

## The Impact of Smart Educational Aids in Learning Listening Among Pupils with Attention and Listening Problems

**Authors :** Sadeq Al Yaari, Muhammad Alkhunayn, Adham Al Yaari, Ayah Al Yaari, Ayman Al Yaari, Montaha Al Yaari, Sajedah Al Yaari, Fatehi Eissa

**Abstract :** The recent rise of smart educational aids and the move away from traditional listening aids are leading to a fundamental shift in the way in which individuals with attention and listening problems (ALP) manipulate listening inputs and/or act appropriately to the spoken information presented to them. A total sample of twenty-six ALP pupils (m=20 and f=6) between 7-12 years old was selected from different strata based on gender, region and school. In the sample size, thirteen (10 males and 3 females) received the treatment in terms of smart classes provided with smart educational aids in a listening course that lasted for four months, while others did not (they studied the same course by the same instructor but in ordinary class). A pretest was administered to assess participants' levels, and a posttest was given to evaluate their attention and listening comprehension performance, namely in phonetic and phonological tests with sociolinguistic themes that have been designed for this purpose. Test results were analyzed both psychoneurolinguistically and statistically. Results reveal a remarkable change in pupils' behavioral listening where scores witnessed a significant difference in the performance of the experimental ALP group in the pretest compared to the posttest (Pupils performed better at the pretest-posttest on phonetics than at the two tests on phonology). It is concluded that smart educational aids designed for listening skills help not only increase the listening command of pupils with ALP to understand what they listen to but also develop their interactive listening capability and, at the same rate, are responsible for increasing concentrated and in-depth listening capacity. Plus, ALP pupils become able to grasp the audio content of text recordings, including educational audio recordings, news, oral stories and tales, views, spiritual/religious text and general knowledge. However, the pupils have not experienced individual smart audio-visual aids that connect listening to other language receptive and productive skills, which could be the future area of research.

**Keywords :** smart educational aids, listening attention, pupils, problems

**Conference Title :** ICCN 2024 : International Conference on Cognitive Neuroscience

**Conference Location :** New York, United States

**Conference Dates :** May 23-24, 2024