

Dr. Declan Devlin - CV
declankdevlin@gmail.com

EXPERIENCE

Postdoctoral Research Fellow in Mathematical Cognition (2026–present)
Department of Teacher Education, Norwegian University of Science and Technology

Postdoctoral Research Associate (2025)
Centre for Pain Research, University of Bath

Postdoctoral Research Associate (2023–2024)
Centre for Early Mathematics Learning, Loughborough University

EDUCATION

PhD, Mathematical Cognition (2020–2023) — Loughborough University, Department of Mathematics Education (passed viva: November 2023)

BSc, Psychology (2017–2020) — University of Sheffield (First Class; top 3 in cohort)

FUNDING / GRANTS

CMC Small Grants Scheme — *The Role of Memory Retrieval in Number Order Processing: A Multi-Design Investigation* [£9,000] (Oct. 2022–March 2024)

PUBLICATIONS

Sella, F., **Devlin, D.**, Dubinkina, N., Xenidou-Dervou, I., Reynvoet, B., & Moeller, K. (2026). The effect of verbal working memory load on number order processing: a dual-task experiment. *Acta Psychologica*. [[link](#)]

Devlin, D*, Dubinkina, N*, De Praetere, E., Sella, F., Reynvoet, B. (2026). The nature of order processing deficits in developmental dyscalculia: the influences of familiarity and the count-list. *Journal of Experimental Child Psychology*. [[link](#)]

Devlin, D., Moeller, K., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2025). The presence of the reverse distance effect depends on the familiarity of the sequences being processed. *Psychological Research*. [[link](#)]

Devlin, D., Moeller, K., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2024). Familiar sequences are processed faster than unfamiliar sequences, even when they do not match the count-list. *Cognitive Science*, 48: e13481. [[link](#)]

Devlin, D., Moeller, K., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2023). Concepts of Order: Why is ordinality processed slower and less accurately for non-consecutive sequences? *Quarterly Journal of Experimental Psychology*. [[link](#)]

Devlin, D., Moeller, K., Reynvoet, B. & Sella, F. (2022). A critical review of number order judgements and arithmetic: What do order verification tasks actually measure? *Cognitive Development*, 64, 101262. [[link](#)]

Devlin, D., Moeller, K., & Sella, F. (2022). The structure of early numeracy: Evidence from multi-factorial models. *Trends in Neuroscience and Education*, 100171. [[link](#)]

*Shared first-authorship

BOOK CHAPTERS

Krajcsi, A., Barth, H., **Devlin, D.**, Dubinkina, N., Patalano, A. (accepted). Symbolic Number Processing, chapter in *Handbook of Mathematical Cognition*, Routledge.

UNDER REVIEW

Devlin, D., Kaspersen, E., & Solstad, T. (under review). People remember dot patterns during quantity estimation tasks. [[preprint](#)]

Devlin, D. & Dubinkina, N. (under review). Non-symbolic quantity estimation is characterised by many signatures, yet we typically focus on only a few. [[preprint](#)]

Devlin, D., Dubinkina, N., & Aunio, P. (under review). Ordinality and dyscalculia: What do we actually know? [[preprint](#)]

Dubinkina, N., **Devlin, D.**, Sella, F., & Reynvoet, B. (under review). The developmental trajectory of children's strategy use on order processing tasks. [[preprint](#)]

Sella, F. & **Devlin, D.** (under review). Arithmetic is more strongly associated with numerical ordering than non-numerical ordering.

Sella, F. & **Devlin, D.** (under review). Presence, stability, and reliability of the reverse distance effect and familiarity effect in number order verification: An in-depth reanalysis of Devlin et al. (2024)

PRESENTATIONS / INVITED TALKS

Devlin, D., Kaspersen, E., Solstad, T. (2026, July). *Visual memory and numerosity estimation: Some data and some ideas*. Presented at The Mathematical Cognition Group Seminar, Centre for Mathematical Cognition, Loughborough University, UK.

Devlin, D., Dubinkina, N., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2026, June). *What do order verification tasks actually measure? A multi-strategy perspective*. Presented at The Mathematical Cognition and Learning Society, Padova, Italy.

Devlin, D*, Dubinkina, N*, De Praetere, E., Sella, F., Reynvoet, B. (2026, June). *The nature of order processing deficits in developmental dyscalculia*. Presented at Centre for Educational Neuroscience Seminar Series, University College London, UK. [[recording](#)]

Devlin, D*, Dubinkina, N*, De Praetere, E., Sella, F., Reynvoet, B. (2025, September). *The nature of order processing deficits in developmental dyscalculia*. Presented at The

Mathematical Cognition Group Seminar, Centre for Mathematical Cognition, Loughborough University, UK.

Devlin, D., Moeller, K., & Sella, F. (2023, June). *What factors comprise “early numeracy” and why does no one agree?* Presented at The Mathematical Cognition and Learning Society, Loughborough, UK.

Devlin, D., Moeller, K., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2023, June). *Order Processing is Characterised by a Familiarity Effect, Not a (Reverse) Distance Effect*. Presented at The Mathematical Cognition Group Seminar, Centre for Mathematical Cognition, Loughborough University, UK.

Devlin, D., Moeller, K., Xenidou-Dervou, I., Reynvoet, B., & Sella, F. (2023, May). *The Count-list Explanation of the Reverse Distance Effect*. Presented at the Department of Mathematics Education PhD Conference, Loughborough University, UK.

PROGRAMMING & STATISTICAL SOFTWARE

I am proficient in various coding languages and software packages. For instance, I have extensive experience conducting statistical analyses using R and creating reproducible analysis scripts using R markdown. Alongside this, I have experience with the statistical software SPSS and JASP.

I am also proficient in Python and have experience creating cognitive experiments using both PsychoPy and jsPsych. As well as conducting studies online using platforms such as Pavlovia, Prolific, and JATOS.

Some examples of my analyses and experiments can be found on my OSF page [[link](#)].

OTHER ACADEMIC ACTIVITIES

I also engage in various other academic activities. For example, I have acted as a peer-reviewer for several academic journals, including: Cognition, Cognitive Science, Developmental Psychology, and Journal of Experimental Child Psychology. As well as an external evaluator for applications to the Doctoral Programme in Cognition, Learning, Instruction and Communication at the University of Helsinki (Autumn, 2025).

I occasionally contribute to the Centre for Mathematical Cognition blog [[March, 2025](#)], which aims to provide accessible overviews of research to educators and non-academic audiences.

Links to my other academic profiles:

- [[ORCID](#)]
- [[LinkedIn](#)]
- [[Google scholar](#)]
- [[OSF](#)]