

Interdisciplinary approaches to understanding listening difficulties: Implications for basic research and clinical care

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Under the ideal conditions of a clinical audiology booth or a well-controlled laboratory environment, speech understanding can feel like a relatively automatic and effortless task. However, with increased demands in real-world environments (e.g., in background noise) or with individual differences (e.g., with varied language experience), listening can become a challenging endeavor. Traditionally, the fields of cognitive hearing science and psycholinguistics have investigated listening difficulties from different perspectives, with different methods, and with different applied goals. However, interdisciplinary research suggests that greater integration across the fields may enhance outcomes in both.

In this talk, I will overview the development of each field's unique approaches to the study of listening difficulties. I will then describe research that has bridged previous divides, including my group's work examining interactions among auditory, linguistic, and cognitive factors that drive listening effort. I will discuss the implications of such work for basic research and clinical care and conclude with near- and long-term recommendations for expanding interdisciplinary approaches to more comprehensively assess and mitigate the challenges that listeners experience in their daily lives.