

# The Practice of Pairing Visual Stimuli with Auditory Stimuli for Individuals with ASD/PDD

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## Abstract

For many children with Autism Spectrum Disorder, the visual sense is strongest and the auditory sense is frequently impaired. This study was conducted using three examiners, each measuring a different component of auditory processing. Attention and on-task behavior was one measurement taken on this client. The use of visuals to increase on-task behavior and attention to auditory stimuli with an eight-year-old male with PDD is presented. The subject's behavior and attention to auditory stimuli were measured. Results showed that the individual's on-task behavior and attention to auditory stimuli were on-task 100%. Future implications and research are discussed.

## Purpose

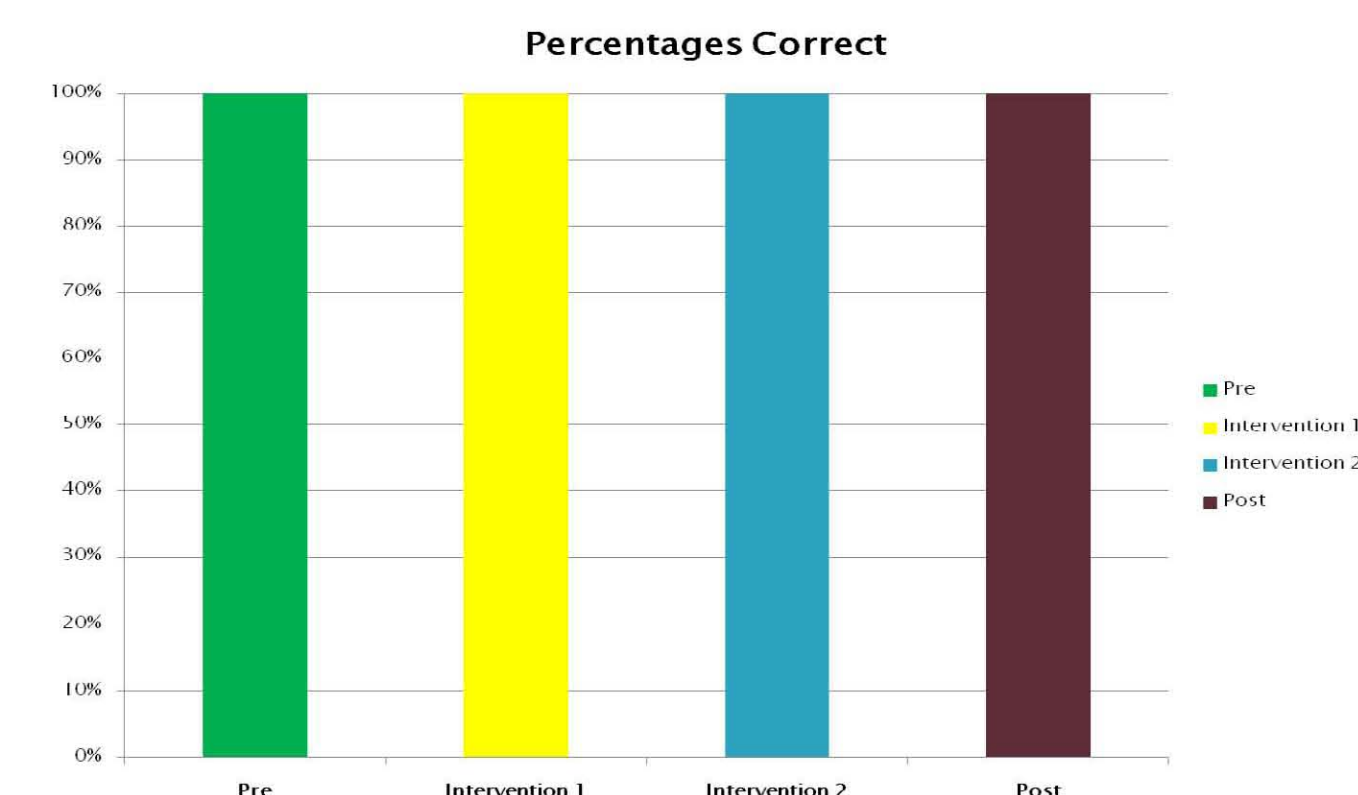
- The main purpose of this investigation was to evaluate the effectiveness of pairing visual stimuli with auditory stimuli.
- A second purpose throughout this study was to determine if the use of pictures would increase the ability for individuals with PDD to discriminate between different auditory stimuli.
- A third purpose was to observe if auditory discrimination would increase with the pairing of visual stimuli.
- A fourth purpose was to evaluate the effectiveness of this particular therapy approach.
- The final purpose was to evaluate if the use of visuals would increase the on-task behavior and attention to auditory stimuli.

## Method

- An eight year old male with a diagnosis of PDD was selected for this experiment.
- Three researchers were involved in this investigation.
- One administered the sounds and marked the responses correct or incorrect, another measured the subject's latency of response, while another measured the subject's on-task behavior for attention to auditory stimuli.
- The sessions were conducted in a therapy room at the Valdosta State University Speech and Hearing Clinic.
- For baseline data, the sounds were administered without presenting the visual stimuli. The subject was told to tell the investigator what he thought each sound was. There were no visual distractions in the room.
- During collection of research data, the picture board was placed in front of subject. He was told to point to the picture that matched the sound that he heard.
- A post-intervention session was conducted to measure the subject's performance without the visual stimuli.
- Each session consisted of 24 safety and environmental sounds.

## Results

- The subject's on-task behavior and attention were measured during pre-intervention, intervention 1, intervention 2, and post-intervention.
- The subject's behavior and attention were on-task for 24 out of 24 sounds (100%) during pre-intervention when only the environmental sounds were played.
- During the first intervention, the subject's behavior and attention were on-task for 24 out of 24 sounds (100%).
- During the second intervention, the subject's behavior and attention were on-task for 24 out of 24 sounds (100%).
- The subject's behavior and attention were also on-task for 24 out of 24 sounds for 100% during post-intervention.



## Conclusion

- A hypothesis was neither accepted nor rejected.
- Although no formal hypothesis was formed by the investigator, it was anticipated that the subject would have poor on-task behavior and attention at some point throughout the investigation.
- The subject, however, had on-task behavior and attention at 100% for each sound presented at each session.
- The investigator's assumption was therefore false.

## Implications

- The results of this investigation allow the investigator to believe that this therapy approach is effective and would be effective with different populations.
- May be effective for individuals such as:
  - younger individuals with language expansion disorders
  - individuals with severe language disorders
  - adults with aphasia or progressive neuropathies
- Regardless of the population targeted, the stimuli chosen should always be an area that the client is interested in.