Supporting Participation and Communication in Community Shopping Using Video VSDs

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Rationale

- Grocery shopping is an important skill for independent living and community participation
- Shopping includes:
  - making a shopping list,
  - navigating the store,
  - selecting the correct item,
  - calculating cost,
  - paying for the items

- Individuals with intellectual and developmental disabilities may require supports for both participation and communication in grocery shopping activities
- Video visual scene displays (video VSDs) may provide an appropriate support for participation and communication in key activities of daily living (e.g., shopping)
  - ➢ *Videos VSDs*: Videos with programmed "hotspots" to support communication

Research Question

What is the effect of a video VSD app (GoVisual) on the independent completion of a shopping activity by a young adult with Down syndrome?

Methods

- *Design*: pilot case study (AB design)
- *Participant*: 21-year-old adult with Down syndrome, very limited speech intelligibility (less than 10% with unfamiliar partners)
- *Independent variable*: video VSD app (GoVisual) with 1 model and 3 guided practice training sessions
- *Dependent variable*: the percentage of completed steps for a task analysis of shopping, including
  - participation (e.g., selecting correct items)
  - communication (i.e., interacting with store clerk)

Video VSD app (GoVisual)

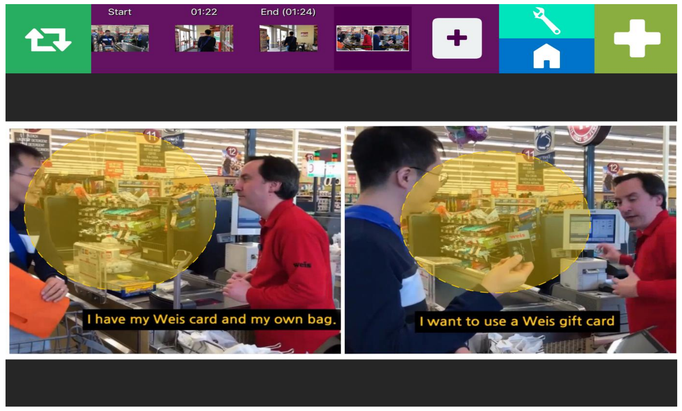


Figure 1. Screenshot of the Video VSD for communication at checkout counter

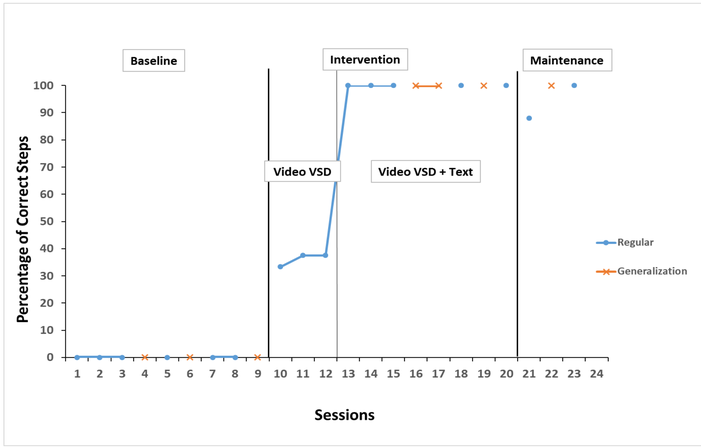
Figure 2. Video VSD with text

Materials

- *Video VSD application*: GoVisual (Attainment Company)
- *Handheld technology*: iPad
- Shopping bag
- Grocery membership card
- Grocery gift card (for payment)

- A 5-minute video was created using the GoVisual app. It was programmed with 16 visual scene displays (VSDs) to support completing the 24 steps in the shopping activity
- 7 of the 16 VSDs were programmed with "hotspots" to support communication

Results & Discussion



- The participant showed an immediate increase in successful performance following introduction of the video VSD, including
  - navigating the store
  - obtaining 3 food items
    - *Taco shells, bananas, sliced cheese* (deli counter)
  - paying at the checkout
- The addition of text on the screen assisted the communication partner (e.g., deli clerk) in noisy situations

- The participant also
  - made generalized use of the video VSD with 3 untrained items
    - *Yogurt, apples, sliced turkey* (deli counter)
  - maintained high levels of performance in shopping 12 weeks after the initial training

- This study provides evidence that video VSDs can support independent participation and communication in community activities for individuals with intellectual and developmental disabilities

Acknowledgements

The contents of this presentation were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number #90RE5017) to the Rehabilitation Engineering Research Center on Augmentative and Alternative Communication (RERC on AAC). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this presentation do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government