for simple comparisons, it does not capture qualitative aspects such as shape accuracy, grapheme stability, or their phonological assignment. In line with current research trends in the field of early literacy, it would therefore be appropriate to supplement the assessment with multidimensional indicators, such as error analysis, letter category discrimination, or the relationship between letter production and recognition. A limitation of the study is the restricted selection and small number of children in the research sample. Furthermore, the relationship between writing letters and names in relation to the children's age was not analyzed.

### **Conclusion**

The contribution of this scientific study can be articulated on several interrelated levels. On a theoretical level, the study expands the body of knowledge regarding the early acquisition of written language in preschool-aged children. It confirms that the acquisition of letters is not random but is influenced by a combination of graphomotor difficulty, the frequency of letters in the language, and personal relevance to the child (especially in connection with their own name). At the same time, it supplements predominantly foreign (especially Anglophone)



research with findings from the Slovak linguistic and cultural environment, thereby contributing to a better understanding of the specifics of emergent literacy in local conditions.

The empirical contribution lies in identifying the specific repertoire of letters that preschool-aged children most frequently produce, as well as in demonstrating a statistically significant relationship between the ability to write one's own name and the overall level of letter production. The study thus provides evidence that writing one's name can serve as a sensitive indicator of broader pre-literacy skills. The findings also suggest that children who can write their names possess more developed graphomotor, visual-perceptual, and, to some extent, phonological abilities.

The methodological contribution of this work lies in opening a discussion on the operationalization of the concept of "letter knowledge." The study highlights the limitations of a purely quantitative approach (the number of letters written) and suggests the need for a more comprehensive assessment that would also include qualitative aspects (e.g., the accuracy of graphemes, their differentiation, or their connection to the phonetic level of language). At the same time, it offers possible directions for future research, such as an analysis of the relationship between the letters in a child's name and their overall written repertoire.

The practical (pedagogical) contribution is particularly significant. The study's results have direct applicability in early childhood education, especially in relation to meeting the performance standard "identifies some letters of the alphabet." The ability to write one's own name proves to be a simple, quick, and practically useful diagnostic tool for preschool teachers, which can help identify children's pre-literacy competence levels and tailor pedagogical support. At the same time, the study provides an empirical basis for the creation of methodological materials and didactic activities (e.g., within the "Games with Letters" project) that can specifically support the development of written language.

Finally, the study's contribution can also be seen in its integrative nature—it connects the areas of graphomotor skills, language development, and emergent literacy, thereby supporting a more comprehensive view of child development in the preschool years. Despite the identified limitations, the study thus represents a relevant contribution to scientific knowledge and pedagogical practice and creates space for further research in this area.

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## References

- Bloodgood, J. W. (1999). What's in a name? Children's name writing and literacy acquisition. *Reading Research Quarterly*, 34(3), 342–367.
- Drouin, M., & Harmon, J. (2009). Name writing and letter knowledge in preschoolers: Incongruities in skills and the usefulness of name writing as a developmental indicator. *Early Childhood Research Quarterly*, 24(3), 263–270.
- Hooper, S. R., Roberts, J. E., Nelson, L., Zeisel, S., & Fannin, D. K. (2010). Preschool predictors of narrative writing skills in elementary school children. *School Psychology Quarterly*, 25(1), 68–81.
- Lewis, E. R., & Lewis, H. P. (1964). Which manuscript letters are hard for first graders? *Elementary English*, 41(3), 855–858.
- Lipnická, M. (2009). Počiatkové čítanie a písanie detí predškolského veku [Early Reading and Writing for Preschoolers]. Rokus.
- Ministry of Education, Research, Development, and Youth of the Slovak Republic. Štátny vzdelávací program pre predprimárne vzdelávanie v materských školách (2022) [State Curriculum for Pre-Primary Education in Preschools (2022)]. <https://www.minedu.sk/data/att/5ff/36555.318e99.pdf>
- Puranik, C. S., & Lonigan, C. (2011). Name-writing proficiency, not length of name, is associated with preschool children's emergent literacy skills. *Early Child Res Q*, 27(2), 284–294.
- Puranik, C. S., Lonigan, C., & Kim, Y. (2011). Contributions of emergent literacy skills to name writing, letter writing, and spelling in preschool children. *Early Childhood Research Quarterly*, 26(4), 465–474.
- Puranik, C. S., Petscher, Y., & Lonigan, C. (2013). Dimensionality and reliability of letter writing in 3- to 5-year-old preschool children. *Learning and Individual Differences*, 28(1), 133–141.
- Ritchey, K. D. (2008). The building blocks of writing: Learning to write letters and spell words. *Springer Science+Business Media B.V*, 21(1–2), 27–47.
- Stevenson, H. W., & Newman, R. S. (1986). Long-term prediction of achievement and attitudes in mathematics and reading. *Child Development*, 57(3), 646–659.
- Welsch, J., Sullivan, A., & Justice, L. (2003). That's my letter! What preschoolers' name writing representations tell us about emergent literacy knowledge. *Journal of Literacy Research*, 35(2), 757–776.
- Whitehurst, G., & Lonigan, C. (1998). Child Development and Emergent Literacy. *Child Development*, 69(3), 848–872.

Worden, P., & Boettcher, W. (1990). Young children's acquisition of alphabet knowledge.  
*Journal of Literacy Research, 23*(3), 277–295.

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