

MEASUREMENT

40 Hour RBT Course



TASK LIST OBJECTIVES WE WILL COVER

PREPARATIONS FOR DATA COLLECTION
 TYPES OF DATA COLLECTION
 GRAPHING DATA AND ANALYSIS

OBJECTIVES



THREE FUNDAMENTAL PROPERTIES •REPEATABILITY- (ARE YOU ABLE TO COUNT IT?) •TEMPORAL EXTENT: (CAN YOU TIME IT?) •TEMPORAL LOCUS: (WHEN DID IT HAPPEN?)

MEASUREMENT



PREPARING FOR DATA COLLECTION



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OPERATIONAL DEFINITIONS



Jumping
Smiling
Has their hands out to the side

BEHAVIOR DEFINITIONS

- IS IT OBSERVABLE?
- Is it clearly written?
- Can a stranger read it and collect data on the same behavior?
- Can you count how many times it occurs or how long?



CONTINUOUS MEASUREMENT PROCEDURES

Collecting data on behavior as it occurs



FREQUENCY/COUNT

CONTINUOUS MEASUREMENT PROCEDURES

IF ONE IS INTERESTED IN HOW MANY TIMES A PERSON JUMPS UP AND DOWN, AN APPROPRIATE CONTINUOUS MEASUREMENT PROCEDURE WOULD BE FREQUENCY DATA. FREQUENCY DATA IS SOMETIMES CALLED "COUNT" DATA AND MEASURES A BEHAVIOR

BY 'COUNTING' HOW MANY TIMES A BEHAVIOR OCCURS.



MEASUREMENT TOOLS

Some helpful tools:

CLICKER OR COUNTER FOR FREQUENCY. STOPWATCH FOR DURATION, IRT, LATENCY AND RATE

DURATION

ANOTHER CONTINUOUS MEASUREMENT PROCEDURE IF ONE WANTS TO SEE <u>THE AMOUNT OF TIME</u> A PERSON JUMPS UP AND DOWN WOULD BE **DURATION** DATA.

DURATION DATA MEASURES THE TIME, OR DURATION, OF A BEHAVIOR INSTEAD OF HOW MANY TIMES THE BEHAVIOR OCCURS. DURATION IS PREFERABLE WHEN A BEHAVIOR OCCURS CONTINUOUSLY.





MEASUREMENT TOOLS



INTER-RESPONSE TIME AND LATENCY

LATENCY AND INTER-RESPONSE TIME (IRT) ARE TYPES OF CONTINUOUS MEASUREMENT COMMONLY USED IN BEHAVIOR ANALYSIS. IF YOU WERE TO TELL AN INDIVIDUAL "START JUMPING",

THE TIME IT TAKES THE INDIVIDUAL TO BEGIN JUMPING AFTER YOU SAY "START JUMPING" IS REFERRED TO AS **LATENCY**.

THE TIME THAT ELAPSES BETWEEN JUMPS IS REFERRED TO AS THE INTER-RESPONSE TIME, OR IRT.



LATENCY

Ready Set GO



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RATE

How many times a minute does he say um?

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PERCENTAGE



- A RATIO FORMED BY COMBINING THE NUMBER OR FREQUENCY DIVIDED BY THE AMOUNT OF TIME OR THE NUMBER OF TOTAL TRIALS OR OPPORTUNITIES A BEHAVIOR OCCURRED.
- TRIALS TO CRITERIAN INCLUDES HOW MANY OPPORTUNITIES NEEDED TO REACH THE PREDETERMINED LEVEL OF SUCCESS OR PERFORMANCE (COOPER ET AL., 2020

DISCONTINUOUS MEASUREMENT PROCEDURES

DISCONTINUOUS MEASUREMENT PROCEDURES

DISCONTINUOUS MEASUREMENTS USE SIMILAR MEASURING TOOLS AS CONTINUOUS MEASUREMENT PROCEDURES BUT DIFFER SIGNIFICANTLY AND ARE UTILIZED FOR DIFFERENT BEHAVIORS UNDER DIFFERING CONDITIONS.



PARTIAL INTERVAL RECORDING

PARTIAL INTERVAL RECORDING REFERS TO DIVIDING AN OBSERVATION PERIOD INTO SHORT INTERVALS AND RECORDING IF THE BEHAVIOR OCCURRED DURING EACH INTERVAL.



WHOLE INTERVAL RECORDING

Whole-Interval Recording Dividing an observation period in short intervals and recording if the behavior occurred during each entire interval

MOMENTARY TIME SAMPLING

MOMENTARY TIME SAMPLE A RECORDING PROCEDURE IN WHICH THE PRESENCE OR ABSENCE OF A BEHAVIOR IS OBSERVED AND RECORDED AT THE END OF CONSISTENT TIME INTERVALS



LET'S TAKE DATA

	Partial Interval Recording	Momentary Time Sample	Whole Interval Recording
:00			
:05			
_:10			
_:15			
_:20			
_:25			
_:30			

GRAPHS: LINE GRAPHS



GRAPHS: BAR GRAPHS



GRAPHS: SCATTERPLOT



GRAPHS: CUMULATIVE RECORD



RECORDING DATA

GRAPHING DATA

GRAPHING DATA

GRAPHING DATA

PERMANENT PRODUCT

REFERENCES