

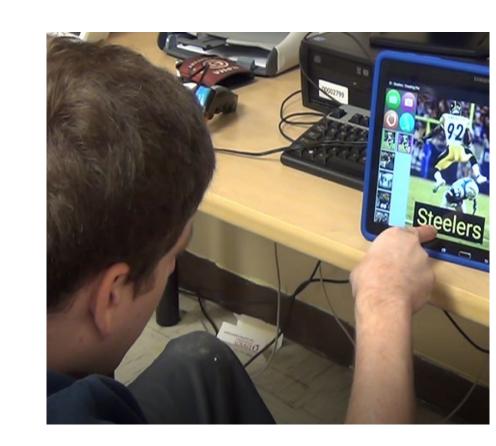
# Effect of VSDs with Dynamic Text in Social Interactions on Single Word Reading in Adults with Intellectual and Developmental Disabilities Christine Holyfield, Janice Light, David McNaughton, Jessica Caron, Kathryn Drager, and Lauramarie Pope



#### Rationale

- Unfortunately, many adults with intellectual and developmental disabilities who have limited speech do not have functional literacy skills
- While adults with intellectual and developmental disabilities should have access to appropriate literacy instruction regardless of their age, such opportunities are often limited
- Therefore, supports that supplement traditional instruction might be beneficial to these individuals
- AAC technologies designed to promote literacy learning may be one supplemental support option

## **Research Questions**



 What is the effect of a VSD app with the Transition to literacy (T2L) feature used during social interactions on the single-word reading performance of adults with intellectual and developmental disabilities, limited speech, and early literacy profiles?

#### Method

- The study used a single-subject, multiple baseline across participants design
- The study had three phases:
  - Baseline, intervention, and maintenance
- A probe at the beginning of each session tested participants on their identification of 10 words chosen to be of high-interest to them (the dependent variable)
- Then, in the intervention phase, participants engaged in social interactions with the investigator using the app with the T2L feature (the independent variable)
- No literacy instruction was provided

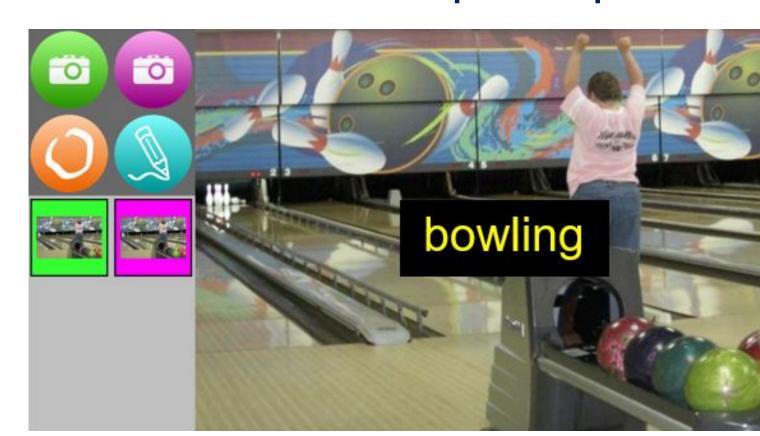
### Participants



- Six adults with intellectual and developmental disabilities who had limited literacy skills participated
  - Don (all pseudonyms), a 55 year old with ASD
  - Jim, a 32 year old with Down syndrome
  - Esther, a 44 year old with an ID
  - Tiffany, a 22 year old with Down syndrome
  - Tony, a 46 year old with Down syndrome
  - Ed, a 30 year old with Down syndrome

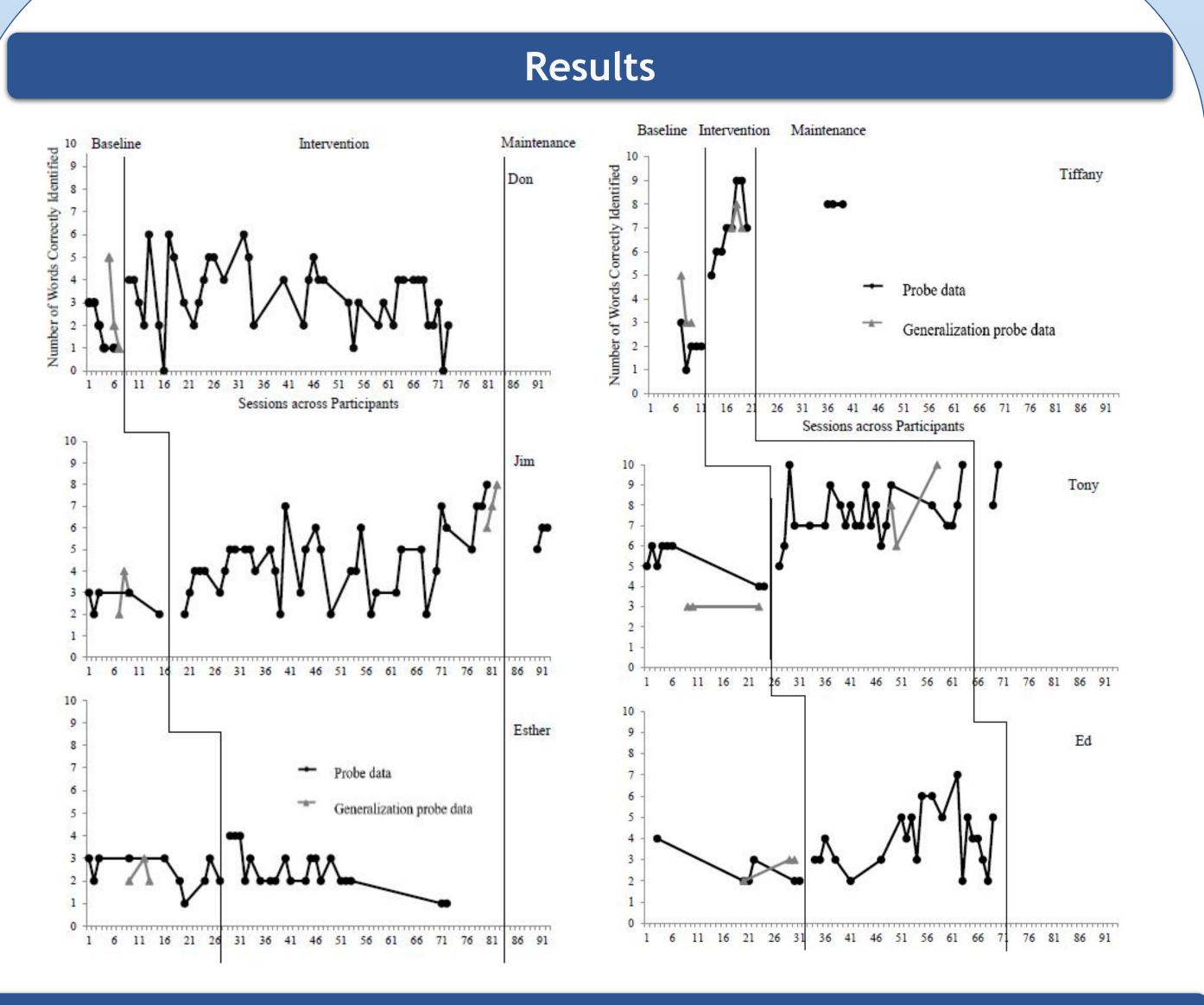
#### Materials

- EasyVSD (InvoTek, http://www.invotek.org) with the T2L feature enabled was used as the communication modality and context for interactions
- The app was loaded with VSDs of highly-motivating content individualized to each participant



## Procedures

- During one-on-one social interactions between the investigator and participants, the investigator:
  - Navigated to photo VSDs representing target words that were meaningful and motivating to the participant,
  - Waited to allow the participant to select the hotspot for each VSD, enacting the T2L feature,
  - Responded to participants' activation and again waited for another selection from the participant, and
  - Expanded on that subsequent selection



# Discussion & Implications

- For three of the six adults Jim, Tiffany, and Tony interactions using EasyVSD (InvoTek) with the T2L feature
  enabled was a highly-effective intervention for
  supporting single-word reading
- Therefore, even into adulthood, individuals with intellectual and developmental disabilities can demonstrate increases in literacy skills through simple adjustments to AAC technologies
- Future research should gather more precise information about different interventions using T2L that may be effective for more adults
- Future research should also consider longitudinal effects of the T2L feature integrated within the unstructured, daily communication of adults with intellectual and developmental disabilities

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