

Comparison of Students' Achievement: Deaf, Learning Disabled, and Deaf With a Learning Disability



Summary of Caemmerer et al., "Comparison of Students' Achievement: Deaf, Learning Disabled, and Deaf With a Learning Disability"¹

Why was this work done?

- There is a growing concern that deaf students who have a learning disability (LD) are being improperly identified, as most assessment measures are not designed for use with deaf individuals, and interpreting findings is challenging.
- As in the general population, LDs are the most prevalent disability in the deaf population. Differences in academic achievement across deaf students with and without a LD may help educators better diagnose this population.
- Most research on deaf student achievement compares deaf students to their hearing peers, but does not include the assessment tools that are used to diagnose LD.

How was this work done?

- Researchers used data from a national-level study of students with disabilities, known as The National Longitudinal Transition Study–2 (NLTS2). Three groups of students were analyzed: 363 deaf students, 111 deaf students with a LD, and 666 hearing students with a LD (1,140 total participants).
- To identify differences in performance between the three groups, students with other disabilities, including cognitive disabilities, were not included in this study.
- Researchers tested whether standardized reading and math performance (as measured by subtests of the Woodcock-Johnson Tests of Achievement of Cognitive Abilities III) and classroom grades differed between these three groups of students.

What did researchers find?

- The reading performance of deaf students and hearing students with a LD was not significantly different.
- Deaf students with a LD were significantly more likely than the other two groups to score below average on several standardized achievement tests.
- Deaf students scored significantly higher on a math calculation test and earned higher classroom grades than deaf students with a LD.

High school students with low math calculation skills and low grades may be more likely to have a learning disability.

¹Caemmerer, J. M., Cawthon, S. W., & Bond M. (2016). Comparison of students' achievement: deaf, learning disabled, and deaf with a learning disability. *School Psychology Review, 45*(3).



What do these results mean?

- Educators may be more concerned if their deaf student struggles with math calculation and if there is a pattern of low scores across several standardized tests in a variety of areas.
- Although classroom grades are often thought to be a more subjective measure of performance than standardized achievement scores, grades were also useful in differentiating between deaf students with and without a LD.
- Lower performance on only reading and vocabulary tests may not be suggestive of a LD for deaf students.



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