Supporting Grocery Shopping for a Student with Developmental Disabilities using a Video VSD App

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Introduction

Quality of life → Functional life skills → Purchasing (Shopping) → Handheld technology

Purchasing skills (Mechling & Gast, 2003)
-Knowing which items to purchase
-Navigating in the store
-Locating the items
-Reading price
-Paying for items

* Communicating with store staff

Research Question

How can we improve shopping skills including communication skills for students with disabilities by using handheld technologies?

Design

- Design: AB case design (pilot study)

- Participant: 21-year old male with Down syndrome and complex communication needs

- Setting: Large grocery store in suburbs

- IV: iPad with Video visual scene displays (VSD) application + Guided practice
- DV: Correct percentage of task analysis

Video VSD (Go Visual)

- What is Video VSD?

Task analysis

8. Navigate to item 3 (deli counter)
9. Talk to the clerk ("Hi, how are you?")
10. Talk to the clerk ("I would like a quarter pound of 'Dietz & Watson' American cheese sliced thin.")
11. Talk to the clerk ("That's good")
12. Talk to the clerk ("No, thank you")
13. Talk to the clerk ("Thank you! Have a great day")
14. Take the item from the clerk and put the deli item in the shopping cart

Rules for scoring dependent variables

- *__1 minute rule__*
  - The participant has one-minute after completing a task to begin the next task, with the exception of appropriate wait time (i.e., waiting for meat to be sliced at the deli counter)
  - If the participant failed to complete a task within one-minute, the session was ended.

- Pros: Researchers can prevent participant's learning from probes (i.e., isolate impact of IV)

- Cons: Student may feel frustrated in Baseline

Baseline

<Shopping lists>

1. Ortega taco shells (20% Larger Tacos, Yellow Corn Taco Shells)
2. 2 Bananas
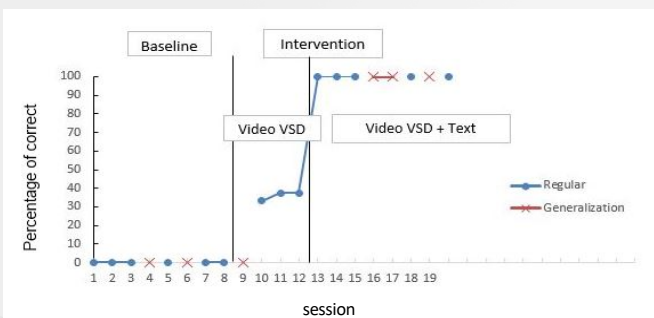3. Quarter pound of Premium American Cheese (Dietz & Watson)

Probe (Intervention)

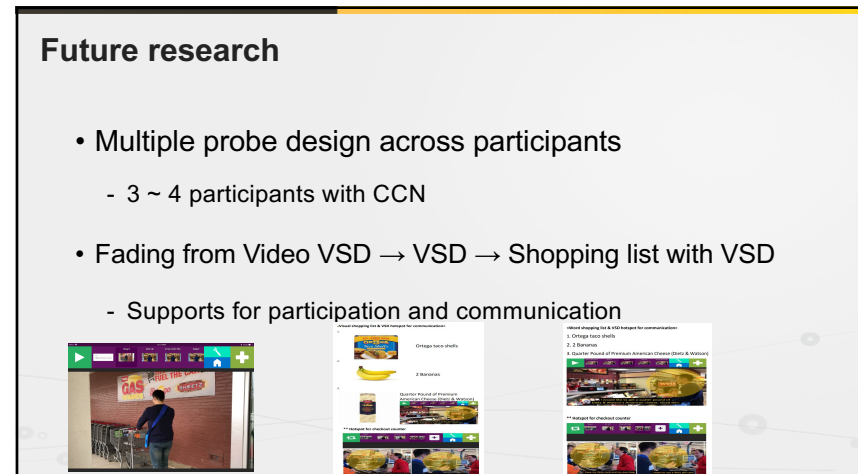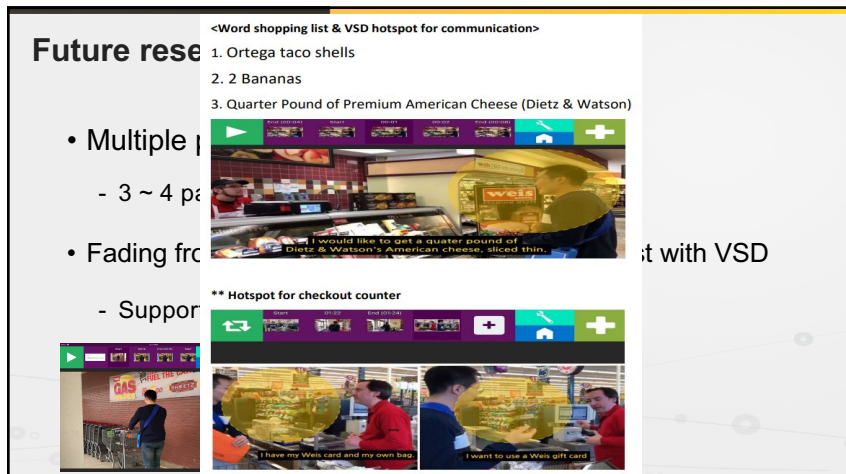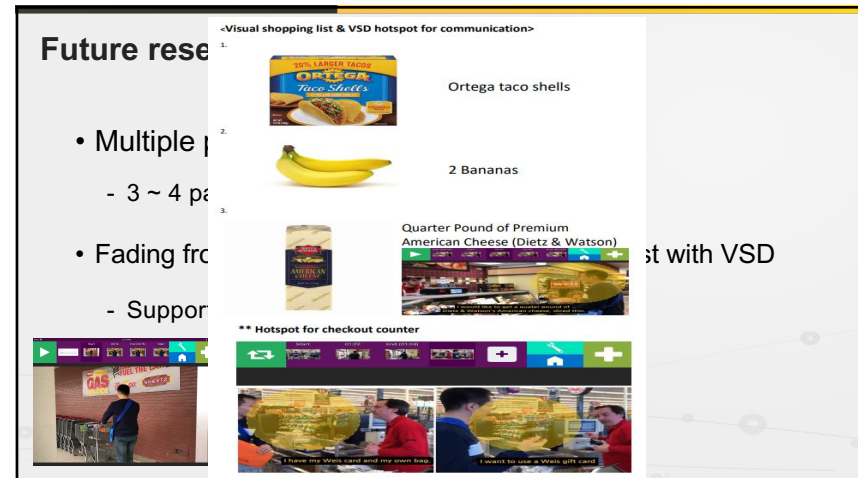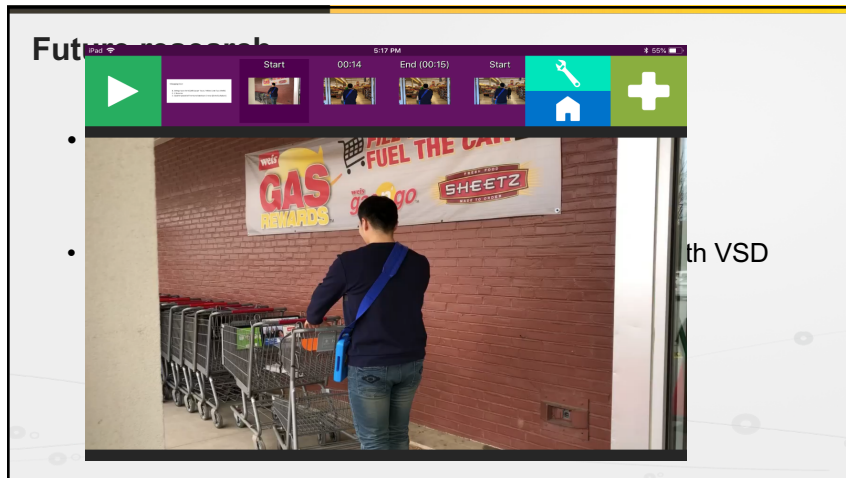## Probe (Intervention)- Deli

Graph

- **Regular list**: Taco shells, 2 bananas, American cheese (Dietz & Watsons)
- **Generalization list**: Yogurt, 2 green apples, Turkey (Weis premium honey)

Upcoming Schedule - Maintenance

- 3 maintenance sessions with regular list
- 2 maintenance sessions with generalization list

Future research

- Multiple probe design across participants

  - 3 ~ 4 participants with CCN

- Fading from Video VSD → VSD → Shopping list with VSD

  - Supports for participation and communication

Discussion topic

- Rules for scoring dependent variables
  - 'One minute rule' **OR** 'Complete step for the participant and give opportunity for the next step'

Discus

- Fac

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Discussion topic

- Fading from tablet to smart phone or smart watch

References

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Question & Advice

Thank you!