

Children with autism need to be taught in smaller groups, pilot study confirms

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Since the 1970s, there has been much debate surrounding the fact that individuals with autism have difficulty in understanding speech in situations where there is background speech or noise.

Today, at the annual meeting of the International Multisensory Research Forum (June 29th - July 2nd) being held at The City College of New York (CCNY), neuroscientists announced conclusive evidence to verify this fact.

Speaking at the conference, Dr. John J. Foxe, Professor of Neuroscience at CCNY said: "Sensory integration dysfunction has long been speculated to be a core component of [autism spectrum disorder](#) (ASD) but there has been precious little hard empirical evidence to support this notion. Viewing a speaker's articulatory movements can greatly improve a listener's ability to understand spoken words, and this is especially the case under noisy environmental conditions." Delegates to the 10th annual meeting of the International Multisensory Research Forum view poster session in the Lincoln Corridor of Shepard Hall.

"These results are the first of their kind to verify that children with autism have substantial difficulties in these situations, and this has major implications for how we go about teaching these children in the classroom," he continued. "Children with autism may become distressed in large classroom settings simply because they are unable to understand basic speech if the environment is sufficiently noisy."

"We should start to pay attention to the need for smaller numbers in the classroom and we need to carefully control the levels of background noise that these kids are exposed to. Imagine how frustrating it must be to sit in a classroom without being able to properly understand what the teacher or your [classmates](#) are saying to you.

"Being able to detect speech in noise plays a vital role in how we communicate with each other because our listening environments are almost never quiet. Even the hum of air conditioners or fans that we can easily ignore may adversely impact these children's ability to understand speech in the [classroom](#).

"Our data show that the multisensory speech system develops relatively slowly across the childhood years and that considerable tuning of this system continues to occur even into early adolescence. Our data suggest that children with Autism lag almost 5 years behind typically developing children in this crucial multisensory ability."

Professor Foxe concluded that further studies may result in advances in the understanding of ASD and the communication abilities of individuals with [autism](#) by identifying the neural mechanisms that are at the root of these multisensory deficits. This will be an important step if viable intervention and training strategies are to be developed.

Source: City College of New York

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