



**ABA
CONFESSIONS
FROM AN SLP**

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Analysis

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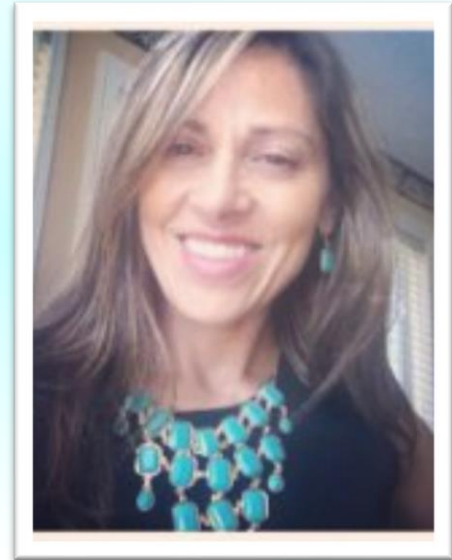
Speaker Disclosure

Relevant Financial Disclosures

Claudia is the owner of Stone Oak Therapy Services and Behavior Analysis. This organization provides speech and language therapy, occupational therapy, physical therapy, social skills groups, aquatic therapy, and behavioral therapy to individuals with autism and other developmental disabilities.

Relevant Non-Financial Disclosures

Claudia is dually credentialed as a Speech Language Pathologist and a Board Certified Behavior Analyst.



Claudia Goswitz, M.S.,
CCC-SLP, BCBA

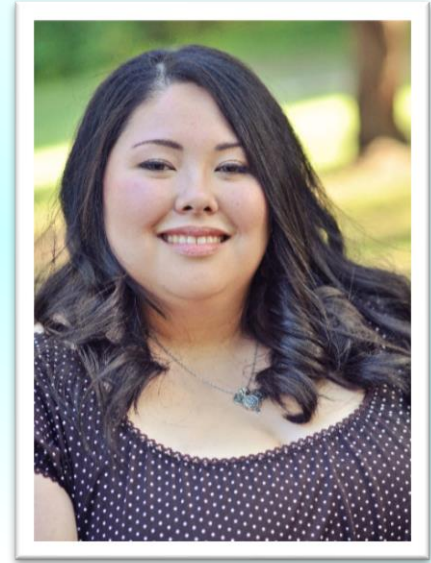
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Christina Martin, M.S.,
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AS A RESULT OF THIS PRESENTATION, THE PARTICIPANT WILL...

1

Compare and contrast different data collection and measurement tools to determine the most appropriate method for the individual learner.

2

Compare and contrast terminology used in the fields of speech language pathology and applied behavior analysis.

3

Apply specific Applied Behavior Analysis strategies to a **variety of case studies** of different communication disorders.





“Without data
you’re just
another person
with an opinion.”

- W. Edwards Deming,
Data Scientist

**DATA COLLECTION
AND MEASUREMENT
TOOLS**



DATA COLLECTION AND MEASUREMENT TOOLS

MEASUREMENT



DATA

Process of assigning numbers and units to particular features of objects or events (dimensional quality). The number and the unit TOGETHER constitute the measure of the object or event.

Used to evaluate the effects of intervention and guide decision making

The product of measurement
is DATA

WHATEVER

Top it off



BEER

12 ounces

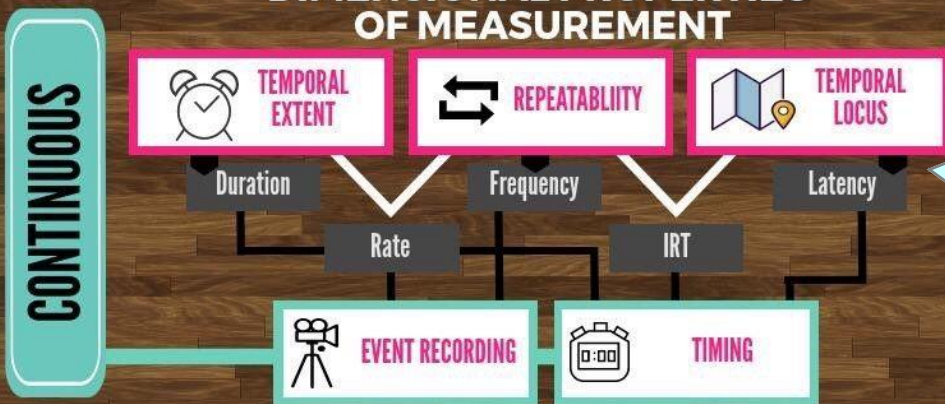
WINE

5 ounces

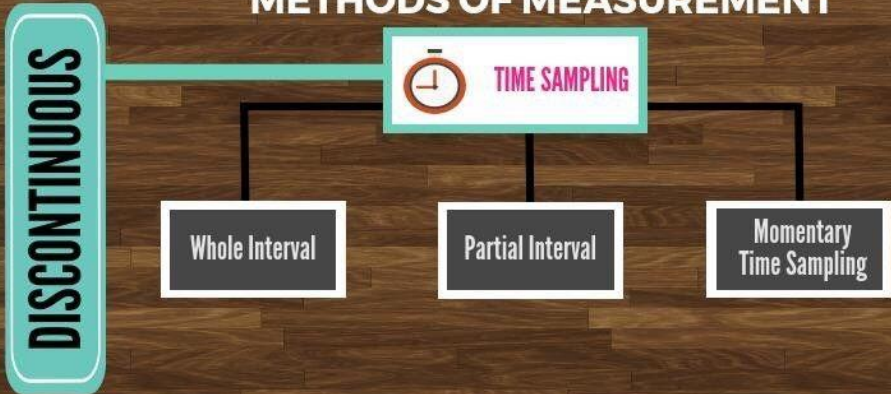
LIQUOR

1 ounce

DIMENSIONAL PROPERTIES OF MEASUREMENT



METHODS OF MEASUREMENT



REFERENCE

Johnston, J. M., & Pennypacker, H. S. (2008) Strategies and Tactics of Behavioral Research, Third Edition pp. 107

www.RogueABA.com



DIMENSIONS OF BEHAVIOR

```
graph TD; A[DIMENSIONS OF BEHAVIOR] --> B[REPEATABILITY]; A --> C[TEMPORAL EXTENT]; A --> D[TEMPORAL LOCUS];
```

REPEATABILITY

**TEMPORAL
EXTENT**

**TEMPORAL
LOCUS**

REPEATABILITY

(Countability) behavior can occur repeatedly through time



COUNT



Tally of the number of occurrences of behavior



RATE/FREQUENCY



The number of responses per unit of time

Cipry



What is the behavior? **Touching hair**

What is the dimension of behavior? **Repeatability**

What method should be used to measure the behavior? **Count**

What are the data? **6 occurrences**



What is the behavior? **Saying any form of mom**

What is the dimension of behavior? **Repeatability**

What method should be used to measure the behavior? **Rate**

What are the data? **27 times in 30 seconds**



What is the behavior? **Interrupting**

What is the dimension of behavior? **Repeatability**

What method should be used to measure the behavior? **Rate**

What are the data? **3 times in 30 seconds**

TEMPORAL EXTENT

Every instance of behavior occurs during some amount of time



DURATION



Amount of time in
which behavior
occurs



What is the behavior? **Laughing**

What is the dimension of behavior? **Temporal extent**

What method should be used to measure the behavior? **Duration**

What are the data? **10 seconds**



What is the behavior? **Staring**

What is the dimension of behavior? **Temporal extent**

What method should be used to measure the behavior? **Duration**

What are the data? **30 seconds**

TEMPORAL LOCUS

Every instance of behavior occurs at a certain point in time with respect to other events (i.e. **WHEN** the instance of behavior occurs can be measured)



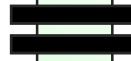
**RESPONSE
LATENCY**



Measurement of the elapsed time between the onset of a stimulus and the initiation of a response



**INTERRESPONSE
TIME**



Measurement of the amount of time that elapses between two consecutive instances of a response class



What is the behavior? **Dysfluency/secondary behaviors**
What is the dimension of behavior? **Temporal locus**
What method should be used to measure the behavior? **Response latency**
What are the data? **40 seconds from onset**

METHODS OF MEASUREMENT

```
graph TD; A[METHODS OF MEASUREMENT] --> B[EVENT RECORDING]; A --> C[TIMING]; A --> D[TIME SAMPLING];
```

EVENT
RECORDING

TIMING

TIME
SAMPLING

EVENT RECORDING

Method of recording count and rate/frequency

- Behavior must have clearly determined beginning and end
- Not effective method of measurement if rate is too high

DEVICES USED TO MEASURE



CLICKERS



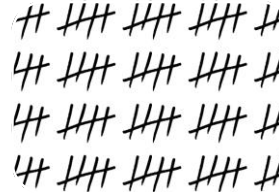
DIGITAL COUNTERS



RUBBER BANDS



BEADS



TALLY
(LEAST EFFECTIVE)



MOVING SMALL OBJECTS
FROM ONE POCKET TO THE OTHER

TIMING

Method for measuring duration, response latency and interresponse time

DEVICES USED TO MEASURE



STOPWATCH



ELECTRONIC TIMER

TIME SAMPLING

Variety of methods for observing and recording behavior occurred at any time during specific moments in time

Whole-Interval Recording

- Observation period is divided into a series of time intervals
- At the end of the interval, the observer records whether behavior happened **THROUGHOUT** the entire interval or not

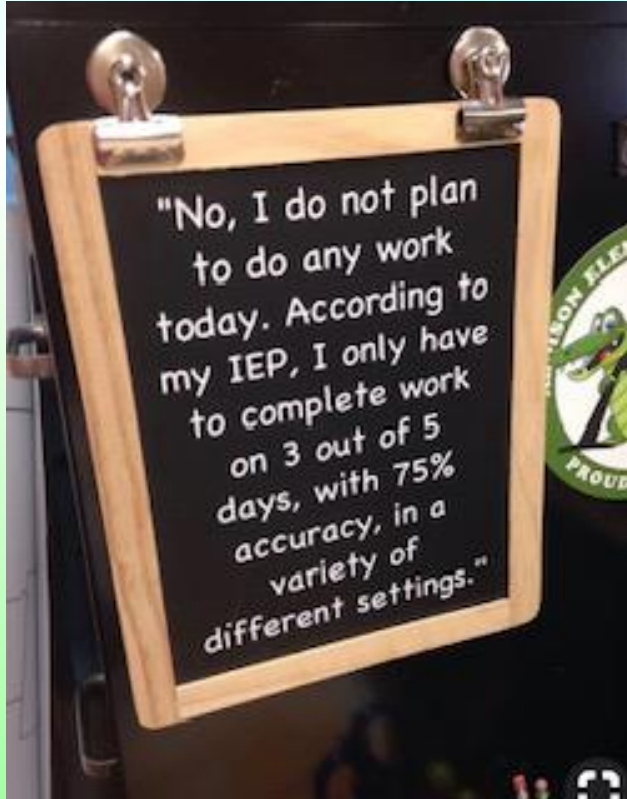
Partial-Interval Recording

- Observer records if the behavior occurred at any time during the interval

Momentary Time-Sampling

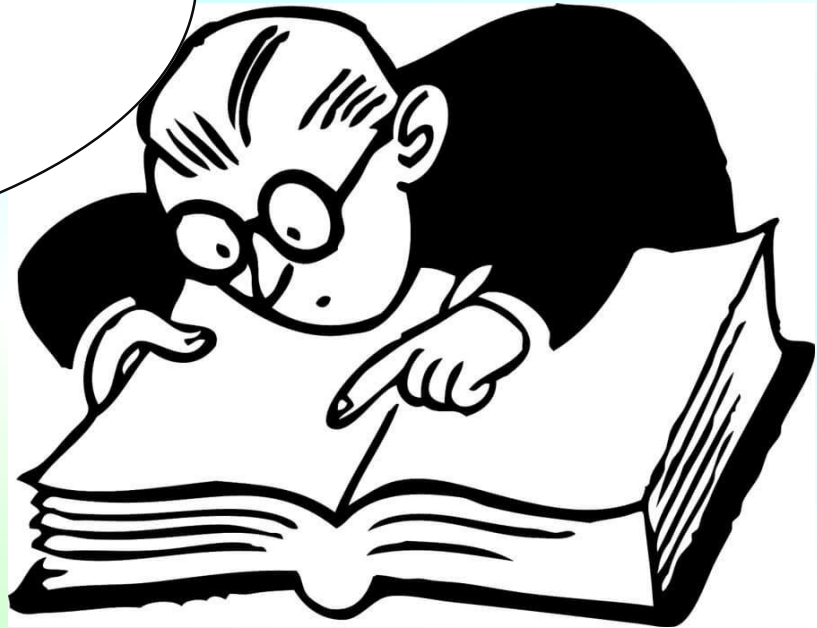
- Observer records if target behavior is occurring at the moment that each time interval ends

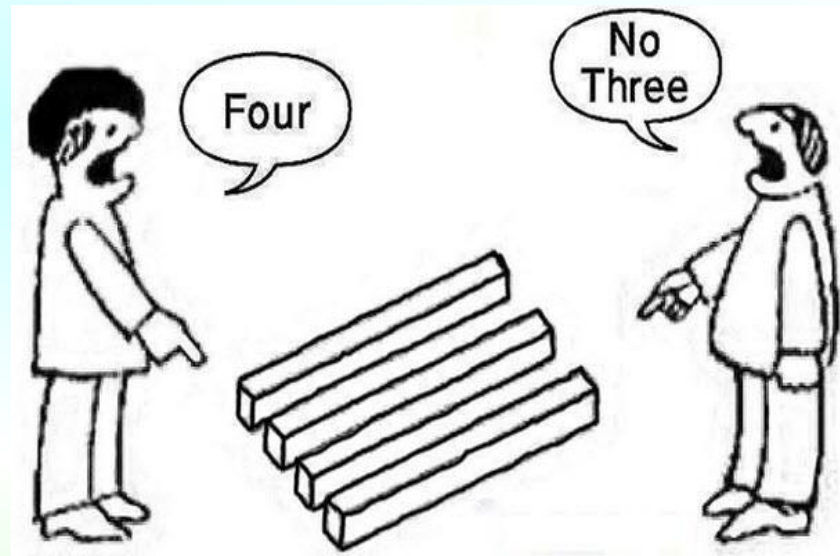
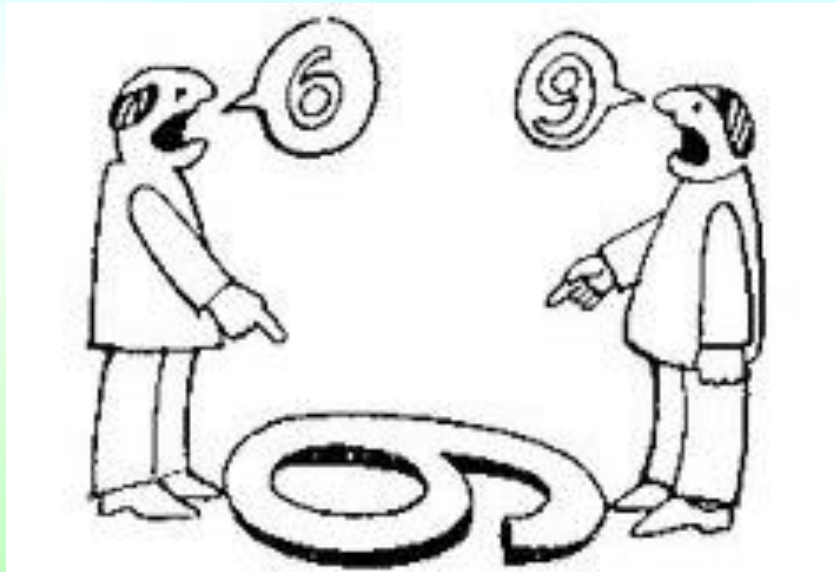
GOALS



- Frequency/Rate: # responses, # conversational exchanges, rate of requesting, rate of responding, etc.
- Duration: sustained engagement, amount of time to attend, etc.
- Latency: expected amount of time to answer a question, respond to a direction, complete a sentence, etc.

TERMINOLOGY

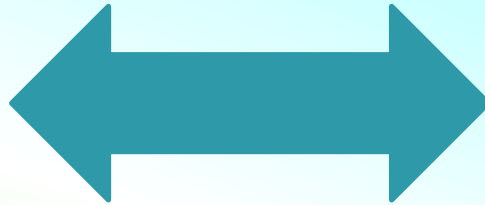




TERMINOLOGY IN SLP AND ABA

SLP

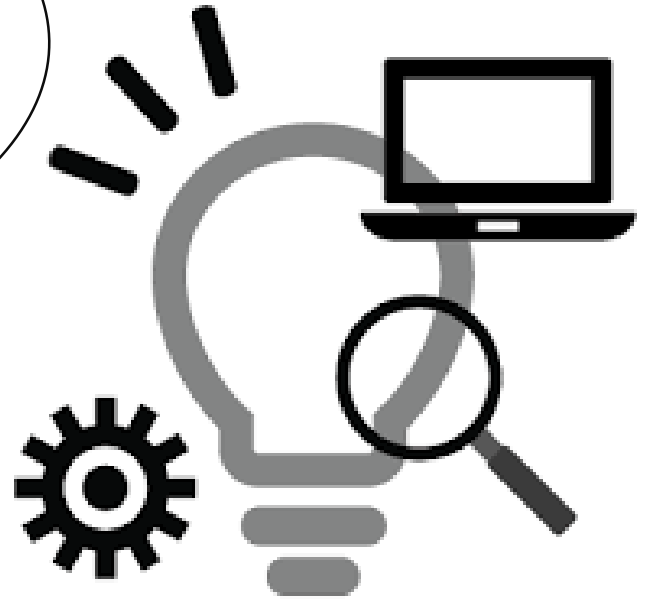
1. Requesting/Protesting
2. Vocal Imitation
3. Labeling/Commenting
4. Receptive/Following Directions
5. Answering Questions/Conversation
6. Cue



ABA

1. Mand
2. Echoic
3. Tact
4. Listener Responding
5. Intraverbal
6. Prompt

ABA STRATEGIES



ABA TEACHING STRATEGIES

ERRORLESS
TEACHING

ERROR
CORRECTION

SHAPING

PROMPTING

PRACTICE

makes

~~PERFECT~~

PERMANENT

ERRORLESS TEACHING

Teaching procedure to reduce learner errors

Most to least prompting

Useful for learners who

- Are learning to communicate
- Have a history of difficulty with learning
- Have a history of engaging in problem behavior to escape the learning environment

Can Increase Motivation

- Prompts are paired with correct responding and faster reinforcement.
- This conditions prompting to be more pleasant for the child.

Increases Accuracy

- Ensures accuracy and a history of reinforcement for correct responding
- Reduces errors and the possibility of accidentally reinforcing errors or unwanted behavior that may occur to escape tasks

ERROR CORRECTION PROCEDURE

A procedure used to increase motivation in learning situations by preventing mistakes and creating more opportunities for reinforcement

Step 1: Correction Trial (Prompt)

Stimulus → Incorrect Response → 0 Sec Delay Prompt → Correct Response → R+

Step 2: Transfer Trial (Practice)

Represent Stimulus → 2 Sec Delay → Correct Response → R+

Step 3: Distract

Step 4: Probe for Independence

Stimulus → 2 Sec Delay → Correct Response → R+

Shaping

Shaping is reinforcing successive approximations of a target behavior while extinguishing earlier approximations leading to the desired behavior or target behavior.



PROMPTING

A prompt is a cue that is added to the environment in order to evoke the correct response

Types

- Least to most (trial and error)
- Most to least (errorless)

Different Prompts

- Physical (Hand over hand)
- Partial physical
- Gesture/Model
- Verbal/Phonemic

PROMPTING & SHAPING

- Use both when teaching skills
- Increase reinforcement as the behavior becomes more accurate
- Use antecedent prompts to encourage behavior to occur before it can be done incorrectly
- Fade prompts to encourage accuracy and independence





The
Shaping
Game

ABA ANTECEDENT STRATEGIES

PROACTIVE STRATEGIES TO USE BEFORE BEHAVIOR OCCURS

VISUALS

BEHAVIOR
CONTRACT

COMMUNICATIVE
TEMPTATIONS

PRE-SESSION
PAIRING/RAPPORT
BUILDING

BEHAVIORAL
MOMENTUM

PROMISE
REINFORCER

ABA CONSEQUENCE STRATEGIES

REACTIVE STRATEGIES TO USE AFTER BEHAVIOR OCCURS

PLANNED
IGNORING

COUNT AND
MAND

POSITIVE
PRACTICE

DIFFERENTIAL
REINFORCEMENT

CASE STUDIES

- What is the barrier or what is getting in the way of you being able to teach the individual?
- What consequence strategies can you use right now?
- What antecedent strategies can you use later?

Contact Information

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