

Introduction to the 2021 special issue for the Association for Reading and Writing in Asia

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Increasingly, there is a push for greater linguistic diversity in the empirical investigation and publication of topics in reading development (e.g., Alves et al., 2020; Blasi et al., 2022; Daniels & Share, 2018; Share, 2020, 2021), which is in part driven by two observations in the literature. First, the majority of influential literacy theories and frameworks such as the Simple View of Reading (Gough & Tunmer, 1986) were developed to reference reading processes in alphabetic languages. While they serve as good starting points in our understanding of language-universal reading processes across different languages (Verhoeven & Perfetti, 2017), these frameworks are more limited in explaining language-specific reading processes in other languages, particularly non-alphabetic ones (e.g., Share 2014; Winskel & Padakannaya, 2014). Second, researchers recognize the bias towards English reading in the literature on reading research (e.g., Arfé 2020; Share, 2008, 2021). However, because of the many anomalies in its sound-spelling correspondences, findings in English might not be altogether generalizable and applicable to other languages (e.g., Frost et al., 1987).

Landerl et al. (2022) thus points out the necessity of bringing greater diversity to reading research as it "explicitly tests the limits of reading theories that were developed for Western alphabets" (p. 120), and provides the impetus for new directions in the field. This is especially relevant in the Asian context considering the multitude of languages and scripts in the region (McBride et al., 2022), many of which are not of an alphabetic system.

Therefore, in this special issue, we bring together nine papers that were presented at the fifth annual conference of the Association for Reading and Writing in Asia (ARWA) conference. The contributions to this issue can be broadly categorized into three categories in terms of their themes. The first is the extension of examination of reading topics to Chinese, a non-alphabetic language that is receiving greater cover-

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age in the literature. The three papers featured delve into issues surrounding theory and measurement of word recognition and reading fluency constructs. The focus of the second cluster of four papers is on reading in bilingual, cross-scriptal, and second-language contexts in Asia. In their examination of cognitive and sociocultural aspects related to reading, these studies discuss topics such as language proficiency which figure as potential moderator variables in the explanation of reading among children who read in two or more languages/scripts. In the final group of two papers in this issue, empirical investigations of reading in unique contexts, namely, ADHD and deaf children who read in Asian languages are presented and discussed along with considerations such as language characteristics and culture.

Chinese reading

In the first paper, Yang et al. examined reading single-character and two-character words in Chinese. By means of theoretical explanations, citations of multiple empirical sources, as well an outline of instructional implications, the authors set up a correlational design to test their hypothesis that different processes underlie reading of these two types of characters in Chinese. Concurrent and longitudinal analyses of young kindergartener's performance on a large battery of component Chinese reading skills were carried out and findings from Generalized Estimating Equations (GEE) analyses supported the authors' hypothesis, suggesting that a wider range of skills are invoked in reading two-character words as compared to single-character words. Specific findings were discussed with regard to reading models in Chinese and types of tasks used to assess different reading skills.

In the second paper by Xu and Liu, body-object interactions (BOI) ratings and their relations to word recognition, as moderated by screen time and age formed the focus of the study. The novelty in this paper presented itself in two ways, First, the scope of the study was a culmination of two bodies of research, namely that on the relation between sensorimotor representations and concept processing, and the work on how screen time impacts concept processing in children. Second, the authors also attempted to bring more clarity to the operationalization of screen time in this study in order to address potential confounding effects that were present in earlier studies. Xu and Liu employed linear mixed models using data obtained from Grades 2 and 4 Chinese children on lexical decision tasks and a variety of behavioral measures that assessed reading skills and BOIs. They found a BOI effect on word recognition and the extent of this effect was influenced by amount of screen time. The moderation effect of screen time was in turn different across age.

The third paper by Chung zoomed in on reading fluency in Chinese. The objectives of this study were two-fold. The first aim pertained to validating whether the relations prosody shared with other reading fluency dimensions and reading comprehension in alphabetic languages were extended to a tonal language such as Chinese. The second objective centered on the measurement of these relations, where two well-established prosody scales developed for English prosodic reading were used and their findings compared to examine their applicability to Chinese. To this end, ANOVAs and regression analyses were carried out to relate performance of Grade



3 and 4 children in Taiwan on the two prosodic scales to a Chinese reading comprehension task. Findings revealed consistencies in findings across the two scales and provided insights into prosodic strengths of children with strong reading skills in Chinese

Bilingual, cross-scriptal, and second language reading

In the paper by Patel et al., the specific role of phonological awareness in English and Hindi reading was examined. The authors argued that despite the large body of research that consistently shows strong within and cross-linguistic associations between phonological awareness and reading across a multitude of languages, the same could not be said for the case of the Hindi-English bilingual context, particularly among young learners. Employing multiple phonological awareness tasks that assessed the skill on different levels of processing in conjunction with other related reading skills, regression and commonality analyses were conducted to examine the common and unique effects of phonological awareness on decoding and pseudoword reading in English and Hindi, respectively, as well as across the two languages. Results were largely consistent with the literature on older children, although the impact of different levels of phonological awareness differed across the two languages. The results were discussed with regard to language proficiency and orthographic characteristics of the two languages.

The second paper by Xie et al. examined reading in the English-as-a-second-language context among middle grade children in Hong Kong. Specifically, the authors focused on the roles of morphological awareness and vocabulary on reading comprehension and the mediating roles word recognition and listening comprehension. By means of a longitudinal approach and structural equation modelling, the authors reported a full mediation of the effect of vocabulary on reading comprehension through word recognition and listening comprehension. Conversely, the contribution of morphological awareness was both indirect and direct. These results were discussed in relation to language proficiency of students.

The third paper by Bae et al. centered on understanding how morphological information of Sino-Korean compound words was accessed among adult readers and whether this access was pre- or postlexical. Capitalizing on the unique multi-script characteristic of the Korean writing system, Hye et al. used a lexical decision paradigm to compare cross-scriptal and within-scriptal priming effects within Korean (Hanja vs. Hangul). Such a design allowed the authors to examine the nature of morphemic processing while eliminating potential confounds. Findings suggested that patterns of morphological activation differed across individuals as a function of language proficiency, where morphological processing was activated prelexically for skilled readers but postlexically for less-skilled readers of Hanja. The authors discussed plausible explanations for these differences across the two groups of readers as well as how these findings could be interpreted with regard to theory and existing literature.

The fourth paper by Sun and Batra focused on the influence of sociocultural factors in children's heritage language reading outcomes and engagement, namely,



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the impact of teachers' contextualized and decontextualized questions in storybook reading on children's Chinese vocabulary and story comprehension among English-Chinese bilingual preschoolers in Singapore. Using an experimental-control design, children participated in three storybook reading sessions where they were exposed to contextualized questions, decontextualized questions, or no questions in the sessions. Latent growth models were conducted and results showed that in general, both types of questions were associated with social-cognitive engagement but contextualized questions were associated with higher vocabulary and story comprehension as compared to decontextualized questions. The authors discussed the pedagogical implications of these findings in light of the heterogeneity in Chinese proficiency among Singapore children.

Reading in unique contexts

The paper by Chen et al. focused on extending the literature on reading difficulties in 8-12-year-old Chinese children with Attention Deficit and Hyperactivity Deficit (ADHD). Using a two-step approach, the authors first compared performance on reading comprehension and executive functions (EFs) of ADHD children to that of typical readers to better understand aspects of reading that ADHD children struggle with. Following that, regression analyses are employed to examine the relative contributions of different components of EFs and language comprehension to reading comprehension with the intent to investigate the intertwining effect of linguistic ability and cognition on reading comprehension. EF difficulties found in ADHD children were explained in the context of the unique characteristics of the Chinese orthography.

Finally, the paper by Francisco and Padilla looked at multimodal literacy instruction for deaf college students in the context of Filipino Sign Language (FSL), a largely underexplored area in the reading literature. The authors used a pre-post intervention paradigm and followed five students who underwent a 10-week intervention developed based on the Scaffolded Reading Experience (SRE) framework. Qualitative analyses of multiple data sources such as interviews, performance on the Qualitative Reading Inventory test and student journals were analysed and findings revealed the benefits of utilizing a variety of modalities in instruction on reading comprehension for deaf readers.

Collectively, these studies highlighted the significant contributions of characteristics of writing systems and learner characteristics that are unique and relevant to the Asian context to reading and writing in the region. Considering the sizeable populations of people who read in Asian languages such as Chinese and Arabic (Blasi et al., 2022), we hope to see more research in these and other Asian languages that encourage the refinement and development of relevant theories and empirical investigations across languages.

On a final note in this special issue, we would like to thank all contributors and reviewers for this special issue for their time and insights. We look forward to future ARWA conferences and submissions to the special issue and invite you to join us in future conferences.



References

- Alves, R.A., Limpo, T., Joshi, R.M. (2020). Introduction to reading-writing connections: The integration roads ahead. In R.A. Alves, T. Limpo, R.M Joshi (Eds), *Reading-writing connections: Towards integrative literacy science* (pp. 1–7). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-38811-9
- Arfé, B. (2020). A Mature Science of Reading and Spelling. In: Alves, R.A., Limpo, T., Joshi, R.M. (eds) Reading-Writing Connections. In R.A. Alves, T. Limpo, R.M Joshi (Eds), Reading-Writing Connections: Towards Integrative Literacy Science (pp. 235–240). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-38811-9 15
- Blasi, D. E., Henrich, J., Adamou, E., Kemmerer, D., & Majid, A. (2022). Over-reliance on English hinders cognitive science. Trends in Cognitive Sciences, 26, 1153–1170. https://doi.org/10.1016/j. tics.2022.09.015
- Daniels, P., & Share, D. (2018). Writing system variation and its consequences for reading and dyslexia. Scientific Studies of Reading, 22, 101–116. https://doi.org/10.1080/10888438.2017.1379082
- Frost, R., Katz, L., & Bentin, S. (1987). Strategies for visual word recognition and orthographic depth: A multilingual comparison. Journal of Experimental Psychology: Human Perception and Performance, 13, 104–115.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6–10. https://doi.org/10.1177/074193258600700104
- Landerl, K., Castles, A., & Parrila, R. (2022) Cognitive precursors of reading: A cross-linguistic perspective. Scientific Studies of Reading, 26, 111–124, DOI: https://doi.org/10.1080/10888438.2021.1983820
- McBride, C., Inoue, T., Cheah, Z. R. E., & Pamei, G. (2022). Dyslexia in Asia. In G. Elbeheri & S. Lee (Eds.), *The Routledge International Handbook of Dyslexia in Education* (pp. 397–408). UK: Routledge. https://doi.org/10.4324/9781003162520-47
- Share, D. L. (2008). On the Anglocentricities of current reading research and practice: The perils of over-reliance on an "outlier" orthography. Psychological Bulletin, 134, 584–616. https://doi. org/10.1037/0033-2909.134.4.584
- Share, D. L. (2014). Alphabetism in reading science. Frontiers of Psychology, 5, 1–3. https://doi.org/10.3389/fpsyg.2014.00752
- Share, D. L. (2020). Extricating reading science from entrenched Anglocentricism, Eurocentricism, and Alphabetism and embracing global diversity: A personal journey. International Journal for Research in Learning Disabilities, 4, 3–14. https://doi.org/10.28987/ijrld.4.2.3
- Share, D. L. (2021). Is the science of reading just the science of reading English? Reading Research Quarterly, 56, S391-S402. https://doi.org/10.1002/rrq.401
- Verhoeven, L., & Perfetti, C. A. (2017). *Learning to read across languages and writing systems*. UK: Cambridge University Press.
- Winskel, H., & Padakannaya, P. (2014). South and Southeast Asian Psycholinguistics. UK: Cambridge University Press.

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