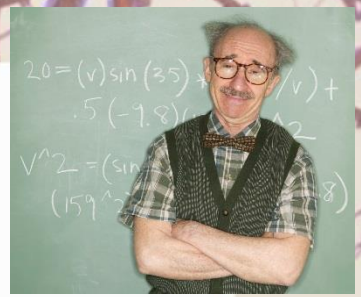
Where to begin? Problems with hypotheticals.



Case of the professor: Richard is a 56 year old male who sustained a severe head injury after falling from his roof while removing Christmas lights. Landing on the frozen concrete of his driveway, he sustained skull fractures, a large subdural hematoma in the right frontal region, and smaller hemorrhages. He laid in his driveway for about 2 hours before family returned home to find him lying just in front of his vehicle. After 2 months of hospitalization/rehab, he returned home.

Richard was a university professor at the time of his injury. He was characterized by friends and family as a brilliant conversationalist, albeit somewhat eccentric.

His initial return home was coupled with daily outpatient programming (3-4 hours), which kept him busy and took some pressure off of his wife and children. When he returned home, he was exhausted and aside from meals either napped or rested in his chair. As per usual, he always had a book in his hand but now, he only read for a few minutes before dozing off.

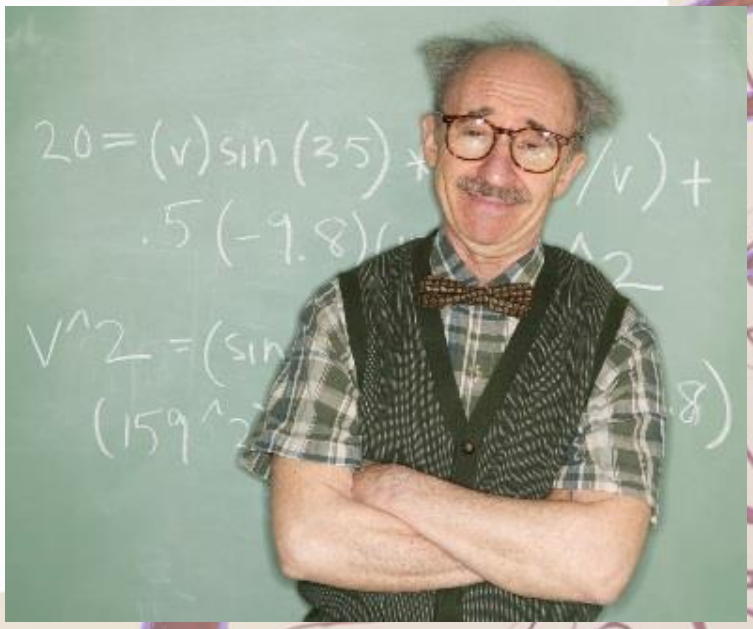
After a couple of months of outpatient day programming, Richard was ‘doing well’ and thinking about returning to work at the start of the next semester. A gifted professor, his colleagues were eager to make this work. They arranged a lighter load and some supports.

Richard (cont.)

To prepare for his return to work, Richard participated in some further testing and his SLP met with a few of his colleagues.

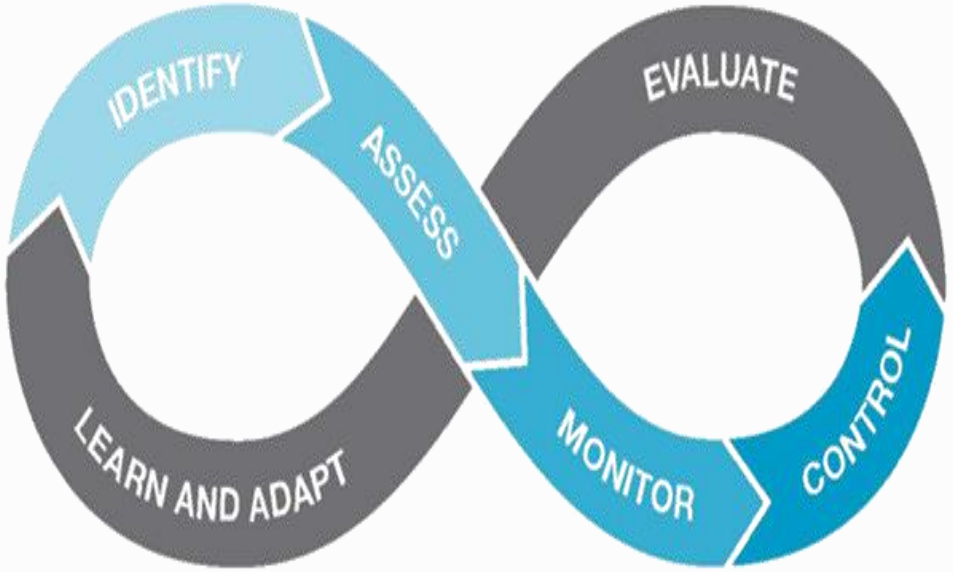
How do you think he did on neuropsychological testing?

How about language and cognitive measures?



Contextual Hypothesis-Based testing (CHBT)

Dynamic Assessment aka Continuous Assessment & Intervention



Some shortcomings of standardized tests

- Think capacity vs. performance issues
- Which are you measuring in your office?
- Problems with hypotheticals…

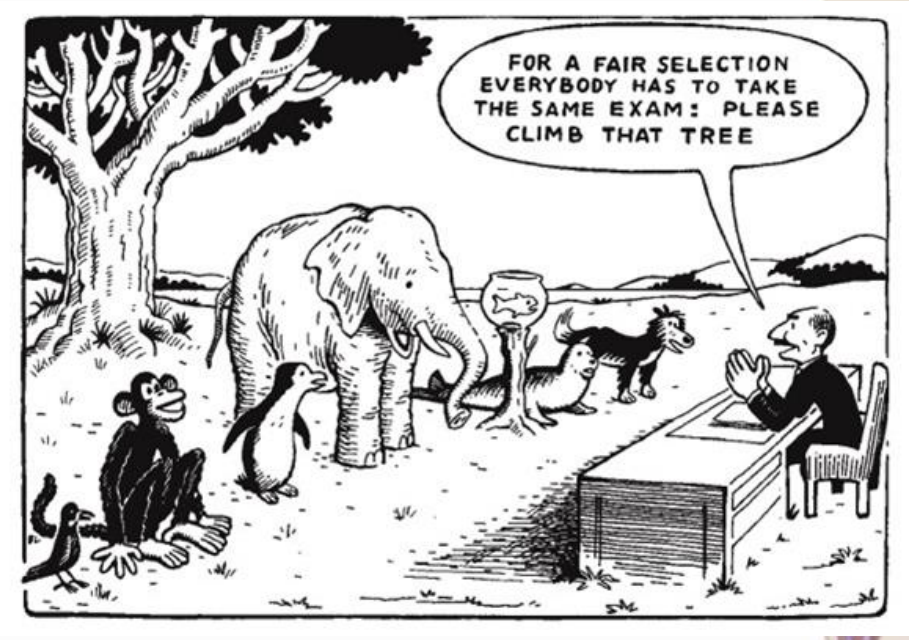
Elements

- Performance in real-world tasks (not hypotheticals)
- Predictions and Self-assessment (Obstacle-Plan-Do-Review)
- Monitor everyday routines
- VSM & guided reflection
- Assessments of communication partners

Ylvisaker & Feeney, 1998; Hoepner, 2010; Hoepner & Turkstra, 2013; Hoepner, 2015

Contextual Hypothesis Testing

- An important component of more ecologically valid assessment
- Can measure discrepancies between capacity and performance
- Uses some components of standardized assessment, also assesses natural environments and contexts



Ylvisaker & Feeney, 1998; Braga, DaPaz-Junior, & Ylvisaker, 2005; Coelho, Ylvisaker, & Turkstra, 2005; Ylvisaker & Gioria, 1998

Plan-Do-Review (we'll return to this in interventions)

- Dynamic assessment and intervention BLUR together here

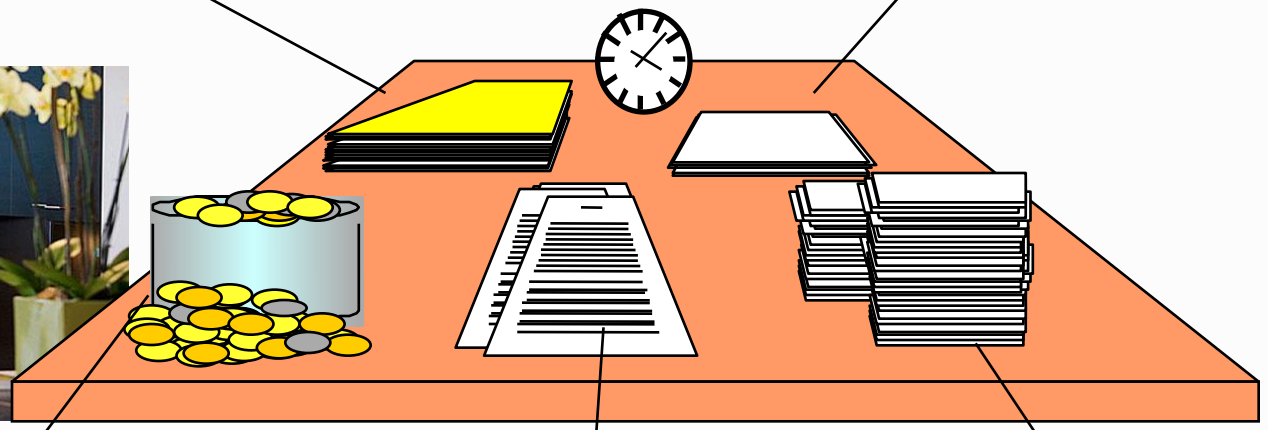
- ❑ Obstacle
- ❑ Goal
- ❑ Plan
- ❑ Do
- ❑ Review

Ylvisaker & Feeney, 1998

The Hotel Task

Looking up phone numbers

Compiling individual bills based on till rolls



Sorting the charity collection.

Proof-reading the new hotel leaflet

Sorting conference delegate labels into alphabetical order

(Make your own modifications: sorting/logging church envelopes, job site coordination, sorting mail, making conference packets, making craft project packets, vehicle maintenance), Burrachos server ☺

CHBT – Jason (CAT Mechanic)

- Jason is a mechanic for a local Caterpillar service and sales company. Since returning to work, you've been in regular contact with Jason and his boss. Before returning to work, you advised Jason to set up a meeting with his boss to let him know of Jason's current status, potential struggles, but remaining competence, capacity, and commitment to success. Jason declined that meeting, however; after a few days at work, Jason called you and requested a joint meeting with his boss. Fortunately, Jason's boss valued his past contributions and saw some inconsistencies in his current productivity and efficiency. A summary of the conversation included – Jason works for a while, as effectively as he ever did. However, when he is interrupted (in any way – colleague, customer, boss, phone call), he falls a part. His return to task time is very poor. For example, in doing maintenance on a Cat, he cannot find where he left off (certainly doesn't remember). So, he goes back to the beginning to retrace his steps. Once he gets to the right step, there is always that potential that he'll be interrupted again. How can we assess this real-life struggle with a CHBT approach?

For Jason, we need

Obstacle: Difficulty getting back on task, when interrupted	A base task (that either parallels or is the maintenance sequence)	Foils & Distractors (that either parallel or are the real-life interruptions)	A strategic plan (to carry out in the moment or in practice)
Plan: Sequence, Script, Predict (Goal)			
Do: Carry out plan, adjust (with cues or self-recognition) Video record			
Review: Did I complete the task? Efficiently? Timely? Accurately? with Quality?			
Post-task strategies & adjustment			

Ylvisaker & Feeney's Obstacle-Plan-Do-review Framework (1998); Hoepner – flow Table

For Jason, we need (At Work)

Obstacle: Difficulty getting back on task, when interrupted	A base task (CAT maintenance)	Foils & Distractors (Customers, Colleagues, Phone Calls, etc.)	A strategic plan (A script to carry out – actions for interruptions)
Plan: Sequence, Script, Predict (Goal)	• Complete 12-step routine maintenance on CAT • Can verbalize steps • 1 CAT per 2 hours	• Introduce typical, real-life distractors • Control exposure – flex based on performance	• "I'll be with you shortly." • Mark current step • Address person who is interrupting the task
Do: Carry out plan, adjust (with cues or self-recognition) Video record	• Jason starts the task	• Increase or decrease foils based on performance (Goldilocks principle)	• Check-in re: time, progress, need for adjustment
Review: Did I complete the task? Efficiently? Timely? Accurately? with Quality?	• Jason rates completion, efficiency, timeliness, accuracy, & quality	• Coach (SLP) prompts discussion – why 9/10?	• Coach (SLP) probes awareness & strategic behaviors
Post-task strategies & adjustment	• More time? Fewer products? Strategy?		• Jointly developed a checklist to mark status

For Jason, we need (In Clinic)

Obstacle: Difficulty getting back on task, when interrupted	A base task (functional, multi-step assembly project)	Foils & Distractors (SLP fills all distractor roles)	A strategic plan (to carry out in the moment or in practice)
Plan: Sequence, Script, Predict (Goal)	• Complete 12-step assembly project (registration packets) • Can verbalize steps • 10 projects per 15 minutes	• Introduce typical, real-life distractors • Control exposure – flex based on performance	• "I'll be with you shortly." • Mark current step • Address person who is interrupting the task
Do: Carry out plan, adjust (with cues or self-recognition) Video record	• Jason starts the task	• Increase or decrease foils based on performance (Goldilocks principle)	• Check-in re: time, progress, need for adjustment
Review: Did I complete the task? Efficiently? Timely? Accurately? with Quality?	• Jason rates completion, efficiency, timeliness, accuracy, & quality	• Coach (SLP) prompts discussion – why 9/10?	• Coach (SLP) probes awareness & strategic behaviors
Post-task strategies & adjustment	• More time? Fewer products? Strategy?		• Adjust and predict if he was to complete task again

Contextual Hypothesis-Based Testing
Goal-Plan-Do-Review

Goal

What do I want to accomplish?

Plan

How am I going to accomplish my goal?

Materials and equipment

Steps or assignments

1.	1.
2.	2.
3.	3.

Prediction

How well will I do?

How much will I get done?

Do

Problems

	Solutions
1.	1.
2.	2.

Review

Self-rating 1 2 3 4 5 6 7 8 9 10

Other ratings 1 2 3 4 5 6 7 8 9 10

What worked?

What didn't work?

1.	1.
2.	2.

What will I try next time?

Ylvisaker & Feeney, 1999

Obstacle-Goal-Plan-Do-Review

Executive Functioning Flow

Predicted Time _____

Distractor/Foil (i.e., conversation, other task, self-distraction, etc):

_____

Actual Time required _____

_____

Efficiency (scale of 1-10; 1-worst → 10-best) _____

_____

Quality Control (scale of 1-10; 1-worst → 10-best) _____

_____

What could/would you do differently next time?

Ylvisaker & Feeney, 1999

Metacognitive strategy instruction

- Uses direct instruction to train persons with TBI to regulate their own behavior by breaking up complex tasks into steps, thinking strategically.
- People with TBI must
  - set goals
  - predict performance
  - identify best solutions based on past performance
  - self-assess during the activity
  - change approach using a strategy
  - self-assess at the end of the activity – essentially OGPDR

Burke et al., 1991; Cicerone & Giacino, 1992; Cicerone & Wood, 1987; Fasotti et al., 2000; Levine et al., 2000; Turkstra & Flora, 2002; Sohlberg, Ehlardt, & Kennedy, 2005; von Cramon et al., 1991

Time Pressure Management

- First address awareness and acceptance of their injuries
- Use a step-by-step approach to stay focused and avoid distracting thoughts
- Rehearse this process with gradually increased levels of distraction

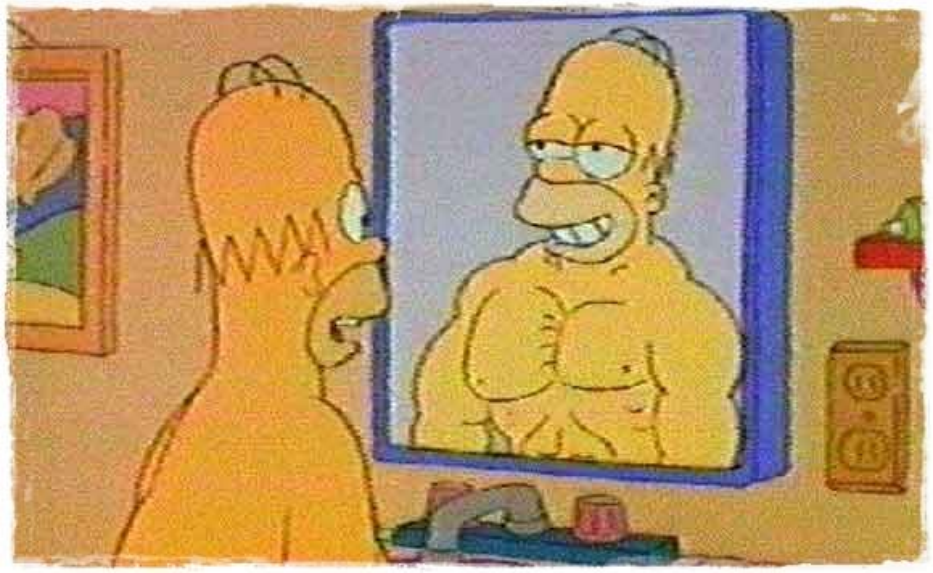
Fassoti et al., 2000

Problems with retrospective judgments by persons with TBI

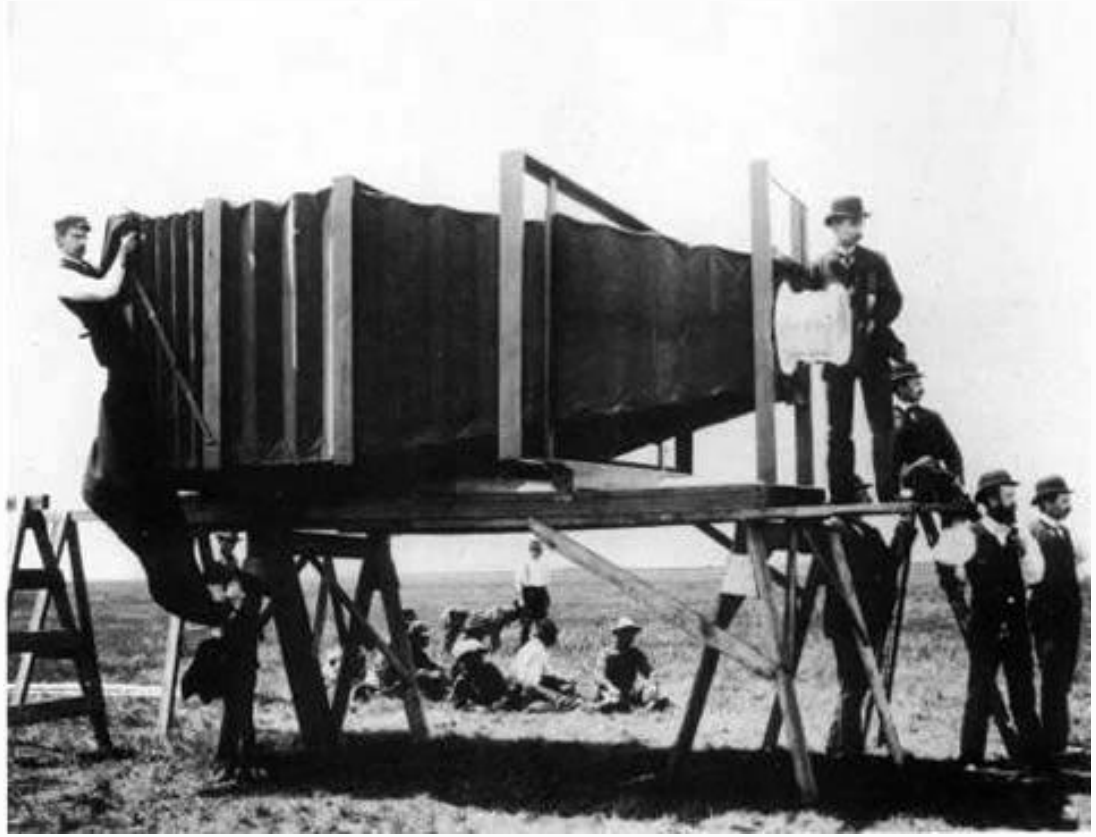
- Places high demands on working memory, which consumes the fuel for higher level executive functions
- Judgments are not accurate
  - Overall accuracy declines
  - Specificity declines
  - Flexibility declines
- Many/most judgments are made by the clinician

Self-assessment

- Reduces confrontation (e.g., “No I don’t”)
- Promotes generalization outside of therapy
  - Promotes additional opportunities for practice (due to increased awareness and self-feedback)
- Strategic behaviors



Video-self modeling: The good ole days…



- Act natural…

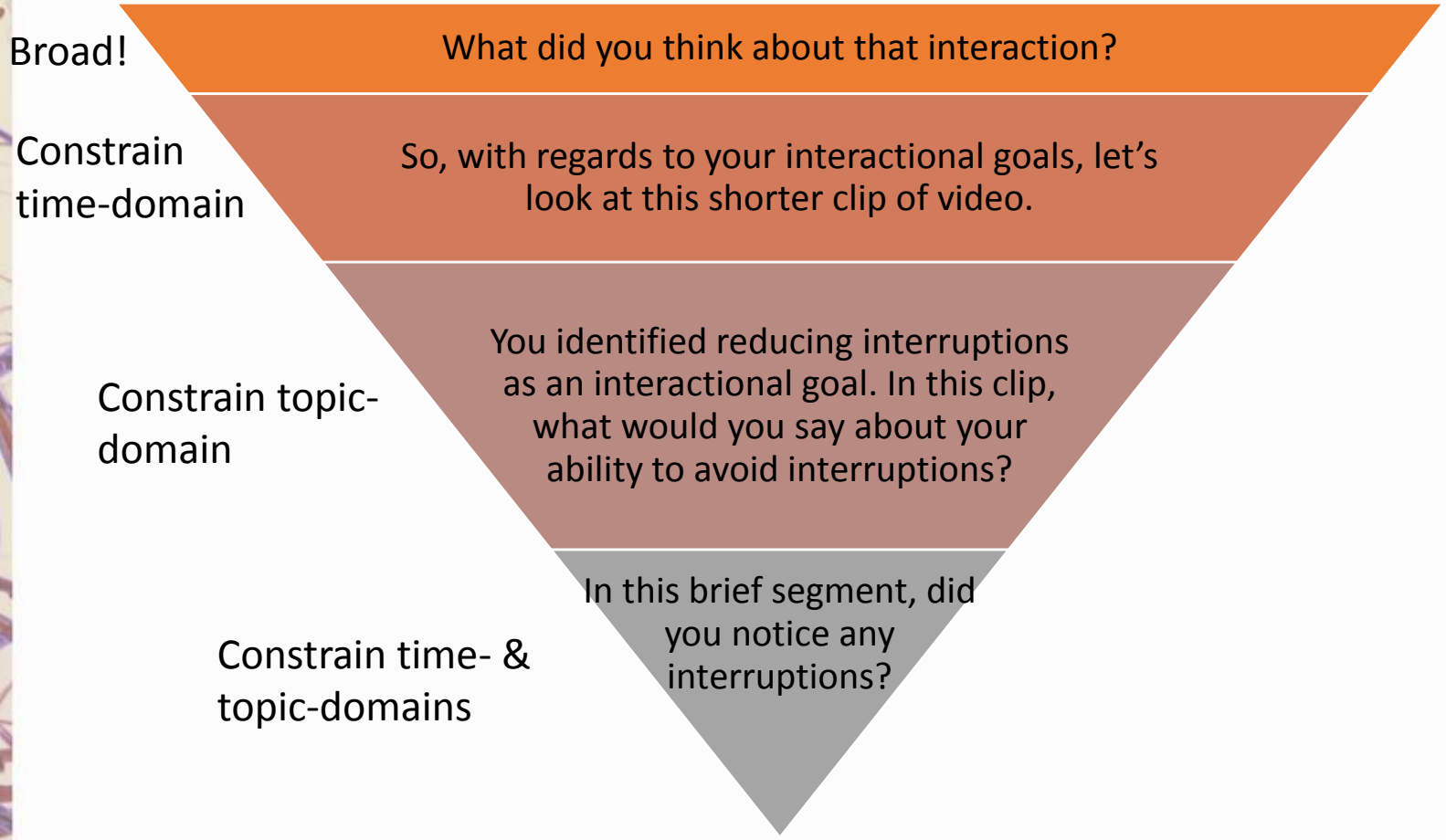
Several decades later…

VSM

- Dynamic – prompts shift from broad to specific
- Errorless – scaffolding is provided to achieve self-assessment
- Positive – feedback from clinician is always positive

Hoepner & Olson, in preparation; Hoepner, 2015; Hoepner, Sell, & Kooiman (2015); Hoepner & Turkstra, 2013; Ortiz et al., 2012; Schmidt et al., 2012; Prater et al., 2011; Cream et al., 2010; McGraw-Hunter et al., 2006; Bray & Kehle, 1996

Broad to narrow; least to most constraining

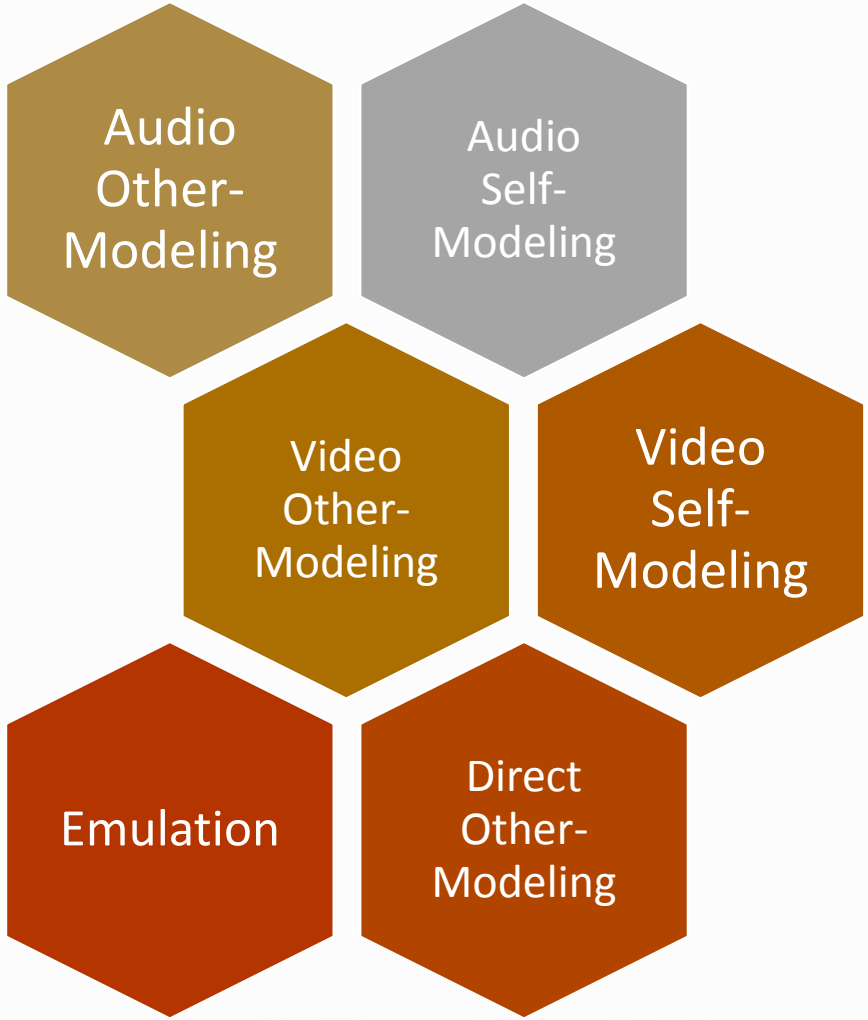


- Notice how you go from little or no scaffolding to maximum scaffolding.
- Recognize that in each case, the clinician merely prompts the assessment – doesn't make a judgment themselves

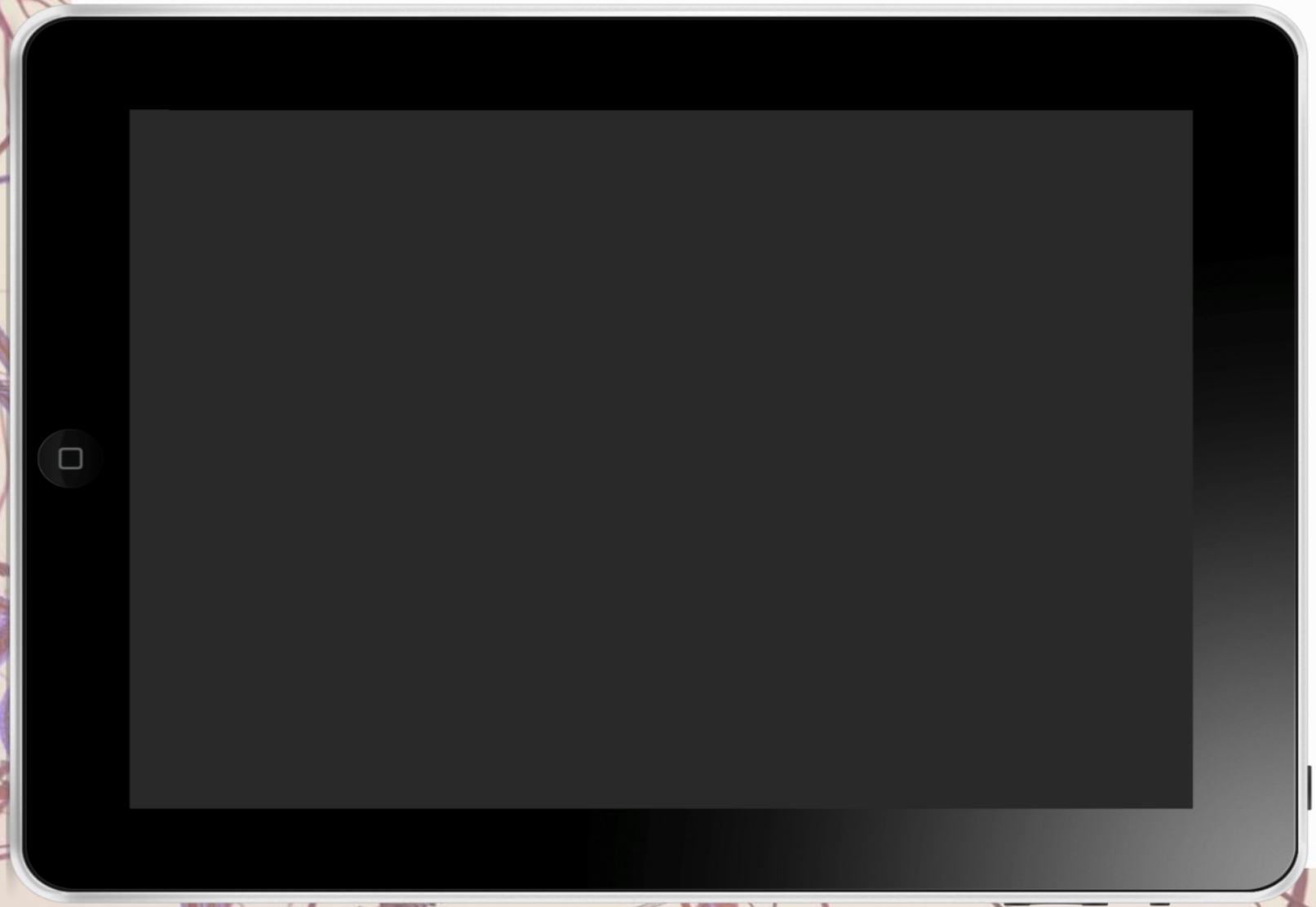
Hoepner, J.K. (in press); Hoepner & Olson, (in prep)

Evolution of video self-modeling

- Learning from every moment
- Positive feedback from clinician
- Self-feedback by client should be positive or constructive
- Each individual will respond somewhat uniquely



Video self-modeling



- Focus on goal/target before attempt
- Review, starting broadly

*Video used with permission

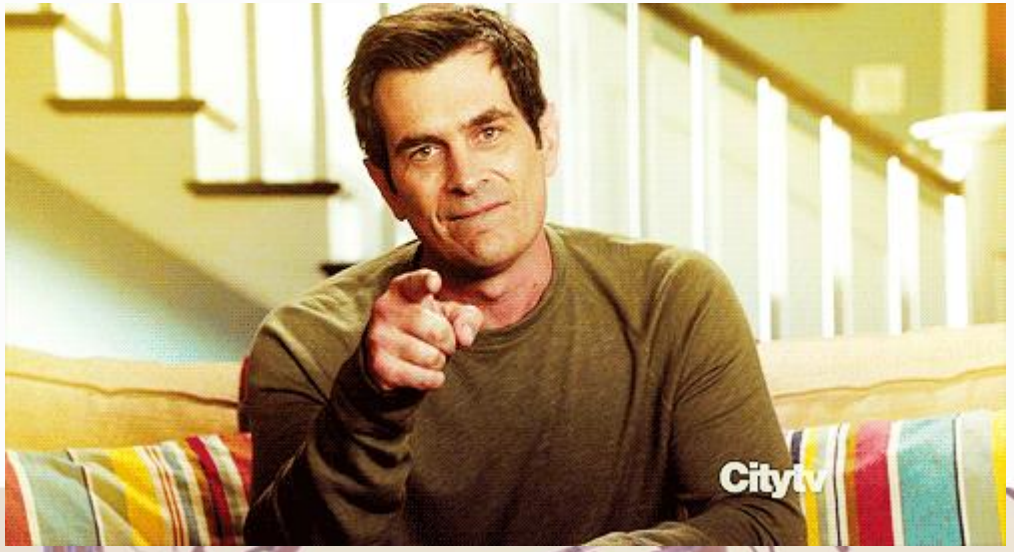
Pitfalls to avoid

- Avoid directly prompting goals or behaviors that a person does not acknowledge
  - (e.g., “You struggle sometimes with going off on tangents. In this clip, what would you say about your ability to stay on topic?”).
- While this works for those who acknowledge that issue, it will typically evoke resistance from those who do not acknowledge an issue.

(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., in press

Balance successes and challenges

- Be careful to roughly balance prompts for successes and challenges
- You may prompt specific footage as a success and yield a response that identifies a challenge (or vice versa).



(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., 2015 in Johnson, P. (Eds.)

Making an assessment trumps accuracy

- The goal is to prompt a self-assessment.
- Often, direct review of performance results in a more accurate assessment
- However, the coach may not fully agree with an assessment.
- Self-assessments tend to become more accurate over time, so prompting an assessment is an important starting point.

(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., 2015 in Johnson, P. (Eds.)

Begin with high-success, high-completion tasks for initial VSM

- Consider strengths and weaknesses
- Don’t choose a memory laden task for someone with memory problems
- Don’t choose a heavy linguistic task for someone with aphasia
- What might be a good task to start with for someone working on their accent?
- What might be really challenging for them?

(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., 2015 in Johnson, P. (Eds.)

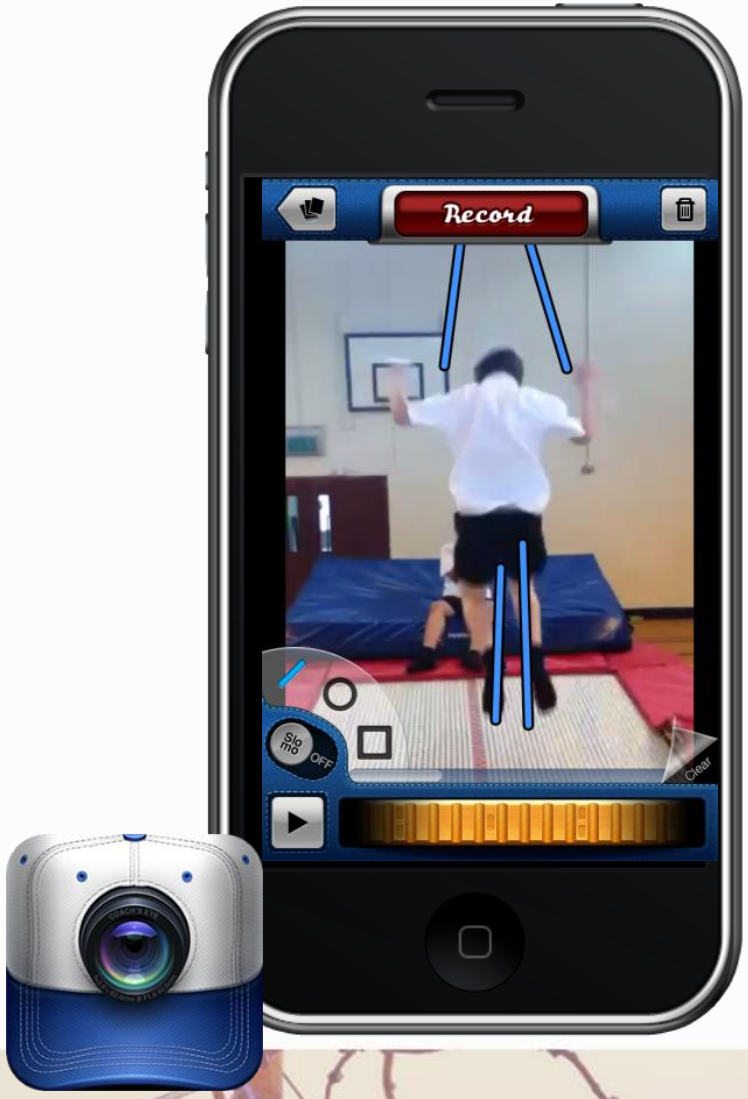
VSM is most successful when feedback to self is positive

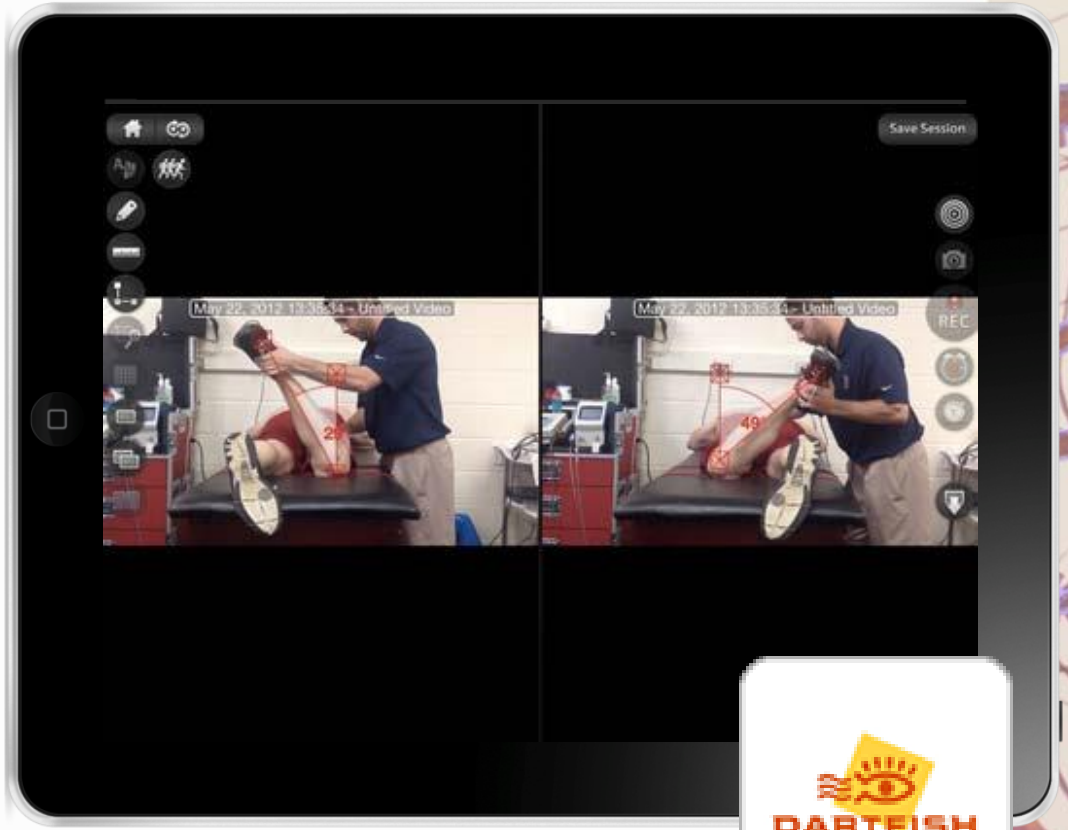
- Recognize that a balance between self-identification of successes and challenges is best.
- Consider shifting away from self-assessment if a person is overly critical.
- You may be able to use direct- or video other-modeling successfully, even when someone is too critical of self.

(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., 2015 in Johnson, P. (Eds.)

VSM - Adjuncts

- Coaches Eye
- Dartfish





DARTFISH

Documentation & Goal ideas

- You may measure the client or partner's metacognitive awareness relative to the amount of support needed to self-assess the target behavior.
- By identifying the conditions for success, you indicate degree of awareness.
- Also note that self-correction and preempting errors frequently occurs as people develop awareness.
- This can be an effective outcome measure.

Outcomes can then be clearly stated:

- "Client identified performance given an open-ended prompt"
- "Client identified performance given an open-ended prompt and constrained time review interval"
- "Client required a direct prompt and constrained time review interval to identify performance."

(Hoepner & Olson, in preparation; Hoepner, Sell, & Kooiman, 2015; Hoepner, J.K., 2015 in Johnson, P. (Eds.)

Special considerations

- Make sure you have a policy in place for handling the videos generated for review.

Policy for use of video capture for therapeutic intervention

This policy and statements therein include guidance for the use of video capture as an intervention modality. This applies to video capture for immediate and delayed review in the case of video self modeling, video other modeling, and related treatment approaches. Failure to comply with the procedures outlined here may result in disciplinary action. Compliance with confidentiality standards and medical records require the following actions:

1) Any video captured within a clinical session, collected for the purpose of immediate review, must be deleted prior to the end of that session.

2) Note that the video capture device (i.e., iPad, tablet, iPod, digital video camera, or related devices) must be placed in airplane mode or disconnected from the wireless system (i.e., WiFi disabled). This will ensure that captured videos do not reach the cloud, where data could be retrieved at a later time.

3) Any video captured within a session, collected for the purpose of immediate and delayed (i.e., at a later session) review, must be downloaded manually from the device via cable (i.e., not uploaded through a cloud, dropbox, or related function). This action must take immediately following completion of that session. The clinician is not allowed to take the video capture device to any other patient/client rooms or sessions. Videos must be stored on a secured server and/or electronic medical record system.

4) Any video, which is collected and saved for later review, is at that point considered a part of that patient/client's medical record and thus is held to the standards of other medical records.

5) Video collected for use with a specific client may not be used with other clients.

6) Any captured video that inadvertently or intentionally includes identifiable evidence of other patients/clients and family, must be deleted prior to the end of that session.

7) Any video captured by the patient/client and/or family and other visitors may be used under the discretion of that patient/family member or visitor, UNLESS the captured video inadvertently or intentionally includes identifiable evidence of other patients/clients, family, or visitors. If a clinician is aware of such evidence, they are required to request deletion of the file and report any non-compliance to xxx.

8) Electronic sharing of any captured video, which is downloaded and stored on a secure server and/or electronic medical record, is prohibited.

9) Refer to policies on photographic and video consent for further details.

10) Video capture by staff (i.e., including paid staff, students, or unpaid volunteers) must be collected using institutionally owned and compliant devices. Video capture using personal devices is prohibited.

This policy is prepared for the use of video capture for the use of therapeutic intervention but excludes electronic capture of other clinical/medical procedures (e.g., video fluoroscopic examination of swallowing, flexible endoscopic examination of swallowing, stroboscopic examination of laryngeal function). It may include video capture for the use of therapeutic interventions such as: gait analysis, ADLs (excluding showering and dressing), iADLs, and interactional communications.

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