

The Effects of Summer Vacation on Achievement Test Scores: A Narrative and Meta-Analytic Review

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Abstract

A review of 39 studies indicated that achievement test scores decline over summer vacation. The results of the 13 most recent studies were combined using meta-analytic procedures. The meta-analysis indicated that the summer loss equaled about one month on a grade-level equivalent scale, or one tenth of a standard deviation relative to spring test scores. **The effect of summer break was more detrimental for math than for reading and most detrimental for math computation and spelling. Also, middle-class students appeared to gain on grade-level equivalent reading recognition tests over summer while lower-class students lost on them.** There were no moderating effects for student gender or race, but the negative effect of summer did increase with increases in students' grade levels. Suggested explanations for the findings include the differential availability of opportunities to practice different academic material over summer (with reading practice more available than math practice) and differences in the material's susceptibility to memory decay (with fact- and procedure-based knowledge more easily forgotten than conceptual knowledge). **The income differences also may be related to differences in opportunities to practice and learn.** The results are examined for implications concerning summer school programs and proposals concerning school calendar changes