


SWITCH ASSESSMENT: DETERMINING THE BEST SWITCH TYPE AND LOCATION FOR CLIENTS WHO ARE NOT ENGAGED


Michelle L. Lange, OTR/L, ABDA, ATP/SMS



1

What are we covering?

- The client who is not engaged
 - Determining causes
 - Determining motivators
 - Interventions
 - Case Studies



M. Lange 2.2022

2

The Client Who is Not Engaged

- Who is this client?
 - You ask the client to press the switch and they do not respond
 - If they do respond, they may bang the switch, pull the cord or throw it
 - The client does not see the switch as a tool



M. Lange 2.2022

3

The Client Who is Not Engaged

- Who is this client?
 - Clients with significant developmental delays, significant cognitive limitations
 - Clients with very limited vision
 - Clients who have a lower level of alertness
 - Clients who don't trust you
 - Too many yucky medical appointments
 - Clients who are over-therapized
 - You want me to do this
 - Don't see the switch as a tool, rather than a task



M. Lange 2.2022

4

Assessment Considerations

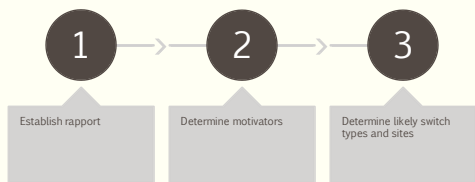
- How does this impact access?
 - If the client won't engage in the activity, determining the best switch type and location is difficult
 - If a switch type and site are determined, the client may not use the switch appropriately/functionally
 - Training switch use is challenging



M. Lange 2.2022

5

Assessment Considerations



M. Lange 2.2022

6

Think of a client you are working with
As we move through the webinar, think of strategies that may be helpful

M. Lange 2.2022

7

Establish Rapport

- It's all about the relationship
- We want the client to feel comfortable
 - For clients who don't trust you, reassure them
 - For clients who are over-therapized, forget the typical therapy and focus on establishing that rapport





M. Lange 2.2022

8

Determine Motivators

- Ask the caregivers, team members and client (as appropriate) what they **like**
- Many clients are motivated by music and sensory stimulation
- Other ideas: jokes, toy cars, video on iPad, balls, bubbles



M. Lange 2.2022

9

Finding that Switch Site

Once your client is feeling comfortable and you know what is motivating, bring in a switch

When the client hits the switch at all, ensure they get a fantastic response!
The switch doesn't even have to be plugged in at this point



M. Lange 2.2022

10

Case Studies

▪ This is easier to explore through some examples:

- Alexi
- Tommy
- Rachel



M. Lange 2.2022

11

Case Study: Alexi

- Alexi
- 10 years old
- 3 years post TBI
- Low vision
- Hypersensitive hands



M. Lange 2.2022

12

Case Study: Alexi

- The problem:
- Initial goal was a communication evaluation, but Alexi had no access
- We "downshifted" to finding a switch site
- It took a while...



M. Lange 2.2022

13

Case Study: Alexi

Establishing rapport
 Alexi got quite agitated very easily
 Common with TBI
 One of his triggers was going to any "medical appointment"
 I tried to reassure him that there would be "no ouchies", but he was still very upset



M. Lange 2.2022

14

Case Study: Alexi

- Establishing rapport
- I asked his caregivers what helped Alexi calm down
- He loved dramatic Broadway musical scores, no lyrics
 - He instantly melted!
 - Family had his favorite music on a smartphone
- We played the music to calm him down while we just got to know each other a bit
 - It took several visits for him to not scream as soon as he entered the building



M. Lange 2.2022

15

Case Study: Alexi

- Motivation
- Alexi was obviously motivated by music
- Every time he touched a switch, I would start the music on my smartphone
 - My goal wasn't to set this up for independent control quite yet



M. Lange 2.2022

16

Case Study: Alexi

- Switch Placement:
- Hands: Alexi's hands were very hypersensitive, so I couldn't even do "hand over hand" here
- Head: Alexi didn't like anything by his head, he also had a strong ATNR
- Knees: Alexi demonstrated potential by the lateral side of his left knee



M. Lange 2.2022

17

Case Study: Alexi

When Alexi pressed the switch, I turned on the music
 We then connected the switch to an iPad
 He did not appear to realize that his movement had any connection to the music playing, he just thought someone turned it on
 Because that is what had happened over the *past several years*
 With practice, he began to realize that *he* was turning the music on



M. Lange 2.2022

18

Case Study: Alexi

- He needed lots of practice to develop this potential switch site
- We recommended a PowerLink, switch, and universal switch mount to allow control of various devices
- He practiced at home and school, in addition to therapy



M. Lange 2.2022

19

Case Study: Alexi

- Eventually, we started activities to develop scanning skills once this motor pattern was well established
- He then was able to transition switch access to a speech generating device and, eventually, a power wheelchair




20

Questions?

M. Lange 2.2022

21

Case Study: Tommy



Tommy
Cerebral palsy, blindness
Non-verbal
Ambulatory for short distances
Age 32
Lives in a group home

M. Lange 2.2022

22

Case Study: Tommy

- The problem:
- Tommy had tried various switches, basic EADLs, and communication devices, but he just tended to bang everything, pull cords, and throw items




M. Lange 2.2022

23

Case Study: Tommy

The evaluation:

- Tommy continually pulled, banged, and threw everything we put in front of him
- He was very agitated by a new setting and new people
- We decided on a field trip...



M. Lange 2.2022

24

Case Study: Tommy

The group home: establishing rapport

- We went to the group home and observed Tommy
- He tended to wander around and would approach staff occasionally
 - We asked how he indicated his needs
 - The staff said he only approached them for assistance in toileting and to turn on his music
 - He became frustrated easily and would start yelling, screaming... and then the other clients would join in



M. Lange 2.2022

25

Case Study: Tommy

Finding a switch type and site

- Our first goal was to give Tommy a more appropriate means of indicating his needs
 - We took a Bigmack and attached it to the wall
 - He was unable to remove this, though he did try for a while
 - It said "I need help" when pressed
 - The staff was instructed to approach Tommy immediately to ask what he needed
 - After a while, the other clients started using it, too!



M. Lange 2.2022

26

Case Study: Tommy

Finding a switch type and site

- Our second goal was to give Tommy an independent means of controlling his music.
 - He liked one radio station only and would get very upset if this changed
 - He would crank up the volume if given the opportunity, so we did not give him that ability
 - The neighbors had called the police in the past!
 - The 'old school' stereo was on a dresser in his room



M. Lange 2.2022

27

Case Study: Tommy

Finding a switch type and site

- Our second goal was to give Tommy an independent means of controlling his music.
 - We plugged the stereo into a PowerLink, out of Tommy's reach
 - We took a Big Beamer wireless switch and attached this to the side of the dresser so he couldn't remove it (he tried!)
 - Once he realized he couldn't destroy the switch, he noticed that it was turning on his music. He began to use this functionally.



M. Lange 2.2022

28

Case Study: Tommy

- I would have loved to explore more sophisticated communication, mobility, and control for Tommy
- He did not have the cognitive abilities to use more sophisticated AT
- However, he stopped yelling and began to use a simple communication strategy (I need help) and could turn on his music.
- The staff reported that Tommy was much more relaxed and content ... so was everyone else!

Calm

M. Lange 2.2022

29

Questions?

M. Lange 2.2022

30

Case Study: Rachel

- Rachel
- 8 years old
- Genetic condition, developmental delays, blindness, seizures



M. Lange 2.2022

31

Case Study: Rachel

- The problem:
- Rachel didn't do anything all day long at school
 - She would put her head down, tuck her arm under her vest, and look like she was napping
 - Withdrawn/sub-aroused



M. Lange 2.2022

32

Case Study: Rachel

- Goal: communication
- Rachel had a communication device, but no access
- Staff would grab her hand and help her hit a switch, but she never initiated this movement, and would actively pull away and get irritated



M. Lange 2.2022

33

Case Study: Rachel

The motivator:

- I asked Rachel's Mom what motivated her
 - Sensory
- Sensory stimulation also increased her alertness level



M. Lange 2.2022

34

Case Study: Rachel

Positioning

- I was concerned that Rachel was so "checked out" in her seating system
- Mom said that Rachel sat in a standard rocking chair at home!
 - She didn't need that much postural support
 - She only "hung" on her anterior trunk support
 - Rocking helped to increase her alertness (sensory again) and she would lift her head and engage



M. Lange 2.2022

35

Case Study: Rachel

- Rachel trialed a Kid Rock dynamic manual wheelchair
- This moves at the hips and knees in response to client movement
- We had to demonstrate how it worked and encourage her to use the dynamic component
- Once she caught on...happy girl!
- (This is no longer available; however, Rachel is now using new dynamic seating components on a tilt in space manual wheelchair)



M. Lange 2.2022

36

Case Study: Rachel

Switch Type and Placement:

- Rachel was able to access a Jellybean switch by the right side of her head
- If she "checks out", those around her provide sensory stimulation to increase her overall alertness
- Her initial choices on the communication device were all sensory choices, as this was most motivating

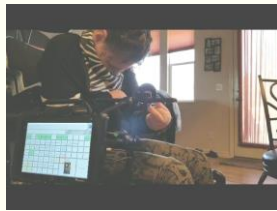


M. Lange 2.2022

37

Case Study: Rachel

- Overtime, Rachel was lifting her head less often to activate a switch here
- A switch was trialed at her right side, and she did well. She reached across her body with her left hand to activate this
- The device is facing outward as she cannot see the display, but tends to touch it – resulting in inadvertent selections ... which she finds quite funny
- Movie Time!



M. Lange 2.2022

38

Case Study: Rachel

- With this new switch location, Rachel began to repeatedly activate the switch, finding it funny to make the communication device repeat words
 - She was rapping!
- What to do?



M. Lange 2.2022

39

Case Study: Rachel

- We placed a Switch Latch and Timer between the switch and the communication device
- This was set to about 5 seconds (timed seconds)
- When Rachel activated the switch, the scan would begin
- If she quickly activated the switch again, there was no response for the set amount of time
- This 'took the fun out it' and over time, she stopped repeatedly activating the switch as a game and resumed using the switch as a tool - for communication



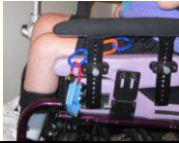
M. Lange 2.2022

40

Case Study: Rachel

Final results:

- Rachel still has many "withdrawn" times throughout her day
- She has sensory choices around her (i.e. attached to her chair) and does seek these out when she chooses
- The dynamic seating has increased her overall alertness at school



M. Lange 2.2022

41

Case Study: Rachel

Final results:

- She does use her communication device, though with a limited amount of vocabulary and not as frequently as the team would like
- By having a switch and mount, she can choose to engage when she is alert and ready
- She also touches an iPad for recreation



M. Lange 2.2022

42

Questions?

M. Lange 2.2022

43


One more thought...

- Some switches are designed to engage the client
 - Lights, buzzers, vibration, texture
- Use with caution
 - The switch often becomes the task, rather than the tool



M. Lange 2.2022

44



Think of that client you are working with
What strategies may be helpful?

M. Lange 2.2022

45

Take Home Message

- Switch Access for people who are not engaged
 - Requires identifying the probable cause of why the client is not engaged
 - Establishing rapport
 - Finding motivators
 - Finding the best switch type and placement
 - Patience!!!



M. Lange 2.2022

46

Questions?

M. Lange 2.2022

47

Thank You!

M. Lange 2.2022

48

Contact Information

- Michelle Lange
- www.atilange.com
- MichelleLange1@outlook.com

M. Lange 2.2022
