Research Case Study is study at the level of ONE, to ask:

- Can a treatment work in relation to named target outcomes?
- How does one treatment compare to another in relation to target outcomes?

"Clinical case study": not the same

- Also known as the narrative case study, the case history. Common in the case literature in all health professions.
- More than vignettes or brief examples.
- "A story is created related about what happens without any efforts at quantification of given variables" (D. Aldridge)
- Exploratory: emphasizes description over time, and on processes.
- Naturalistic: studies the therapy or the case as it would normally unfold.

Narrative (not-research) Clinical Case studies

<u>Value</u> &

- ✓ Easy for clinicians to relate to own practice.
- ✓ Source of ideas & hypotheses
- ✓ Source for developing treatment techniques
- ✓ Study of rare phenomena: counter-instances to the assumed.
- ✓ Persuasive & motivational: can be dramatic, especially when aggregated.

<u>Limitations</u>

- Data are not collected systematically
 - Alternative explanations are usually possible.
 - Developed "after the fact"

 BUT
 - ➤ Notes and observations could be systematically analyzed, or contextualized with the literature using bona fide qualitative procedures.

Qualitative Case Study: What is a case?

An individual person, one group, one institution, one program, one cultural unit, one family, one community, one event.

- Specific
- Bounded in place and time, a "bounded system".
 Defining clearly the scope and boundaries of the case is critical.
- May be a puzzling, unique, pivotal case.

Research case studies may be qualitative, quantitative or mixed methodology

Qualitative case study (R. Stake):

- intrinsic and instrumental case studies.
- Collective case study is of more than one instrumental case.

Quantitative: Single-subject designs (SSDs): an experiment with one participant.

Not the same as a Clinical Case Study

About Single Subject Designs:

AKA N = 1, or "N of 1", experimental case studies, or single case designs.

- This is an experiment, but with 1 participant.
- Participant serves as his/her own "control".
- Essentially quantitative in nature, in that outcome indicators are measured.
- Suitable for mixed method approach too, and for triangulation.

Features of SSD designs

- Like any study of ONE, it is context sensitive.
- Comparison across conditions rather than comparison between groups or individuals
- Manipulation of the intervention with measurement of one or more outcome indicators
- Continuous data collection: sensitive to the fact that all behavior is serially dependant.
- Simple, linear display of data- to show trends -- OR statistical analysis possible.

Specific Design options for SSD

Baseline and Intervention conditions in

-ABA

A=Baseline phase
B = intervention phase

- ABAB
- -AB
- ABAC...
- Multiple baseline study possible, i.e., Replications: "N of 1" with > 1 case



X = the intervention (introduction of the independent variables, or IV)

X1, X2, etc = the "levels" of the IV

O = the Observation, or measurement of the dependent variables or DV.

DV1, DV2 = the different dependent variables built into the study

TEMPLATE FOR A SINGLE SUBJECT DESIGN PROJECT IN ABA FORMAT

Measure 1* DV 1	0 (000)*	O (OOO)	0 (000)	0 (000)	O (OOO)	O (OOO)	O (OOO)	0 (000)
Measure 2* DV 2	O (OOO)*	O (OOO)	O (OOO)	0 (000)	O (OOO)	O (OOO)	O (OOO)	O (OOO)
Clinician/ researcher field notes per partic. (QUAL)			0 0	0 0	0 0	0 0		
Group or Individual DMT Sessions [the IV]			хх	хх	хх	хх		
Time	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8

TURQUOISE: BASELINE (A) PHASES YELLOW: TREATMENT (B) PHASE

Another option

IV 1 x x x x	IV 1	IV 2 x x x x	IV 2 x x x x	IV 3	IV 3 x x x x
0-0, 0-0, 0-0, 0-0	0-0 ,0-0, 0-0, 0-0	0-0, 0-0, 0-0, 0-0	0-0, 0-0, 0-0, 0-0	0-0, 0-0, 0-0, 0-0	0-0, 0-0, 0-0, 0-0

- Testing three different interventions
- One IV could be "treatment as usual" TAU, or standard care.
- No withholding of treatment.
- Note multiple pre-post measurements, after each session, data for analysis could be all "pre-s" compared, or all change scores compared, or both.



 "A causal relation between the intervention and performance on the dependant measures is demonstrated if each behavior (individual or situation) changes when (and only when) the program is introduced."

(Kazdin, 1998, p. 478)

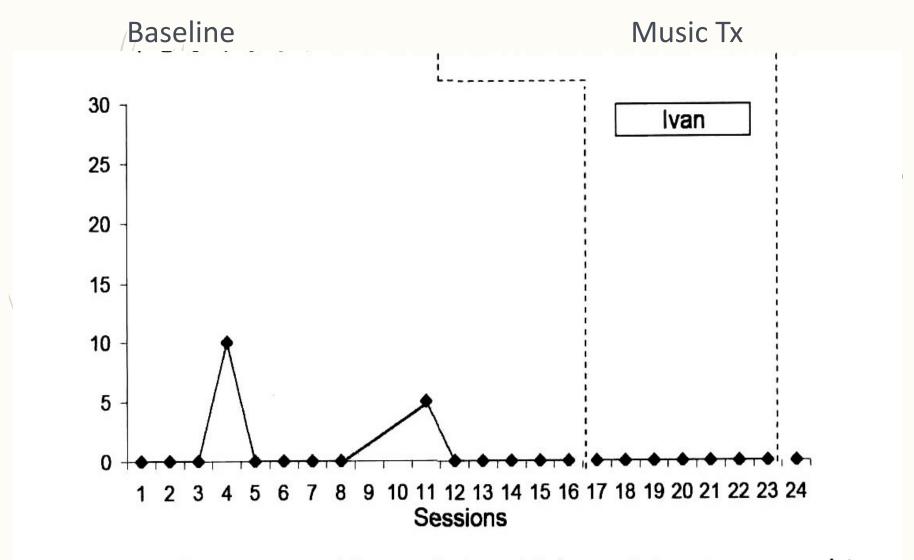
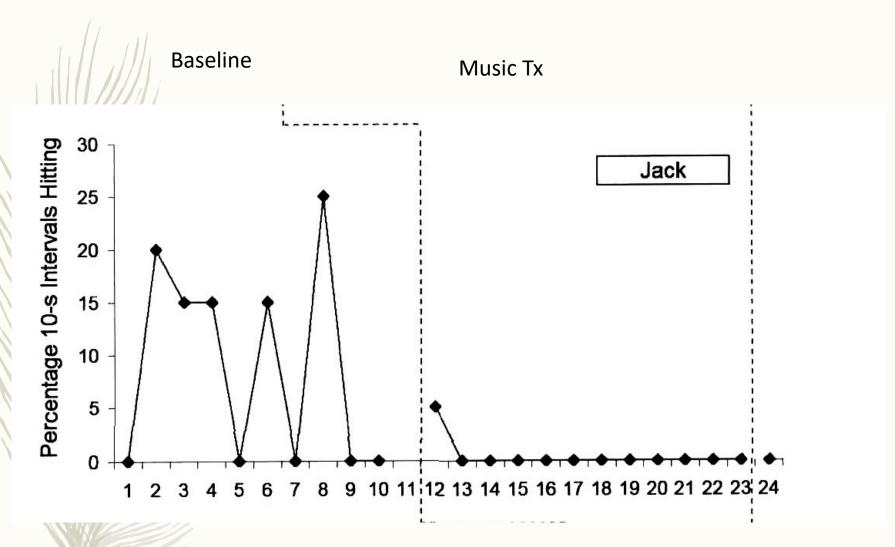


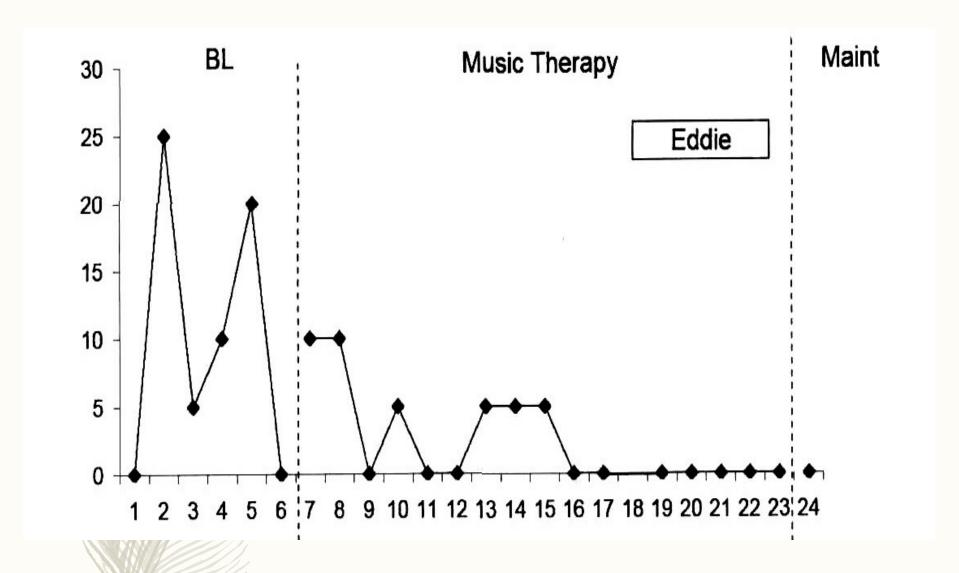
Figure 3. Percentage of intervals in which participants engaged in hitting.

S. Goodill, DTAA Webinar July 4, 2018



From example study

(de mers et al.)



Example study

(der mers, et al.)

Sources

Aldridge, D., 1994 (Arts in Psychotherapy)

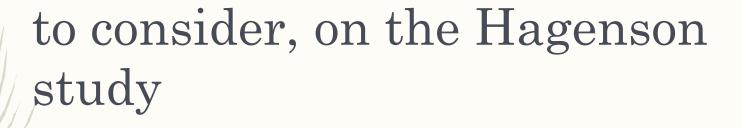
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What kind of case study do we have?

What are the merits and shortcomings of the study?

To what extent does it meet the criterion of informing practice?