Effectiveness of Visual Supports for Naming Items by Individuals with Acquired Brain Injury
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Introduction
• Certain individuals who have sustained traumatic brain injuries (TBI) have difficulties with their cognitive processes and communication skills and require augmentative and alternative communication (AAC) methods.
• In this instances, clinicians must decide what AAC supports will be most beneficial to specific individuals.
• Two common representations include contextualized and decontextualized photographs.
• Contextualized photographs consist of objects and people placed in natural settings while decontextualized photographs often are on plain backgrounds as well as in a grid format.
• The purpose of this study was to examine and analyze accuracy of theme naming in several individuals with traumatic brain injury using the contextualized visual scene displays as well as the decontextualized grid displays.

Methods
Participants
• The current participants have included four males who have had histories of severe traumatic brain injury
• Resided in a transitional living facility at the time of study completion.
• All the males are native American English speakers, had no concomitant aphasia, and completed at least a high-school level education.
• Eleven more participants are expected to be part of this study.

Materials
• 20 contextualized visual scene displays
• 10 decontextualized grid displays
• 8 foil images (4 contextualized and 4 decontextualized)
• Tobii-6o
• Eye-Tracking Equipment

Procedures
• The contextualized, decontextualized, and foil stimuli were all loaded onto the Tobii Studio software program.
• The experiment consisted of a four part screening procedure:
  • Language assessment – Western Aphasia Battery Revised;
  • Cognitive assessment – Cognitive Linguistic Quick Test;
  • Vision screening; and
  • visual calibration to the Tobii system
• Participants began with viewing a fixation dot page (red dot on black screen) for two seconds
• Followed by one of the decontextualized, contextualized, or foil scenes
• Determined what the theme of each scene was and then verbally expressed their decision

Results Interpretation
• Current results indicate that most participants demonstrated several overlapping fixations on various components of the contextualized visual scenes prior to making a theme decision.
• On the contrary, participants focused on almost all individual parts of the grid in the decontextualized photographic grid displays.
• Accuracy of theme naming does not appear to change regardless of which image type a participant is viewing; however, individual differences exist in the image display preference participants report following study completion.

Discussion
• The current results are preliminary in nature, however, after some analysis the current data indicates that individuals with histories of TBI do differ in how they interact with and make meaning from visual scene displays.
• Clinicians working with individuals with TBI should consider these differences when determining which types of displays will be more effective for their clients.