

Extensions of Assessment and Treatment for Food Selectivity



Presented by:
Holly C. Gover, PhD, BCBA-D
Vanderbilt University Medical Center -
TRIAD



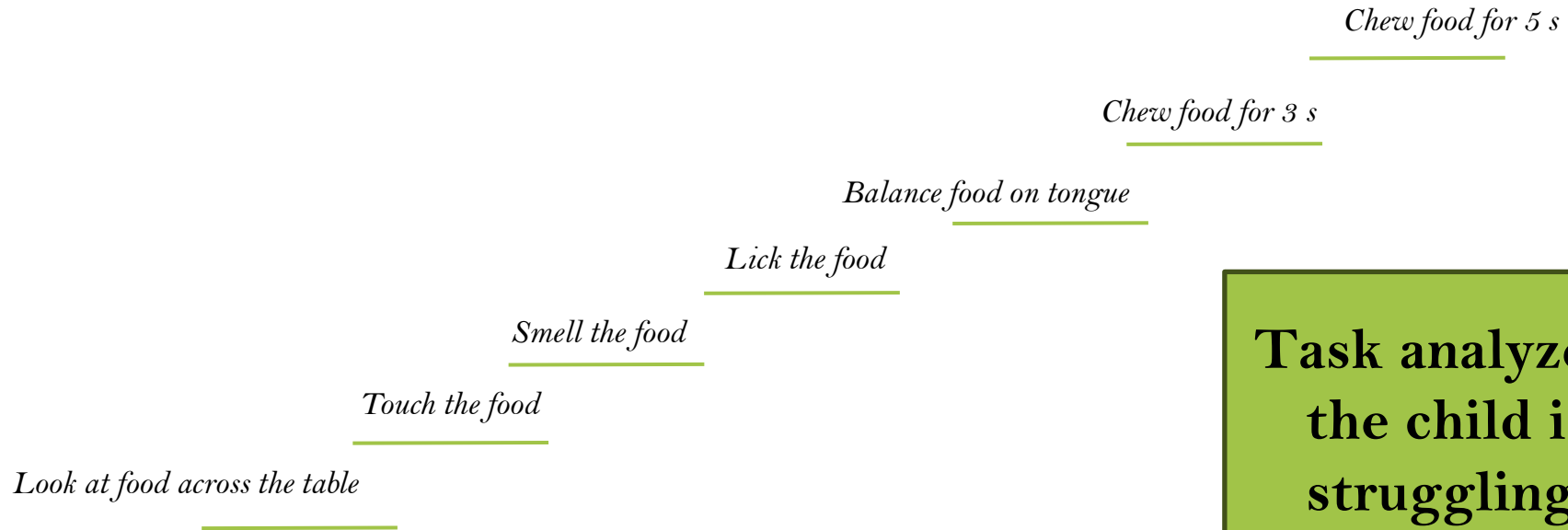
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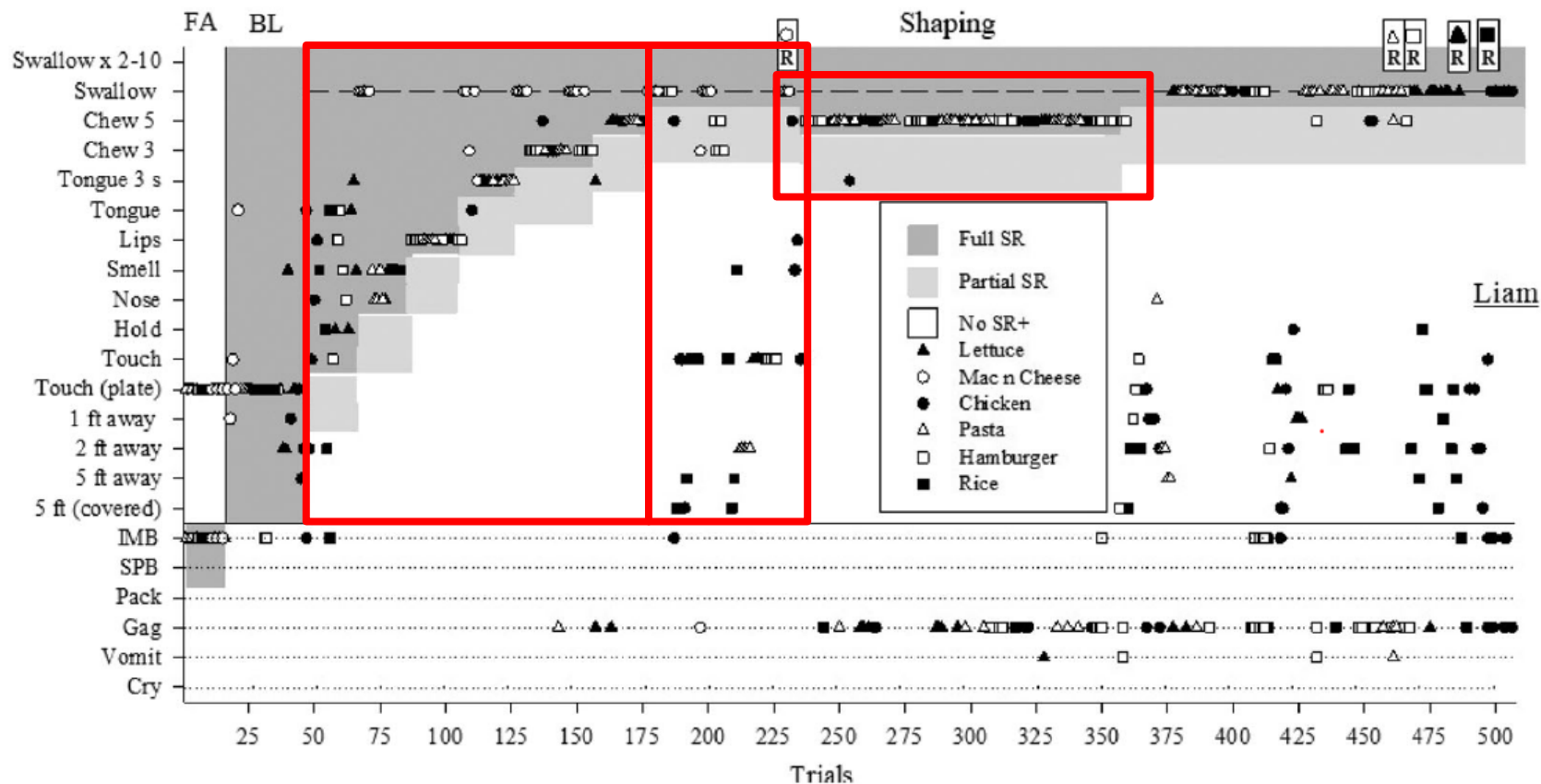
Lessons learned
and
modifications for
children with
varying skill levels

Shaping without escape extinction

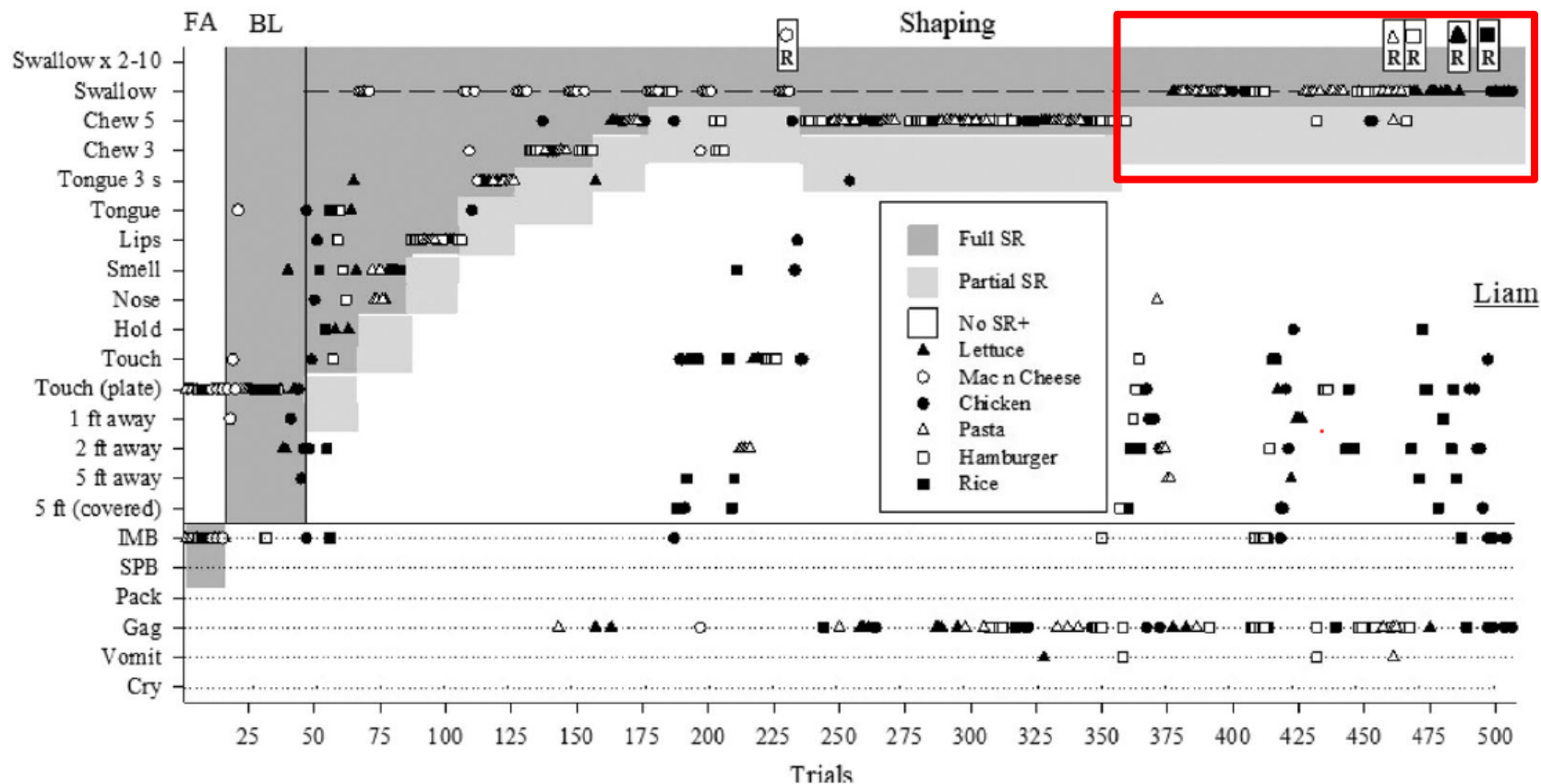


**Task analyze if
the child is
struggling.**





Modifications



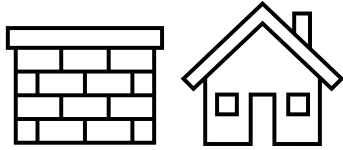
Levels for Luke – 6 yo

1. Look at food, uncovered, food is within arm's reach
2. Touch plate
3. Touch food with utensil or hand
4. Hold food in spoon or hand
5. Bring to nose
6. Bring to nose and smell
7. Touch piece of food to lips
8. Touch piece of food to tongue
9. Balance on tongue 3 s
10. Chew food 3x, spit out
11. Chew food 5x, spit out
12. Swallow 1 bite of food

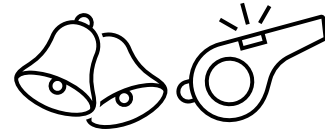
Levels for Derek – 4 yo

1. Look at food, uncovered, food is within arm's reach
2. Touch plate
3. Touch food with utensil or hand
4. Analyst hands food to hold
5. Hold food
6. Bring to chin
7. Bring to nose
8. Bring to nose and smell
9. Touch piece of food to lips
10. Touch piece of food to tongue 1 s
11. Food to tongue 2 s
12. Food to tongue 3 s
13. Balance on tongue, 3 s
14. Balance on tongue, close mouth, 1 piece
15. Balance on tongue, close mouth, 2 pieces
16. Balance on tongue, close mouth, 3 pieces
17. Balance on tongue close mouth, 4 pieces
18. Hold on tongue, move back and forth
19. Move back and forth, 2 pieces
20. Move back and forth, 3 pieces
21. Move back and forth, 4 pieces
22. Hold food with front teeth
23. Bite food in 2 pieces with front teeth
24. Bite in 2, hold 3 s
25. Bite in 2, hold 5 s
26. Hold food with side teeth
27. Bite in 2, side teeth
28. Bite in 2, hold 3 s
29. Bite in 2, hold 5 s
30. Put on back teeth
31. Chew food 1x (back teeth), spit out
32. Chew food 2x, spit out
33. Chew food 3x, spit out
34. Chew food 4x, spit out
35. Chew food 5x, spit out
36. Chew food 10x, spit out
37. Chew food 20s, spit out
38. Swallow 1 bite of food

Treatment components



- Differential reinforcement with synthesized reinforcers
- Shaping
- Choice to participate



- Choice-board
- Varying levels of differential reinforcement
- Choice of food
- Choice of what to do with food
- Hang-out corner

Differential Reinforcement



Leave the table, eat fruit snacks, watch YouTube videos of kids unwrapping toys, analyst watches with you and makes positive comments



Chat with the analyst at table



Sit quietly at table next trial

**Differentially
reinforce in
whatever way is
meaningful.**

Differential Reinforcement

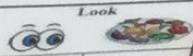


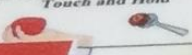


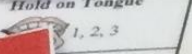
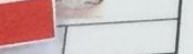



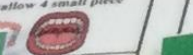




Leave the table, eat fruit snacks, watch YouTube videos of kids unwrapping toys, analyst watches with you and makes positive comments



Sit quietly at table for ~30s until next trial

Sweet Potatoes

Look 	Touch Plate 	Touch Food 
Touch and Hold 	Kiss Food 	Touch Tongue 
Hold on Tongue 	Touch Front Teeth 	Bite with Front Teeth 
Bite + Swallow 1 small piece 	Bite + Swallow 2 small piece 	Bite + Swallow 3 small piece 
Bite + Swallow 4 small piece 	Bite + Swallow Half 	Swallow 1 

Differential Reinforcement



Leave the table, eat fruit snacks, watch YouTube videos of kids unwrapping toys, analyst watches with you and makes positive comments



Sit quietly at table for ~30s until next trial

Differential Reinforcement



Leave the table, eat fruit snacks, watch YouTube videos of kids unwrapping toys, analyst watches with you and makes positive comments **for 2 min**



Leave the table, eat fruit snacks, watch YouTube videos of kids unwrapping toys, analyst watches with you and makes positive comments **for 30 s**

Differential Reinforcement



Access to computer, attention,
mand compliance, **twizzlers**



Access to computer, attention,
mand compliance

Choice

What to do
with it

Nonpreferred
Food



Preferred
Food

Preferred
Toys

**Only provide
choices that
benefit the
child.**

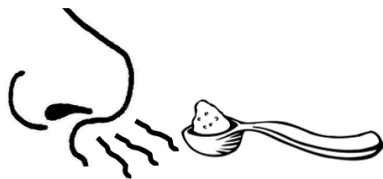
CHOICE BOARD!

<p>Look at covered food across the table</p> <p>5 seconds</p>	<p>Look at food across the table</p> <p>5 seconds</p>	<p>Look at food out of arm's reach</p> <p>5 seconds</p>
<p>Look at food within arm's reach</p> <p>5 seconds</p>	<p>Touch plate</p>	<p>Touch food with spoon or hand</p>
<p>Hold food with spoon or hand</p>	<p>Bring to nose for 1 second</p>	<p>Bring to nose and sniff</p>
<p>Touch food to lips</p>	<p>Touch to tongue</p>	<p>Put food on tongue for 3 s, spit out</p>
<p>Chew food for 3 s, spit out</p> <p>3 seconds</p>	<p>Chew food for 5 s, spit out</p> <p>5 seconds</p>	<p>Chew and swallow food</p>

<p>Look Covered</p>	<p>Look Far</p>	<p>Look Close</p>
<p>Look closer</p>	<p>Touch Plate</p>	<p>Touch Food</p>
<p>Touch and Hold</p>	<p>Bring to Nose</p>	<p>Smell</p>
<p>Kiss Food</p>	<p>Touch Tongue</p>	<p>Hold on Tongue</p>
<p>Touch Front Teeth</p>	<p>Bite with Front Teeth</p>	<p>Chew 1 (Back Teeth)</p>
<p>Chew 3 (Back Teeth)</p>	<p>Chew 5 (Back Teeth)</p>	<p>Swallow 1</p>
<p>Swallow 2</p>	<p>Swallow 3</p>	<p>Swallow 4</p>

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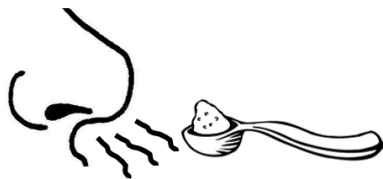
Bring to nose and sniff



Touch food to lips



Bring to nose and sniff



Touch food to lips



Choice

Participation

What to do
with it

Preferred
Food

Nonpreferred
Food

Preferred
Toys



Reinforcement
space

Treatment table

Hang out Space

**Give clients the
opportunity to opt
in and out in
whatever way works
for them.**

Choice

- **The Enhanced Choice Model** (Rajaraman et al. 2021)
Potentially more appropriate for a controlled settled and kids with strong communication skills
- **Open-door / Vote “with your feet”**
Potentially more appropriate for children with less language
Be attuned to behavior suggesting withdrawal of assent
- **Full-assent based procedures**
Potentially more appropriate for children with strong communication skills and less controlled settings



Applications of Trauma-informed Care to the Assessment and Treatment of Food Selectivity

Holly C. Gover, Adithyan Rajaraman,
& Tara Weiss

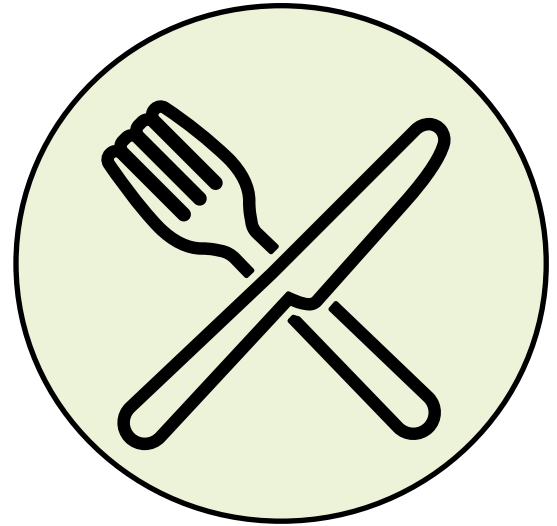


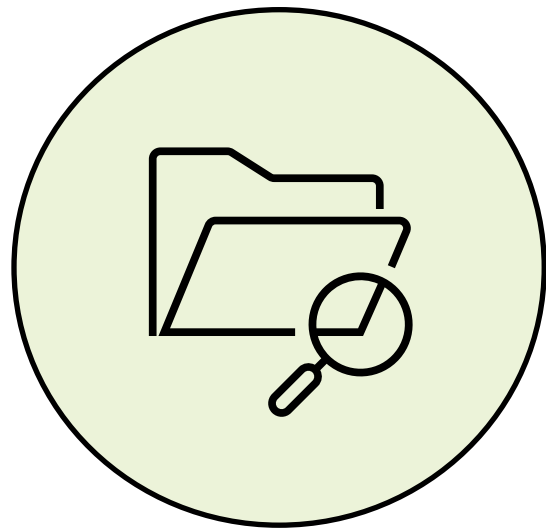
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Prioritizing choice and assent in the assessment and treatment of food selectivity


Holly C. Gover, Gregory P. Hanley, Kelsey W. Ruppel, Robin K. Landa and Juliana Marcus

Vanderbilt Kennedy Center, Treatment and Research Institute for Autism Spectrum Disorders, Vanderbilt University Medical Center, Western New England University, Springfield, MA, USA


Food selectivity affects up to 72% and 45% of individuals with and without disabilities, respectively, and there is a need for interventions that rely on positive, unrestrictive strategies. We evaluated an assessment and treatment package for food selectivity for young children with developmental disabilities that prioritized caregiver collaboration, client autonomy, and did not rely on restrictive procedures (e.g. escape extinction). The

International Journal of Developmental Disabilities

Toward trauma-informed applications of behavior analysis

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Despite a growing acknowledgement of the importance of understanding the impacts of trauma on therapeutic approaches across human service disciplines, discussions of trauma have been relatively infrequent in the behavior analytic literature. In this paper, we delineate some of the barriers to discussing and investigating trauma in applied behavior analysis (ABA) and describe how the core commitments of trauma-informed care could be applied to behavior analysis. We then

Toward trauma-informed applications of behavior analysis

(ORHPK) team to assist in dealing with public health emergencies (Wolkin & Everett, 2018). Harris and Fallot (2001), frequently cited as establishing some of the foundational concepts in TIC, argued that being trauma-informed “means to know the history of past and current abuse in the life of the consumer with whom one is working” and “to use that understanding to design service systems that accommodate the vulnerabilities of trauma survivors and allow services to be delivered in a way that will facilitate consumer participation” (p. 4). The concept of consumer participation implies not only that the person is an active, willing participant, in the then... barriers to discussing and investigating trauma in applied behavior analysis (ABA) and describe how the core commitments of trauma-informed care could be applied to behavior analysis. We then

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nerabilities of trauma survivors and allow services to be delivered in a way that will facilitate consumer participation” (p. 4). The concept of consumer participation implies not only that the person is an active, willing participant in the therapeutic or research process, but that their participation is critical to success. These initiatives, along with a broader research agenda, acknowledge the prevalence of traumatic experiences and the need to develop assessment and treatment

actively infrequent in the behavior analytic literature. In this paper, we delineate some of the barriers to discussing and investigating trauma in applied behavior analysis (ABA) and describe how the core commitments of trauma-informed care could be applied to behavior analysis. We then

Key Components of TIC



Acknowledge Trauma and its Potential Impact



Ensure Safety and Trust



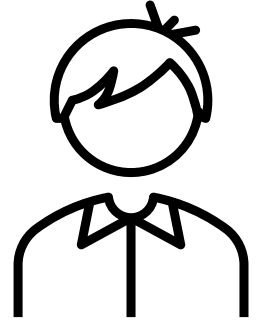
Promote Choice and Shared Governance



Emphasize Skill Building

Skyler

- 12 years old, autism
- Encyclopedic mind for movie/TV characters
- Loves creating homework and quizzes



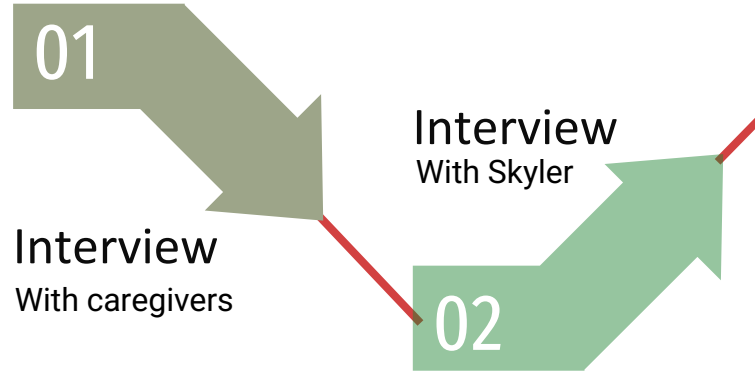
Highly selective eater

Specific rules about what he eats where

nerabilities of trauma survivors and allow services to be delivered in a way that will facilitate consumer participation” (p. 4). The concept of consumer participation implies not only that the person is an active, willing participant in the therapeutic or research process, but that their participation is critical to success. These initiatives, along with a broader research agenda, acknowledge the prevalence of traumatic experiences and the need to develop assessment and treatment

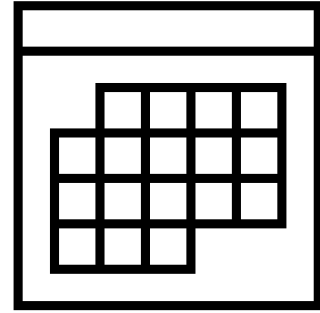
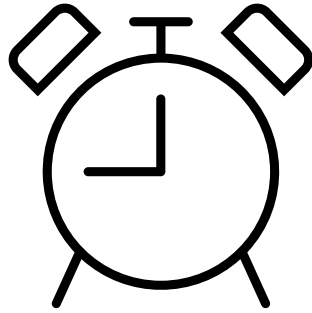
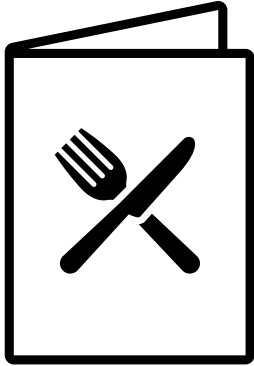
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Assessment



Assessment





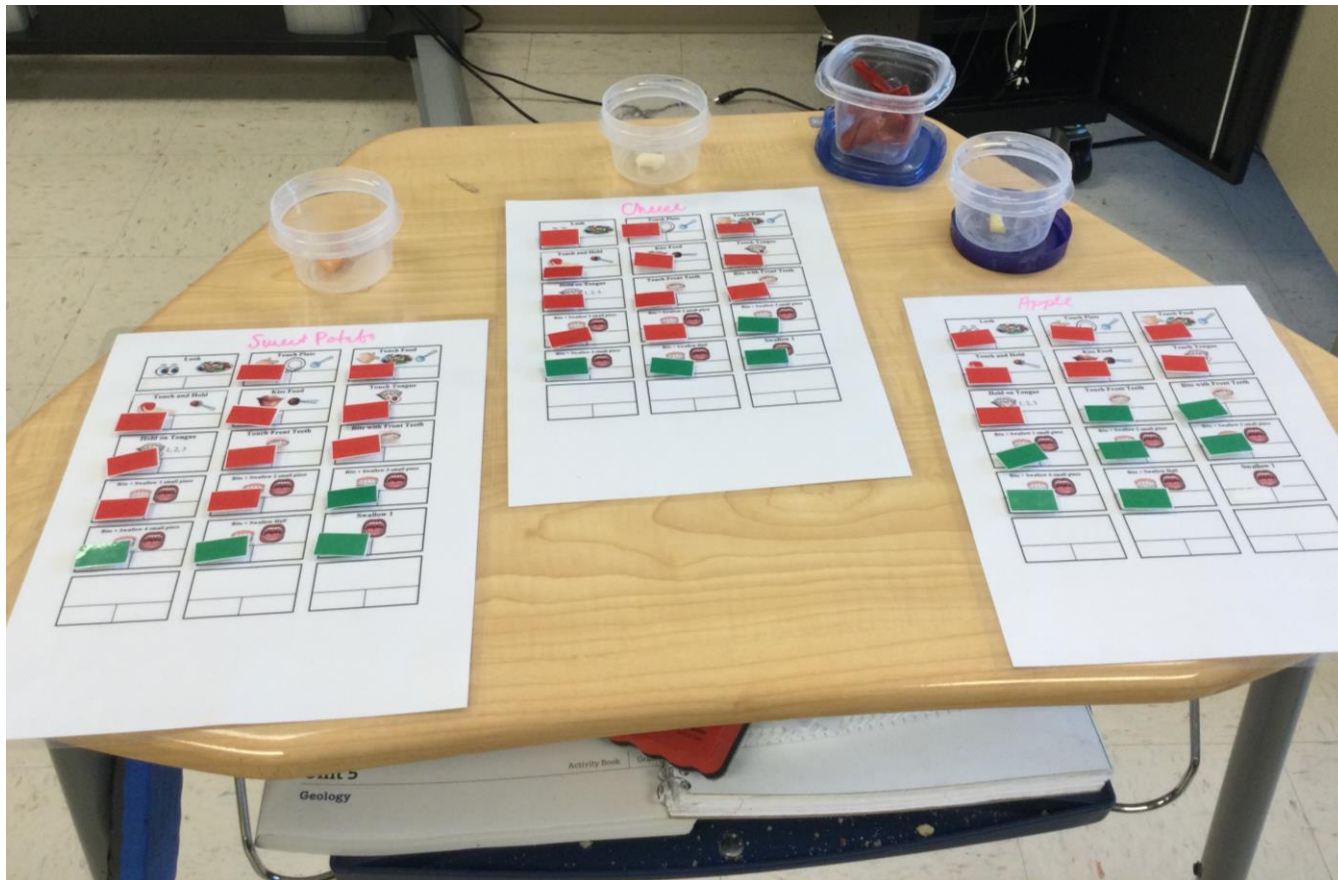
Baseline

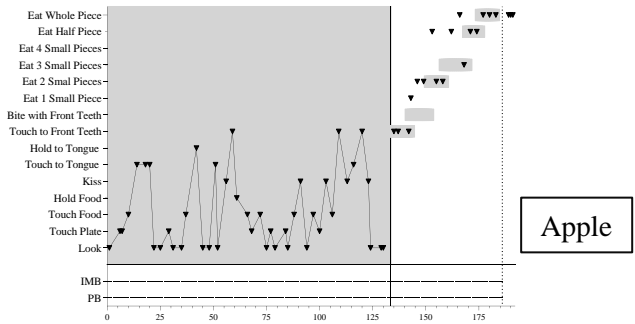
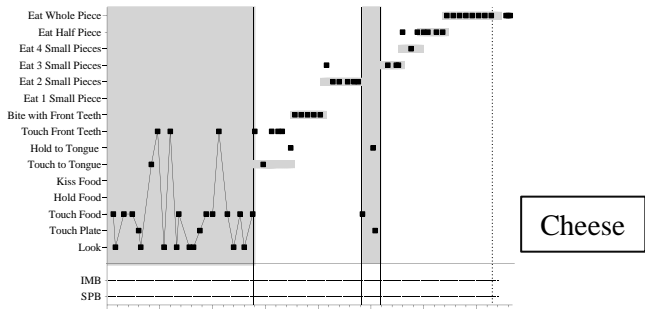
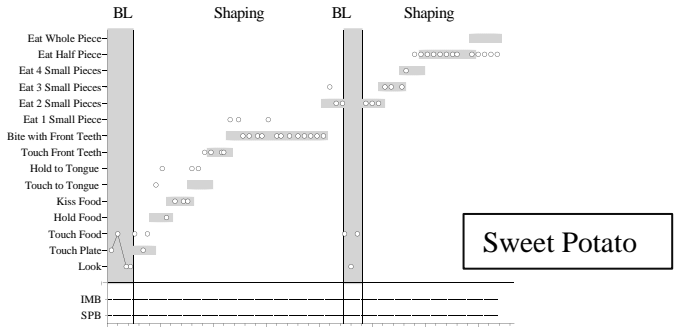


Sweet Potato

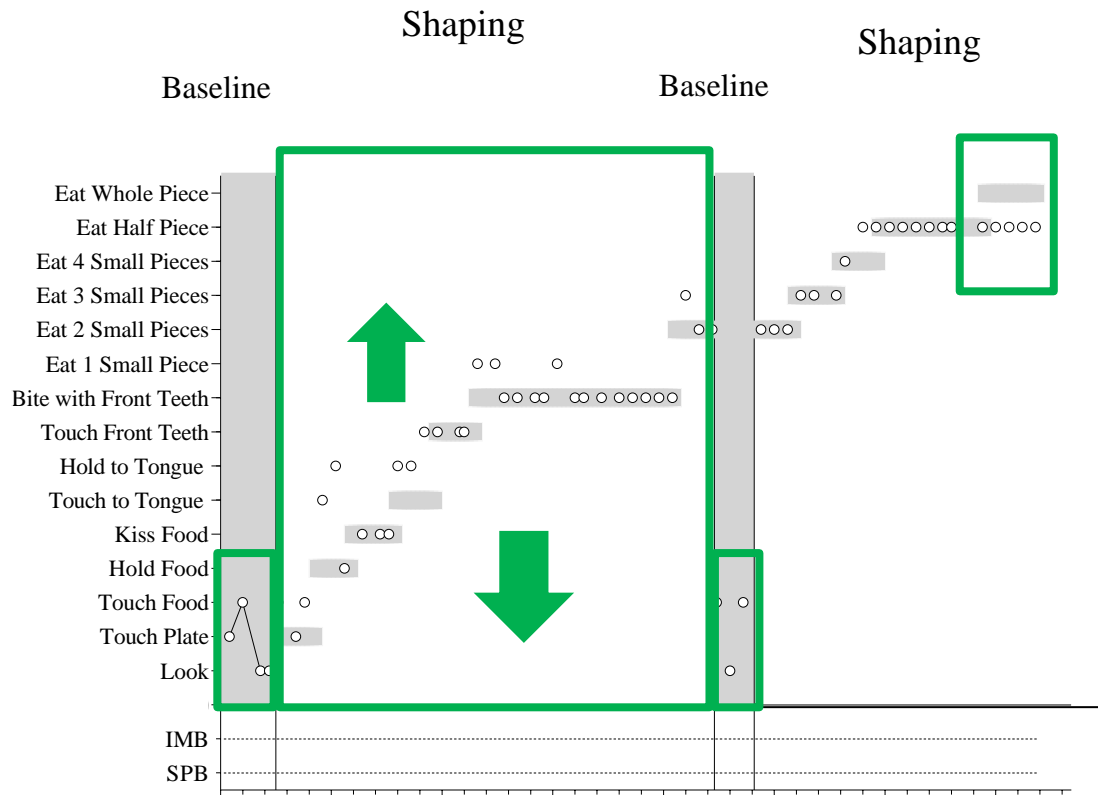
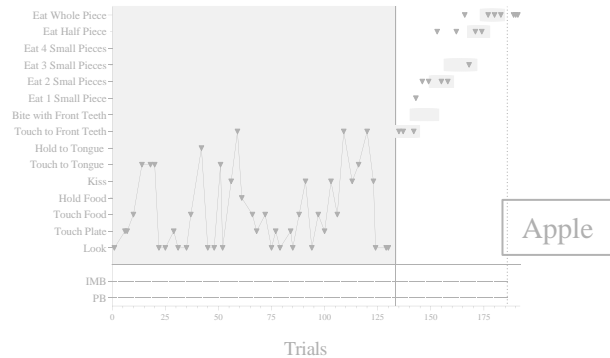
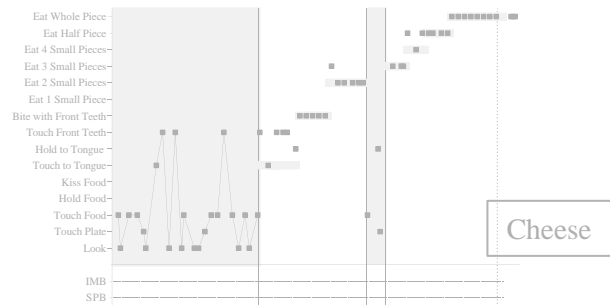
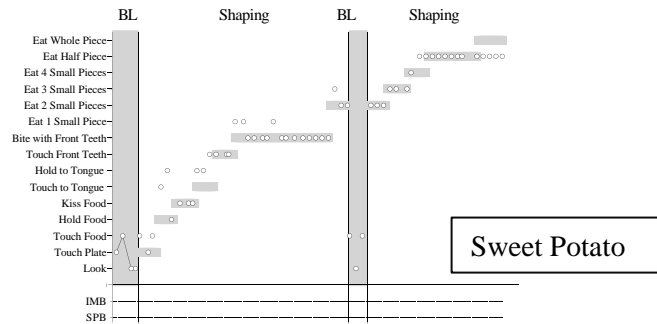
<p>Look</p> [Green card]	<p>Touch Plate</p> [Green card]	<p>Touch Food</p> [Green card]
<p>Touch and Hold</p> [Green card]	<p>Kiss Food</p> [Green card]	<p>Touch Tongue</p> [Green card]
<p>Hold on Tongue</p> [Green card]	<p>Touch Front Teeth</p> [Green card]	<p>Bite with Front Teeth</p> [Green card]
<p>Bite + Swallow 1 small piece</p> [Green card]	<p>Bite + Swallow 2 small piece</p> [Green card]	<p>Bite + Swallow 3 small piece</p> [Green card]
<p>Bite + Swallow 4 small piece</p> [Green card]	<p>Bite + Swallow Half</p> [Green card]	<p>Swallow 1</p> [Green card]

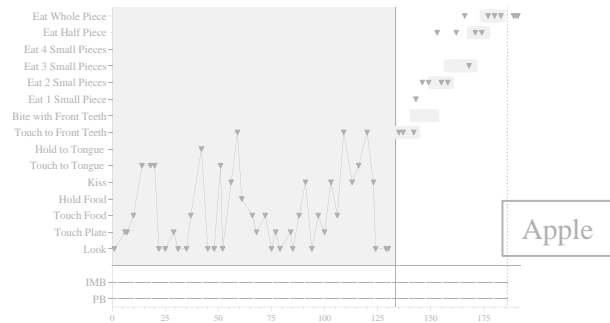
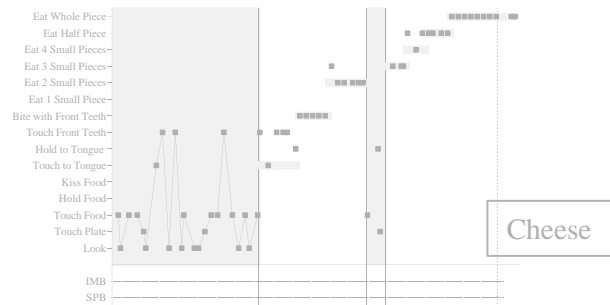
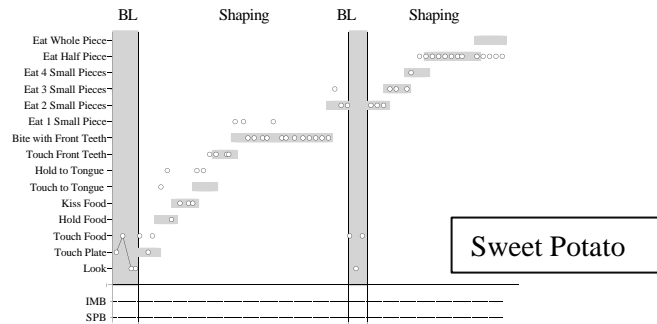
Treatment - Differential Reinforcement



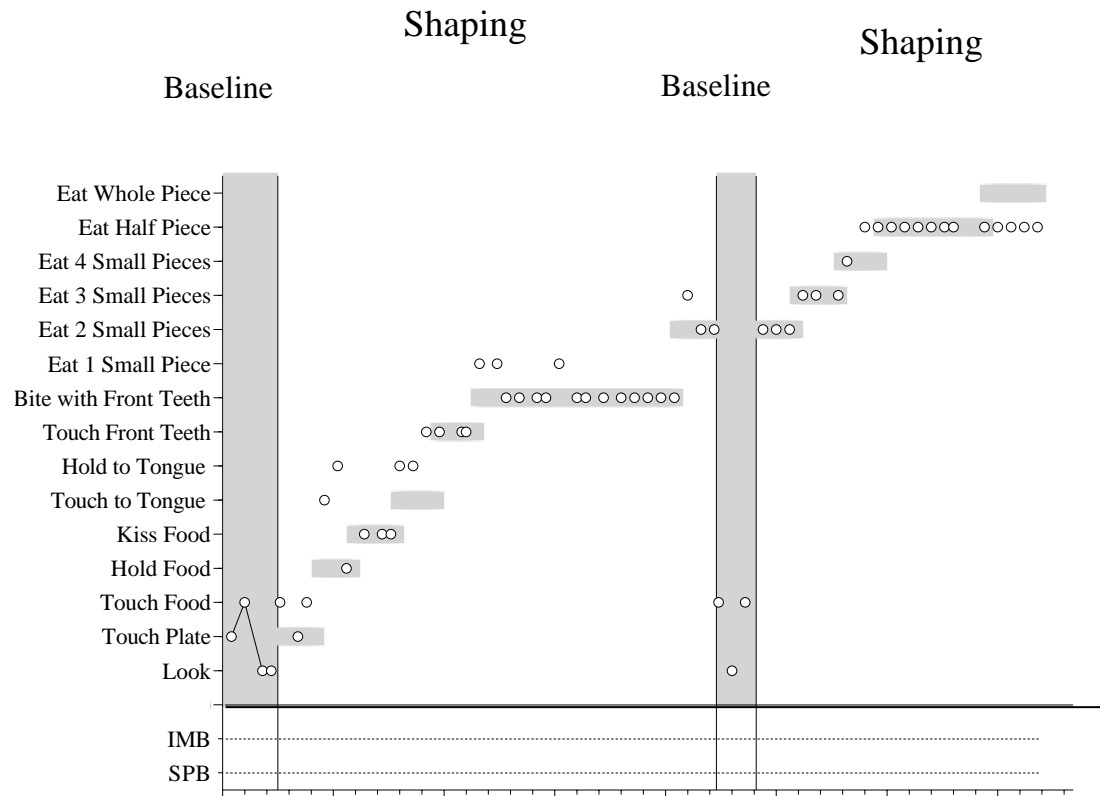


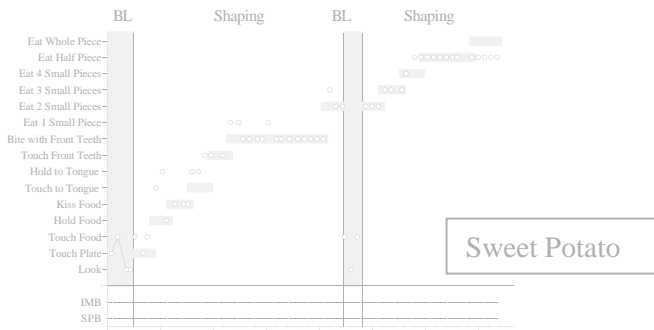
Trials



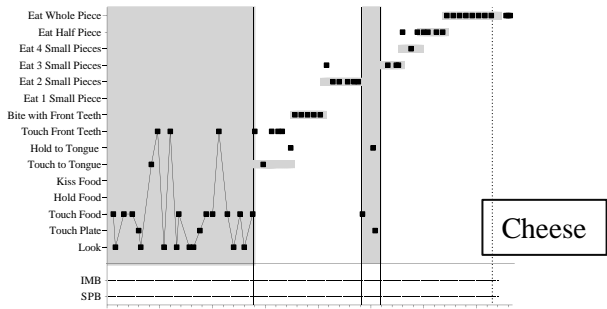


Trials

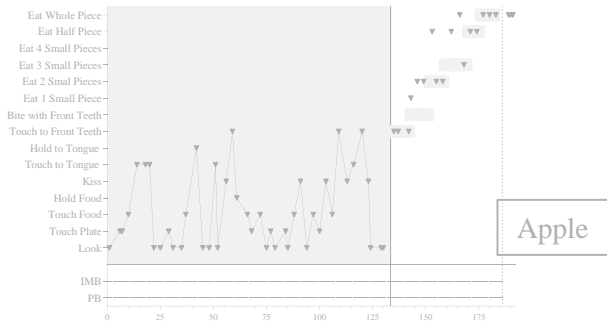




Sweet Potato

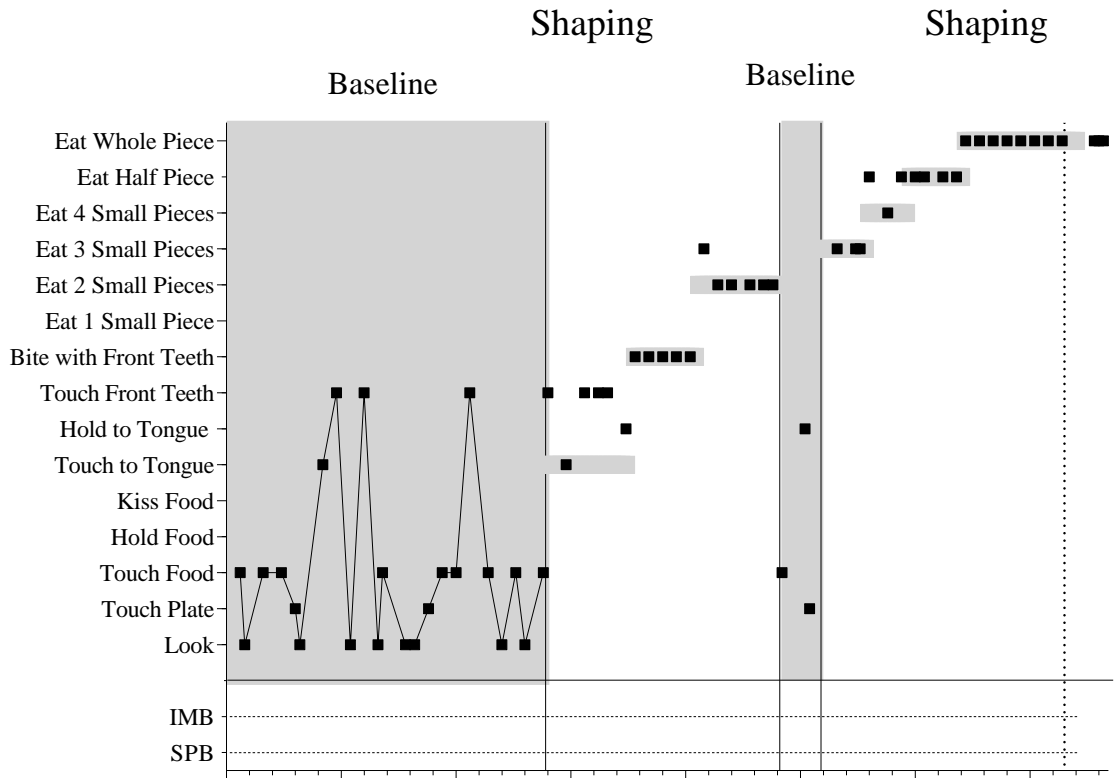


Cheese



Apple

Trials

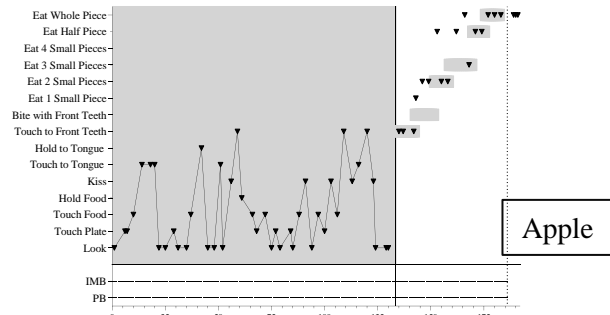
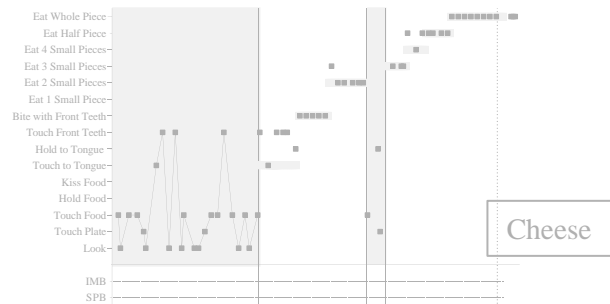
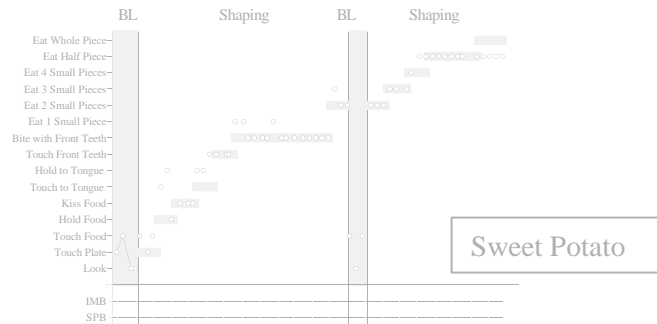


Baseline

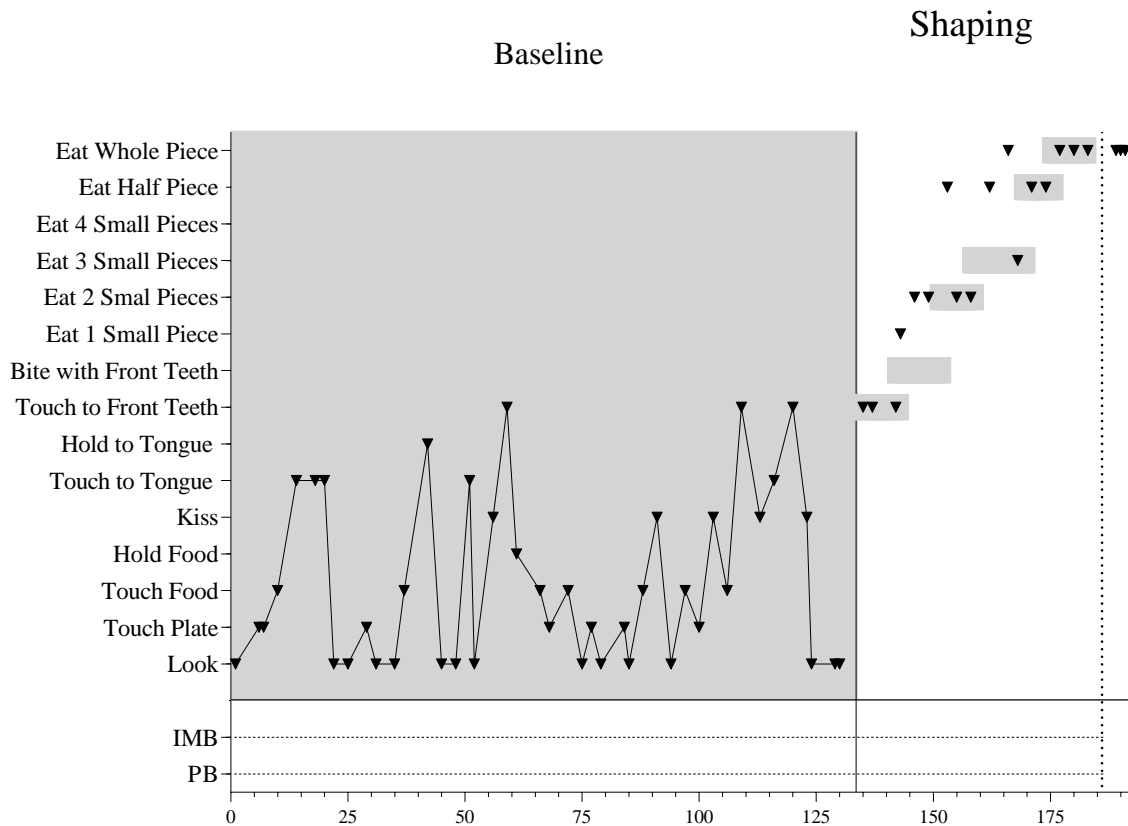
Shaping

Baseline

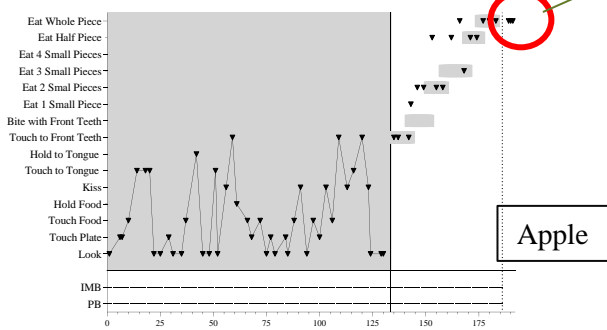
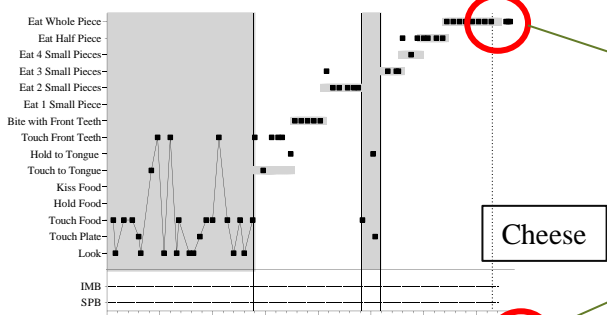
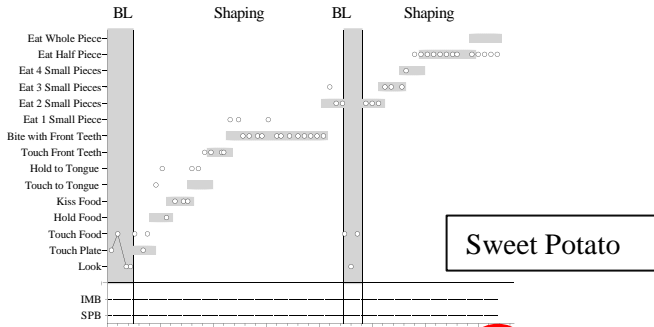
Shaping



Trials



0 25 50 75 100 125 150 175



6 and 9
month
follow-up

Trials

Question	Rating
How do you feel like you were treated during our food program?	7

Question	Rating
How do you feel like you were treated during our food program?	7
Did you feel comfortable and safe during the food program?	7

Question	Rating
How do you feel like you were treated during our food program?	7
Did you feel comfortable and safe during the food program?	7
How important was it for you to have choice and input in the program (e.g., ranking and selecting the foods, choosing the schedule)?	7

Question	Rating
How do you feel like you were treated during our food program?	7
Did you feel comfortable and safe during the food program?	7
How important was it for you to have choice and input in the program (e.g., ranking and selecting the foods, choosing the schedule)?	7
How proud are you of what you accomplished thus far (i.e., trying and eating these foods)?	5

Question	Rating
How do you feel like you were treated during our food program?	7
Did you feel comfortable and safe during the food program?	7
How important was it for you to have choice and input in the program (e.g., ranking and selecting the foods, choosing the schedule)?	7
How proud are you of what you accomplished thus far (i.e., trying and eating these foods)?	5
How willing would you be to try new foods if you could do it like we did?	1

TIC Components

In practice

Acknowledge trauma and its potential impact

- Open-ended interview with caregivers and school team
- Open-ended interview with Skyler
- Record and context review

Ensure safety and trust

- Termination of sessions up to Skyler
- Control embedded into procedures
- Assent for all parts of the intervention

Promote shared governance and choice

- Selection of target foods and preferred foods
- Choice of when and how often sessions were run
- Skyler involved in problem solving

Emphasize skill-building

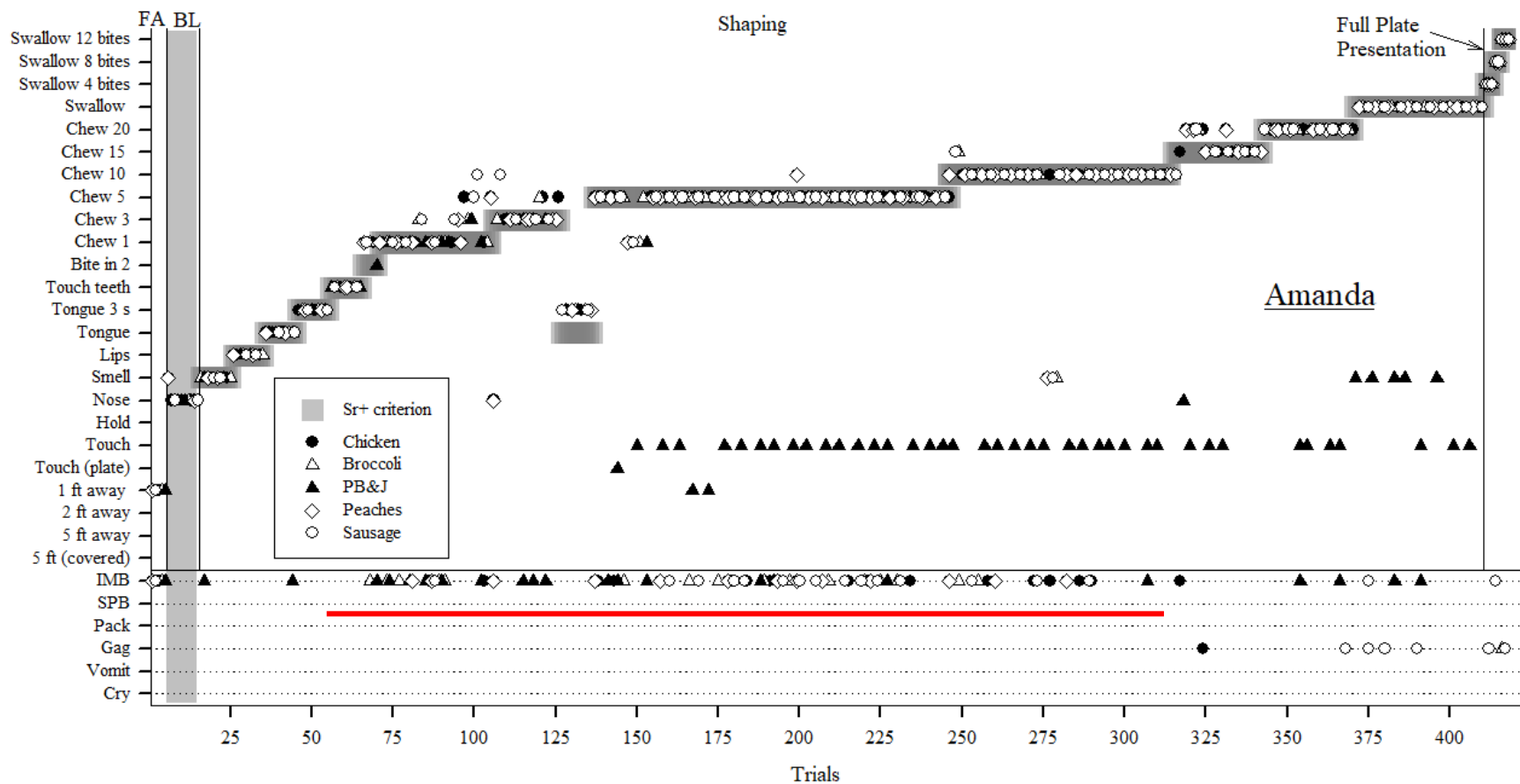
- Focus on skills not compliance
- Self-advocacy skills embedded within

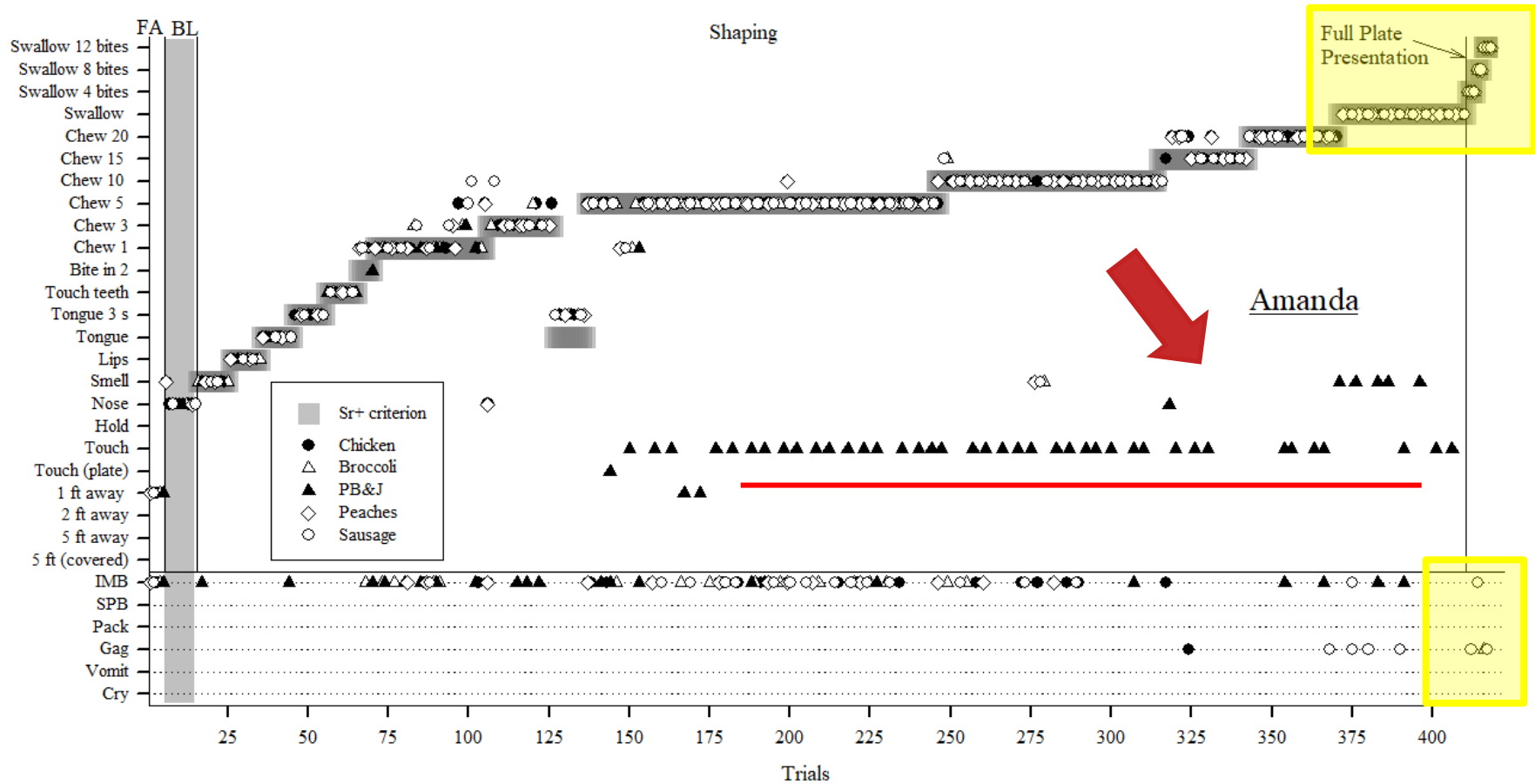
Treating Food Selectivity in Autistic Adolescents and Adults: A Systematic Replication

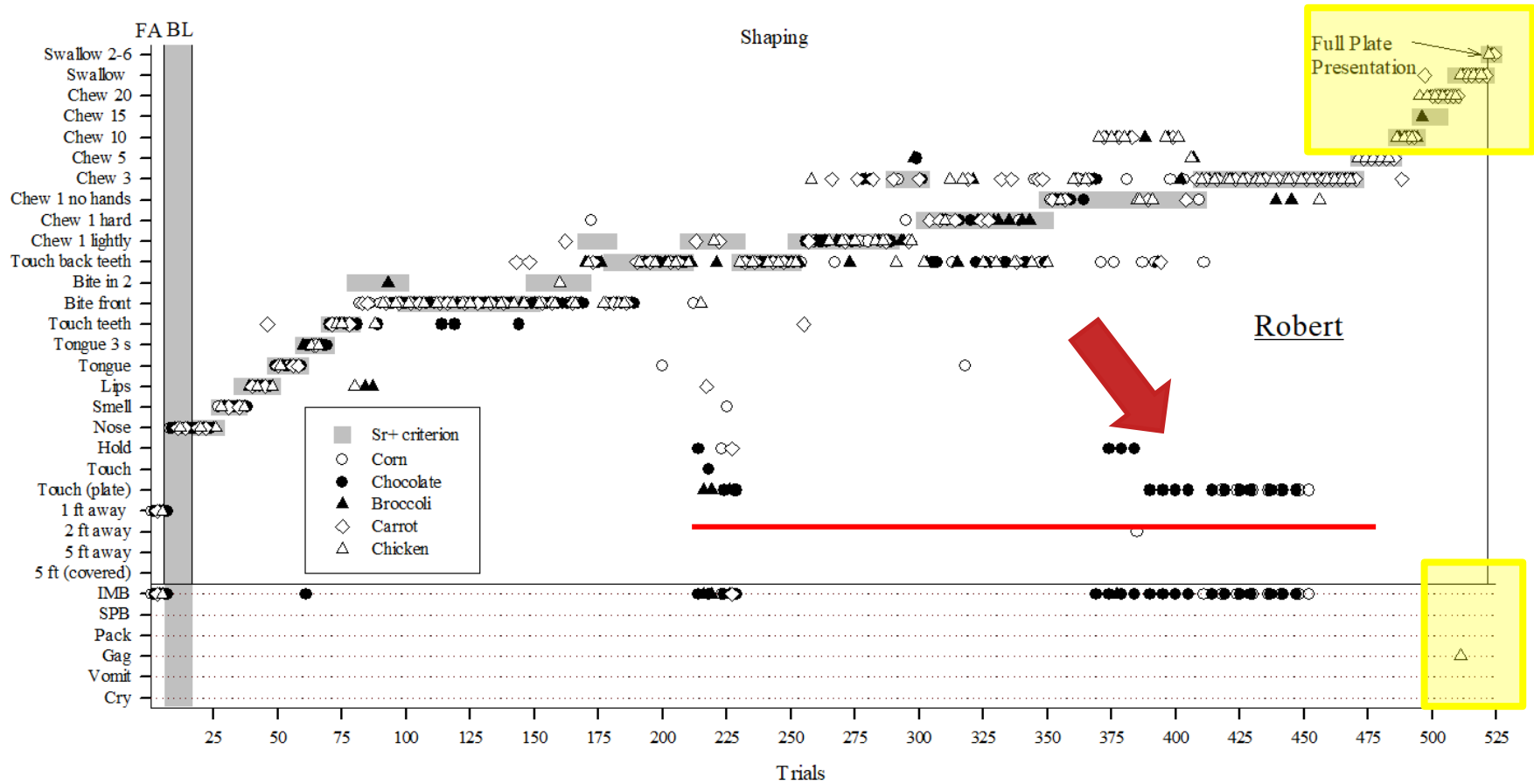
Mara L. Vanderzell, Holly
C. Gover, Sean Badger,
Jessica Hanson, Yvonne
Smith

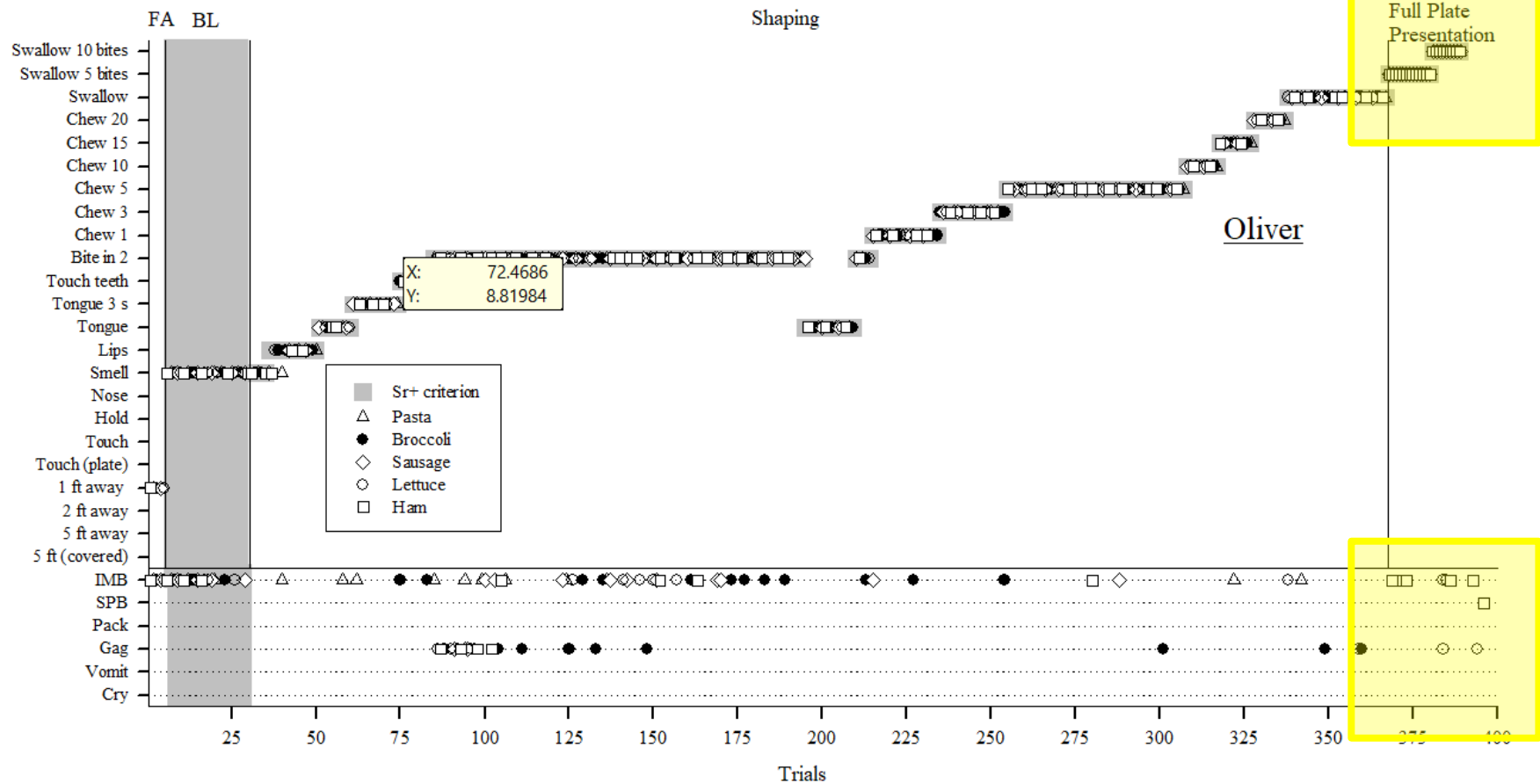


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PALSY











Thank you!

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Thank you!

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Initial Screening

Which clients to work with?

- Food selectivity vs. food refusal
- Receptive and expressive communication
 - **Strong imitation skills needed, at minimum**
- Special considerations for “client zero”

Logistics

- Who?
 - Whoever is comfortable/trained/knows the client well
 - Keep consistent, if possible
- Where?
 - Separate or different from typical environment
- When?
 - Not during snack/lunch/mealtimes
 - Space out from meals, less important in beginning
- How often will sessions be run?
 - Minimally ~3 hours per week

Safety

- Anyone running sessions
 - CPR/First Aid Certified
 - Trainings available for identifying choking:
(<https://opwdd.ny.gov/providers/choking>)
- Recruit professional advice from SLPs/OTs
 - Specializing in feeding/swallowing, if needed
- Do not practice on an island
- Allergy and medical history informed
- Ensure emotional safety
 - History with feeding interventions
 - History with certain foods

Beyond bite shaping

1. Meal-building
2. Generalization to mealtimes
3. Generalization to caregivers and the home
4. Assess need to repeat treatment with new foods