

### **Supplemental Material S3.**

1. Social and Ecological Validity Survey
  - a. COMFORT/IMPORTANCE
  - b. LIFESTYLE FIT
2. Posttreatment Caregiver Interview
3. Caregiver Self-Efficacy Survey

### S3.1 Social and Ecological Validity Survey

#### S3.1a COMFORT/IMPORTANCE

Below are some questions about your comfort level with this training program and VAULT techniques.

1. I am comfortable with my coach. [Slider 1–10: 1 is *Not at all* and 10 is *Very comfortable*, with no descriptive anchors in between.]
2. I am comfortable giving the treatment to my child. [Slider 1–10: 1 is *Not at all* and 10 is *Very comfortable*, with no descriptive anchors in between.]
3. The following questions might seem similar to ones you’ve already answered. However, for these questions, we are interested in knowing *how comfortable you feel* with each of the VAULT treatment techniques. It does not matter how well you do them or how well you think you do them. For example, you might be able to sing well, but you might not *feel comfortable* singing in front of people. We are also interested in *how important* you think each technique is. Again, it does not matter how well you do them or think you do them. For example, you might not eat fresh fruits and vegetables every single day, but you might still think *it is important* to do that. *Check which VAULT techniques you are comfortable with doing on your own (without a coach) and which you think are important for helping your child learn new words.*

[Each statement below was followed by 5 radio buttons anchored on the extremes with *Not comfortable* and *Super comfortable* and in the middle with *Neutral*.]

- a. I feel comfortable...
  - i. saying the new word 9 times per minute over 7–8 minutes.
  - ii. lowering communication pressures on my child.
  - iii. avoiding using ungrammatical sentences.
  - iv. keeping my child engaged in an activity that is related to the new word.
  - v. using the new word in many different sentences.
  - vi. talking about the new word in many different contexts and activities.

[Each statement below was followed by 3 radio buttons anchored with: *No*, *Still deciding*, *Yes*.]

- b. I think it is important to...
  - i. say the new word 9 times per minute over 7–8 minutes.
  - ii. lower communication pressures on my child.
  - iii. avoid using ungrammatical sentences.
  - iv. keep my child engaged in an activity that is related to the new word.
  - v. use the new word in many different sentences.
  - vi. talk about the new word in many different contexts and activities.

### **S3.1b LIFESTYLE FIT**

[Each statement below was followed by 7 radio buttons anchored with descriptions ranging from *Strongly disagree* to *Strongly agree*, with 4 as *Still deciding*.]

1. It was easy to fit the weekly sessions with the research team into my family's schedule.
2. For my weekly sessions without a coach, I could easily fit them into my schedule.
3. The treatment techniques came very naturally to me.
4. The target words used in treatment were meaningful for my child.
5. I want to/will keep doing VAULT treatment with my child.
6. I would recommend the VAULT techniques to a friend or family member.
7. I would recommend this parent training program to a friend or family member.
8. The training materials (pretreatment training videos, worksheets) were helpful.
9. I had the right number of coaching sessions.
10. I would have preferred this training to have been in person.

### **S3.2 Posttreatment Caregiver Interview**

- 1) Has being trained on VAULT changed the way you interact with your child outside of treatment sessions?
  - a. If the answer is yes, then: Can you tell me more about that? What has changed?  
How has it changed?
- 2) Have you noticed any changes in your child since s/he started our program that you think may be related to his/her participation in our program?
  - If the answer is yes, then: Can you tell me more about that? What has changed?  
How has it changed?
- 3) How do you think your child felt about the treatment?
- 4) How did you feel about the program?
  - If needed (if answer is very short or not specific, say):  
Can you tell me more about that?  
What parts would you change?
- 5) How did you feel about your coach?
  - a. What did you think about:
    - i. receiving feedback from the coach?
    - ii. people watching you provide the treatment to your child?
    - iii. sharing questions and challenges with your coach?
- 6) Is there anything else you'd like to share about your family's experience with our program?

### S3.3 Caregiver Self-Efficacy Survey

Below are some questions about your belief in your ability to teach your child new words. There are no right or wrong answers, and this won't affect your continued participation in this study.

Please rate the following statements from 1 (strongly disagree) to 7 (strongly agree). For all questions, please rate yourself based on when you teach your child a new word **WITHOUT** the help of a coach (i.e., independently).

#### Overall Question

- a. When teaching my child a new word, I can successfully combine all of the techniques of the VAULT treatment with my child.

#### 1. Use a target word in focused stimulation

- a. When teaching my child a new word, I am able to use the new word approximately 9 times per minute.
- b. When teaching my child a new word, I can continue using the new word approximately 9 times per minute **over a 7-8 minute period**.
- c. When teaching my child a new word, I know how to make the word stand out from the other words they hear.

#### 2. Low-Pressure Interactions

- a. When teaching my child a new word, I can describe out loud what I'm doing or what my child is doing.
- b. When teaching my child a new word, it is easy for me to reduce the pressure on my child to respond.
- c. When teaching my child a new word, it easy for me to avoid asking my child to say the word I'm teaching.

#### 3. Grammatical utterances

- a. When teaching my child a new word, I avoid saying sentences that are not grammatically correct (e.g., him run).
- b. When teaching my child a new word, it is easy for me to speak grammatically.
- c. When teaching my child a new word, I speak in sentences and phrases that would sound correct to another adult.

#### 4. Engage child in quality interaction (few distractions, gaining/sustaining their attention)

- a. When teaching my child a new word, I can keep my child engaged in activities for about 7–8 minutes at a time.
- b. When teaching my child a new word, I can use the word to talk about the activity that my child is paying attention to.
- c. When teaching my child a new word, I can use the word to talk about the activity that my child is paying attention to **for 7 to 8 minutes**.

#### 5. Varied sentence structures

- a. When teaching my child a new word, I can avoid repeating the same sentence over and over again.
- b. When I'm teaching my child a new word, I frequently change the position of the new word in my sentence.
- c. When teaching my child a new word, I am able to use the word in a variety of sentences.

#### 6. Varied Environments/Contexts

- a. When teaching my child a new word, I can teach it in at least three different activities.

- b. When teaching my child a new word, I can do at least 3 different things with the word.  
(For example, I jump on one foot. I make the doll jump. I jump in a circle. As opposed to, I only ever jump on two feet when I teach the word “jump.”)
- c. When I teach my child a new word, I use different objects.

*Note.* The section headings were not in the questionnaire given to caregivers. Questions were randomized and appeared alongside radio buttons corresponding to ratings 1–7 that caregivers selected.