1 Introduction

Juxtaposed to the well established finding that recalling learned material, compared to merely restudying it, facilitates its long-term retention (Adesope, Trevisan, & Sundararajan, 2017; Roediger III & Karpicke, 2006a, 2006b; Rowland, 2014) stand the results of a study by Szpunar, McDermott, and Roediger (2008), which prompted a surge of interest in a somewhat different type of testing effect, wherein the recall of previously studied material seemingly potentiates the acquisition of information that is yet to be learned. This has stimulated the use of various qualifiers such as interim (Wissman, Rawson, & Pyc, 2011), interpolated (Szpunar, Khan, & Schacter, 2013), and forward (Pastötter & Bäuml, 2014; Yang, Potts, & Shanks, 2018), in order to distinguish this testing effect from the one described above, now sometimes referred to as the backward testing effect. Throughout this paper, we will use the term forward testing effect to refer to the phenomenon under investigation.

2 Methods

These are the methods.

References

- Adesope, O. O., Trevisan, D. A., & Sundararajan, N. (2017, June). Rethinking the Use of Tests: A Meta-Analysis of Practice Testing. Review of Educational Research, 87(3), 659–701. doi: 10.3102/0034654316689306
- Pastötter, B., & Bäuml, K.-H. T. (2014, April). Retrieval practice enhances new learning: the forward effect of testing. *Frontiers in Psychology*, 5. doi: 10.3389/fpsyg.2014.00286
- Roediger III, H. L., & Karpicke, J. D. (2006a). The Power of Testing Memory: Basic Research and Implications for Educational Practice. *Perspectives on Psychological Science*, 1(3), 181–210. Retrieved from http://www.jstor.org/stable/40212166
- Roediger III, H. L., & Karpicke, J. D. (2006b, March). Test-Enhanced Learning: Taking Memory Tests Improves Long-Term Retention. *Psychological Science*, 17(3), 249–255. doi: 10.1111/j.1467-9280.2006.01693.x
- Rowland, C. A. (2014). The effect of testing versus restudy on retention: A meta-analytic review of the testing effect. $Psychological\ Bulletin,\ 140(6),\ 1432-1463.$ doi: 10.1037/a0037559
- Szpunar, K. K., Khan, N. Y., & Schacter, D. L. (2013, April). Interpolated memory tests reduce mind wandering and improve learning of online lectures. *Proceedings of the National Academy of Sciences*, 110(16), 6313–6317. doi: 10.1073/pnas.1221764110
- Szpunar, K. K., McDermott, K. B., & Roediger, H. L. (2008). Testing during study insulates against the buildup of proactive interference. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 34(6), 1392–1399. doi: 10.1037/a0013082
- Wissman, K. T., Rawson, K. A., & Pyc, M. A. (2011, December). The interim test effect: Testing prior material can facilitate the learning of new material. *Psychonomic Bulletin & Review*, 18(6), 1140–1147. doi: 10.3758/s13423-011-0140-7
- Yang, C., Potts, R., & Shanks, D. R. (2018, April). Enhancing learning and retrieval of new information: a review of the forward testing effect. npj Science of Learning, 3(1), 8. doi: 10.1038/s41539-018-0024-y