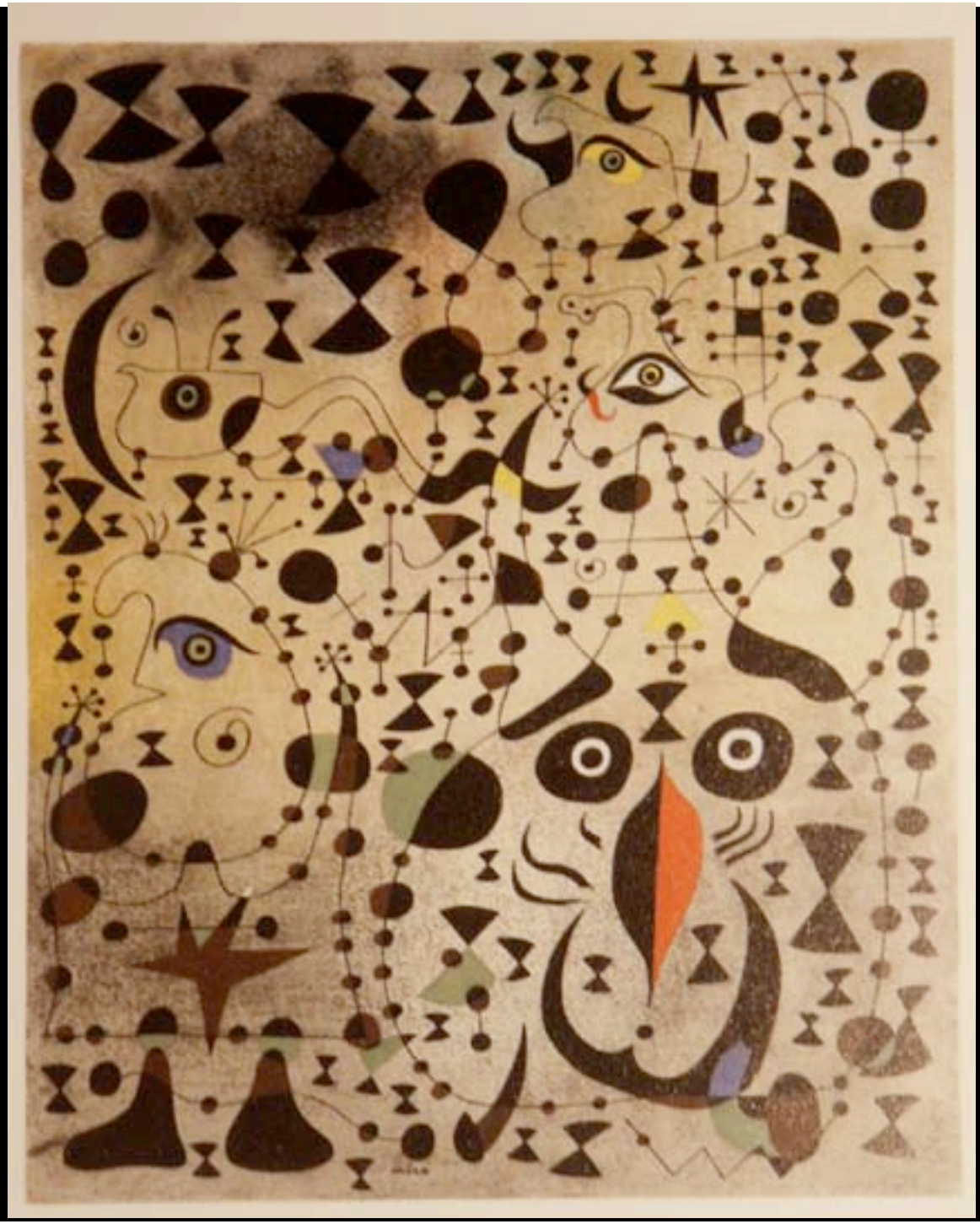

# *Problem Behavior in Educational Contexts*

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# *Common Problem Behaviors*

- *Severe:*
  - *Self-injurious behavior (SIB)*
  - *Aggression (AGG)*
  - *Property destruction*
  - *Sexual misconduct*

- *Other:*
  - *Stereotypy (STPY)*
  - *Tantrums & noncompliance*
  - *Running away*
  - *An endless list of others*

# *Sources of Reinforcement for Problem Behavior*

- Positive Reinforcement
  - *Social (attention, access to tangible materials)*
  - *Automatic (sensory stimulation)*

- Negative Reinforcement
  - *Social (escape from task demands)*
  - *Automatic (pain attenuation)*

# *Methods for Conducting Functional Analyses*

*Anecdotal (Indirect) Methods*

*Descriptive (Naturalistic) Analysis*

*Functional (Experimental) Analysis*

# *Functional Analysis Screening Tool (FAST)*

## F A S T

***Functional Analysis Screening Tool***

Client:_____ Date:_____

Informant:_____ Interviewer:_____

***To the Int erviewer:*** The FAST iden tifies factors that may influence problem behaviors. Use it only for screening as part of a comprehensive functional analysis of the behavior. Administer the FAST to several individuals who interact with the client frequently. Then use the results to guide di rect observation in s everal different situations to verify suspected behavioral functions and to identify other factors that may influence the problem behavior.

***To the Inf ormant:*** Complete the sections below. Then r ead each question carefully and answer it by circling "Yes" or "No." If you are uncertain about an answer, circle "N/A."

***Informant-Client Relationship***

1. Indicate your relationship to the person: ___Parent ___Instructor ___Therapist/Residential Staff _____(Other)
2. How long have you known the person? ____Years ____Months
3. Do you interact with the person daily? ____Yes ____No
4. In what situations do you usually interact with the person?
   ___ Meals ___ Academic training
   ___ Leisure ___ Work or vocational training
   ___ Self-care _____(Other)

***Problem Behavior Information***

1. Problem behavior (check and describe):
   __ Aggression _____
   __ Self-Injury _____
   __ Stereotypy _____
   __ Property destruction _____
   __ Other _____
2. Frequency: __Hourly __Daily __Weekly __Less often
3. Severity: __Mild: Disruptive but little risk to property or health
   _ _ M o d e r ate: Property damage or minor injury
   _ _ S e v e re: Significant threat to health or safety
4. Situations in which the problem behavior is <u>most</u> likely to occur:
   Days/Times_____
   Settings/Activities _____
   Persons present _____
5. Situations in which the problem behavior is <u>least</u> likely to occur:
   Days/Times_____
   Settings/Activities _____
   Persons present _____
6. What is usually happening to the person right <u>before</u> the problem behavior occurs?_____
   _____
   _____
7. What usually happens to the person right <u>after</u> the problem behavior occurs?_____
   _____
   _____
8. Current treatments_____
   _____
   _____
   _____
   _____

| | | | |
|---|---|---|---|
| 1. Does the problem behavior occur when the person is not receiving attention or when caregivers are paying attention to someone else? | Yes | No | N/A |
| 2. Does the problem behavior occur when the person's requests for preferred items or activities are denied or when these are taken away? | Yes | No | N/A |
| 3. When the problem behavior occurs, do care-givers usually try to calm the person down or involve the person in preferred activities? | Yes | No | N/A |
| 4. Is the person usually well behaved when (s)he is getting lots of attention or when preferred activities are freely available? | Yes | No | N/A |
| 5. Does the person usually fuss or resist when (s)he is asked to perform a task or to participate in activities? | Yes | No | N/A |
| 6. Does the problem behavior occur when the person is asked to perform a task or to participate in activities? | Yes | No | N/A |
| 7. If the problem behavior occurs while tasks are being presented, is the person usually given a "break" from tasks? | Yes | No | N/A |
| 8. Is the person usually well behaved when (s)he is not required to do anything? | Yes | No | N/A |
| 9. Does the problem behavior occur even when no one is nearby or watching? | Yes | No | N/A |
| 10. Does the person engage in the problem behavior even when leisure activities are available? | Yes | No | N/A |
| 11. Does the problem behavior appear to be a form of "self-stimulation?" | Yes | No | N/A |
| 12. Is the problem behavior <u>less</u> likely to occur when sensory stimulating activities are presented? | Yes | No | N/A |
| 13. Is the problem behavior cyclical, occurring for several days and then stopping? | Yes | No | N/A |
| 14. Does the person have recurring painful conditions such as ear infections or allergies? If so, list:_____ | Yes | No | N/A |
| 15. Is the problem behavior <u>more</u> likely to occur when the person is ill? | Yes | No | N/A |
| 16. If the person is experiencing physical problems, and these are treated, does the problem behavior usually go away? | Yes | No | N/A |

**Scoring Summary**

Circle the number of each question that was answered "Yes" and enter the number of items that were circled in the "Total" column.

| Items Circled "Yes" | Total | Potential Source of Reinforcement |
|---|---|---|
| 1 2 3 4 | ____ | Social (attention/preferred items) |
| 5 6 7 8 | ____ | Social (escape from tasks/activities) |
| 9 10 11 12 | ____ | Automatic (sensory stimulation) |
| 13 14 15 16 | ____ | Automatic (pain attenuation) |

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# *Structured "A-B-C" Analysis*

**STRUCTURED ABC (Antecedent-Behavior-Consequence) ANALYSIS**

Individual:_____

Residence:_____

Use this form to identify situational factors related to the occurrence of behavior problem. Each time a target behavior occurs, record the date, time, and your initials. Use check marks to identify target behavior, location, activity, and what happened immediately before and after the behavior.

Data on antecedents (As) and consequences (Cs) are summarized in the boxes below. As and Cs are organized under likely behavioral functions (Note: some As or Cs may reflect more than one function). In each box, enter the number of times an A or C was checked (use the arrows as guides). Enter the overall totals at the botton of each column.

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | | | | | | | | | | | | | | | | | | | | | | | |
| Time | | | | | | | | | | | | | | | | | | | | | | | |
| Staff | | | | | | | | | | | | | | | | | | | | | | | |
| **Behavior (list specific problem):** | | | | | | | | | | | | | | | | | | | | | | | |
| 1 HEAD BANGING (SIB) | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 2 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | |
| **Location where behavior occurred:** | | | | | | | | | | | | | | | | | | | | | | | |
| Residence | | | | x | | x | | x | | x | | x | x | | | | | x | x | | | | x |
| Worksite | x | x | | | x | | | | x | | x | | | x | x | | x | | | x | x | x | |
| School | | | | | | | | | | | | | | | | | | | | | | | |
| Outside | | | x | | | | | | | | | | | | | x | | | | | | | |
| Community outing | | | | | | | | | | | | | | | | | | | | | | | |
| Other: | | | | | | | x | | | | | | | | | | | | | | | | |
| **General activity in progress:** | | | | | | | | | | | | | | | | | | | | | | | |
| Leisure/solitary (TV, music, etc.) | | | | | | | | | | | | | | | | | | | | | | | |
| Leisure/social (with another person) | | | | | | | | | | | | | | | | | | | | | | | |
| Meal (preparation, eating, clean up) | | | | | | | | | x | | | | | | | | x | | | | | | x |
| Self-care or household chore | | | | x | | x | | x | | | x | x | | | | x | | x | x | x | | | |
| Academic, work, or training activity | x | x | x | | x | | | | x | | x | | | x | x | x | x | | | | | | |
| Alone (sitting, in bed, etc.) | | | | | | | | | | | | | | | | | | | | | | | |
| Other: SHOPPING IN MALL | | | | | | | x | | | | | | | | | | | | | | | | |
| **Immediate antecedent (A):** | | | | | | | | | | | | | | | | | | | | | | | |
| Ignored by staff or staff walked away | | | | | | | | | | x | | | | | | | | x | | | | -> | 2 |
| Leisure material or food removed/denied | | x | | | | | | | | | | | | x | | | | | | | | ----------> | 2 |
| Other request denied | | | | | | | x | | | | | | | | | | | | | | | ----------> | 1 |
| Given instruction/prompt to work | x | | x | x | | x | | | | x | | x | x | x | | x | x | x | x | | x | x | x |
| Provoked by peer | | | | | x | | | | x | | | | | | | | | | | | | | |
| None (individual alone/doing nothing) | | | | | | | | x | | | | | | | | | | | | | | -> | 1 |
| **Immediate consequence (C):** | | | | | | | | | | | | | | | | | | | | | | | |
| Attention, response block, told to "stop" | x | | x | x | | x | | x | x | | x | x | x | | | x | x | x | | x | x | x | |
| Redirected to another area/activity | | x | | | | | x | | | | | | | | | | | | | | | | |
| Leisure material/food given | | | | | | | | | | | | | | x | | | | | | | | | |
| Work requirement terminated | | | | | x | | | | x | | | x | | | | | x | | | | | x | |
| Staff walked away | | | | | | | | | | | | | | | | | | | | | | | |
| Staff did nothing | | | | | | | | | | | | | | | | | | | | | | | |

| | Pos. Reinf. (attention) | Pos. Reinf (materials) | Neg. Reinf. (escape) | Auto. Reinf. (sensory) |
|---|---|---|---|---|
| Immediate antecedent (A): | | | | |
| Ignored by staff or staff walked away | | | | |
| Leisure material or food removed/denied | | 2 | | |
| Other request denied | | 1 | | |
| Given instruction/prompt to work | | | 15 | |
| Provoked by peer | | | 2 | |
| None (individual alone/doing nothing) | 1 | | | 1 |
| Immediate consequence (C): | | | | |
| Attention, response block, told to "stop" | 15 | | | |
| Redirected to another area/activity | 2 | 2 | | |
| Leisure material/food given | | 1 | | |
| Work requirement terminated | | | 5 | |
| Staff walked away | | | 0 | 0 |
| Staff did nothing | | | | 0 |
| TOTAL: | **20** | 6 | **22** | 1 |

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# *Functional (Experimental) Analysis*

| Condition | Antecedent | Consequence | Contingency |
|---|---|---|---|
| Attention | *Th. ignores Cl.* | *Th. attends to beh. problem* | *Positive rfmnt (attention)* |
| Demand | *Th. presents learning trials* | *Timeout for beh. problem* | *Negative rfmnt (escape)* |
| Alone | *Th. Absent* | *N/A* | *N/A Automatic reinf?* |
| Play | *Toys available Noncontingent reinforcement* | *N/A* | *Control* |

## Functional Analysis Data Sheet

Conduct sessions as described below and in the listed sequence (Session #1=Alone, #2=Attention, etc.). Add a Tangible condition only if it is strongly suspected that problem behavior is maintained by access to tangibles. Each session should last for 10 min. Record either the # or rate of problem behavior (PB) in each session, and summarize as the mean per condition.

**Alone:** Begin session: Student is alone in a room with no access to attention or leisure items.
If PB: No consequences.

**Attention:** Begin session: Inform student that you are busy; then ignore.
If PB: Deliver a mild reprimand, statement of concern, physical comfort, then ignore again

**Play:** Begin session: Deliver frequent attention and allow free access to preferred items. Do not deliver demands.
If PB: Ignore briefly; then resume play.

**Demand:** Begin session: Deliver nonpreferred academic or work tasks.
If PB: Remove task and ignore for 30 s; then resume tasks.

**Tangible:** Begin session: Allow brief access to preferred item then remove and ignore.
If PB: Provide brief access to preferred item; then remove again.

**Other:** Begin session:
If PB:

Student: _____ Start date: _____

Problem behavior: _____ End date: _____

| Session | Alone | Attention | Play | Demand | Tangible | Other |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| **Mean PB** | | | | | | |

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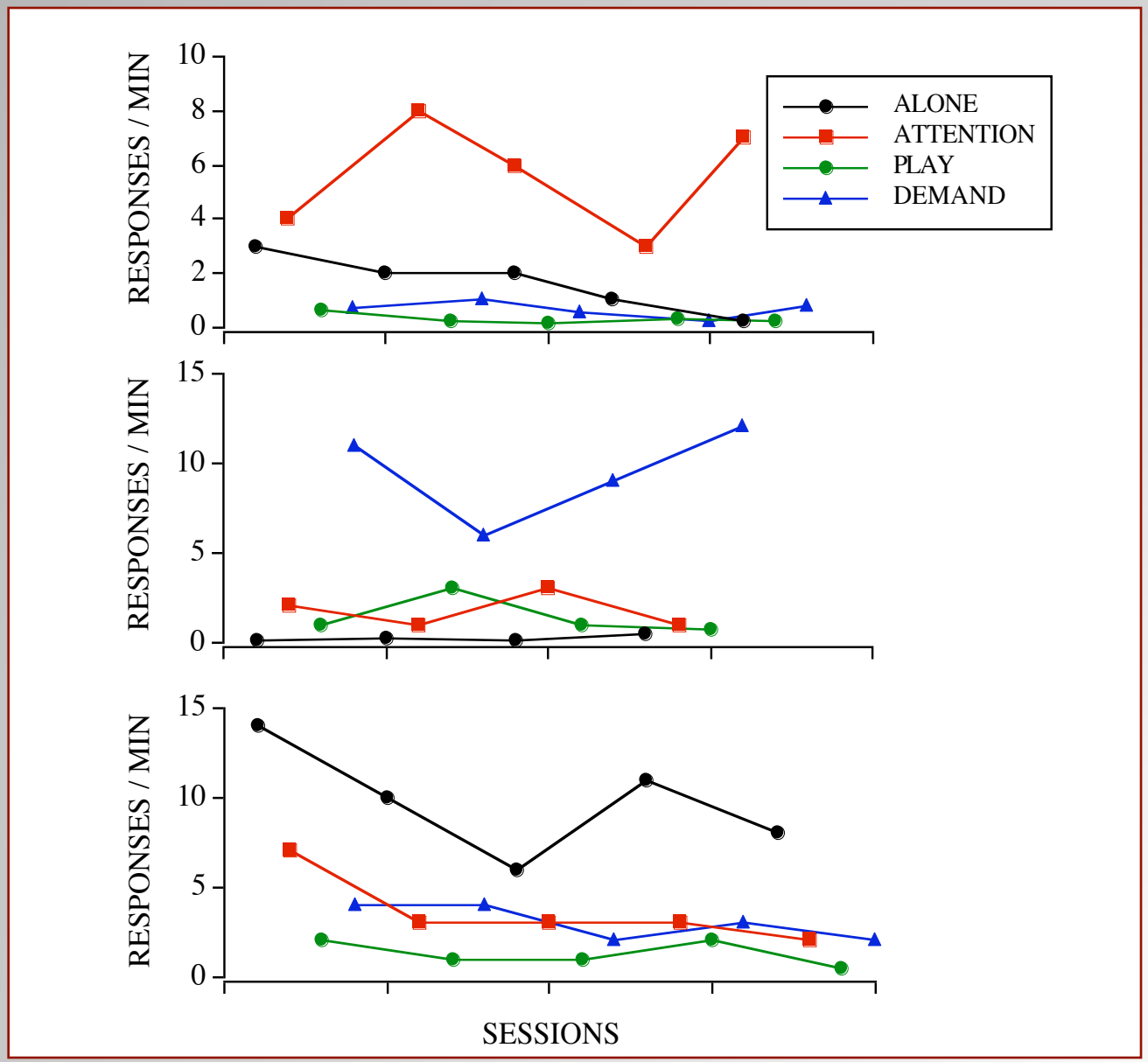
# *Typical Response Patterns*



# *Shortcut to Identifying Behavioral Functions*

| *Source of Sr* | *Likely to Occur* | *Unlikely to Occur* |
|---|---|---|
| *Social Sr+* | •*No access to attn/tangibles*<br>•*Peer access to attn/tangibles* | •*Access to attn/tangibles* |
| *Social Sr-* | •*Work tasks present*<br>•*Required social interaction* | •*No activity requirements* |
| *Automatic Sr* | •*No access to leisure items* | •*Access to stimulating activity* |

# *Probable Functions of Specific Behavior Disorders*

| Behavior Disorder | Positive Reinforcement | | Negative Reinforcement | |
|---|---|---|---|---|
| | *Social* | *Automatic* | *Social* | *Automatic* |
| *Aggression* | + | Ø | + | Ø |
| *Tantrums* | + | Ø | + | Ø |
| *Noncompliance* | + | Ø | + | Ø |
| *Property Destruction* | + | ? | + | Ø |
| *"Stereotypies"* | ? | + | ? | ? |
| *SIB* | + | + | + | + |

# *Summary of Assessment Results*

| *Function* | *Iwata et al.* *SIB (152)* | *Conners et al.* *STPY (91)* | *Shore et al.* *AGG (16)* |
|---|---|---|---|
| *Social Sr+* | *26.3%* | *1.1%* | *31.3%* |
| *Social Sr-* | *38.1%* | *0%* | *62.5%* |
| *Automatic Sr* | *25.7%* | *98.9%* | *0%* |
| *Multiple Sr* | *9.9%* | *0%* | *6.2%* *(all social)* |

# *Summary of Assessment Results*

| *Function* | *Iwata et al.* *SIB (152)* | *Conners et al.* *STPY (91)* | *Shore et al.* *AGG (16)* |
|---|---|---|---|
| *Social Sr+* | *26.3%* | *1.1%* | *31.3%* |
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| *Automatic Sr* | *25.7%* | *98.9%* | *0%* |
| *Multiple Sr* | *9.9%* | *0%* | *6.2%* *(all social)* |

# *Reinforcement-Based Approaches to Behavior Reduction*

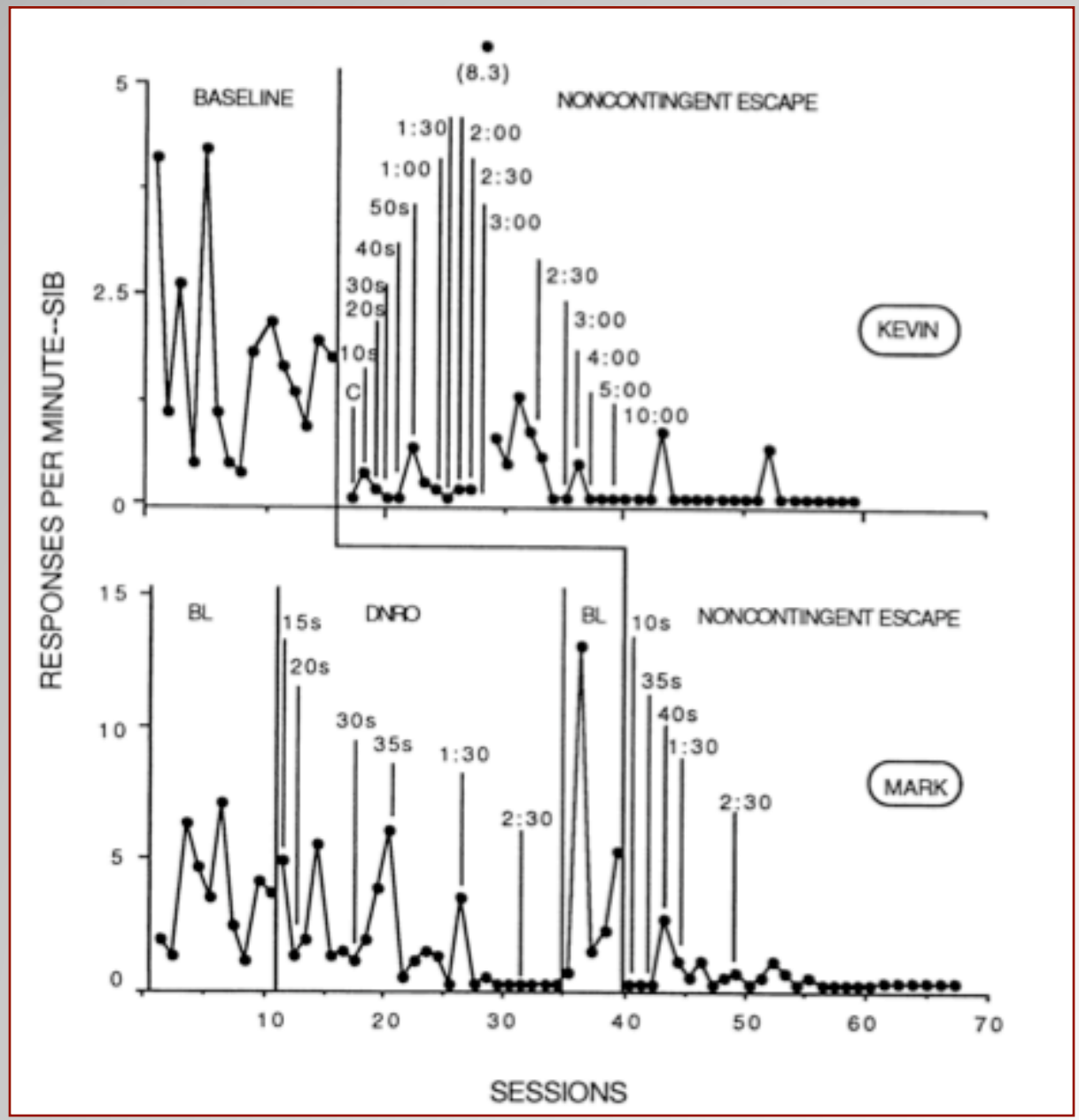
- *Eliminate the behavior's establishing operation or antecedent event (deprivation or aversive stimulation)*
  - *Noncontingent reinforcement (NCR)*
- *Eliminate the behavior's maintaining contingency*
  - *Extinction (EXT)*
- *Replace the behavior with an alternative response*
  - *Differential reinforcement (DRA)*

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Periodic, Noncontingent Escape*
## *(Vollmer, Marcus & Ringdahl, 1995)*

- *Participants: N=2, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
  - *BL: SIB ➔ 30-s break*
  - *TR: Continuous escape ➔ 1 (20- or 30-s) break per session*

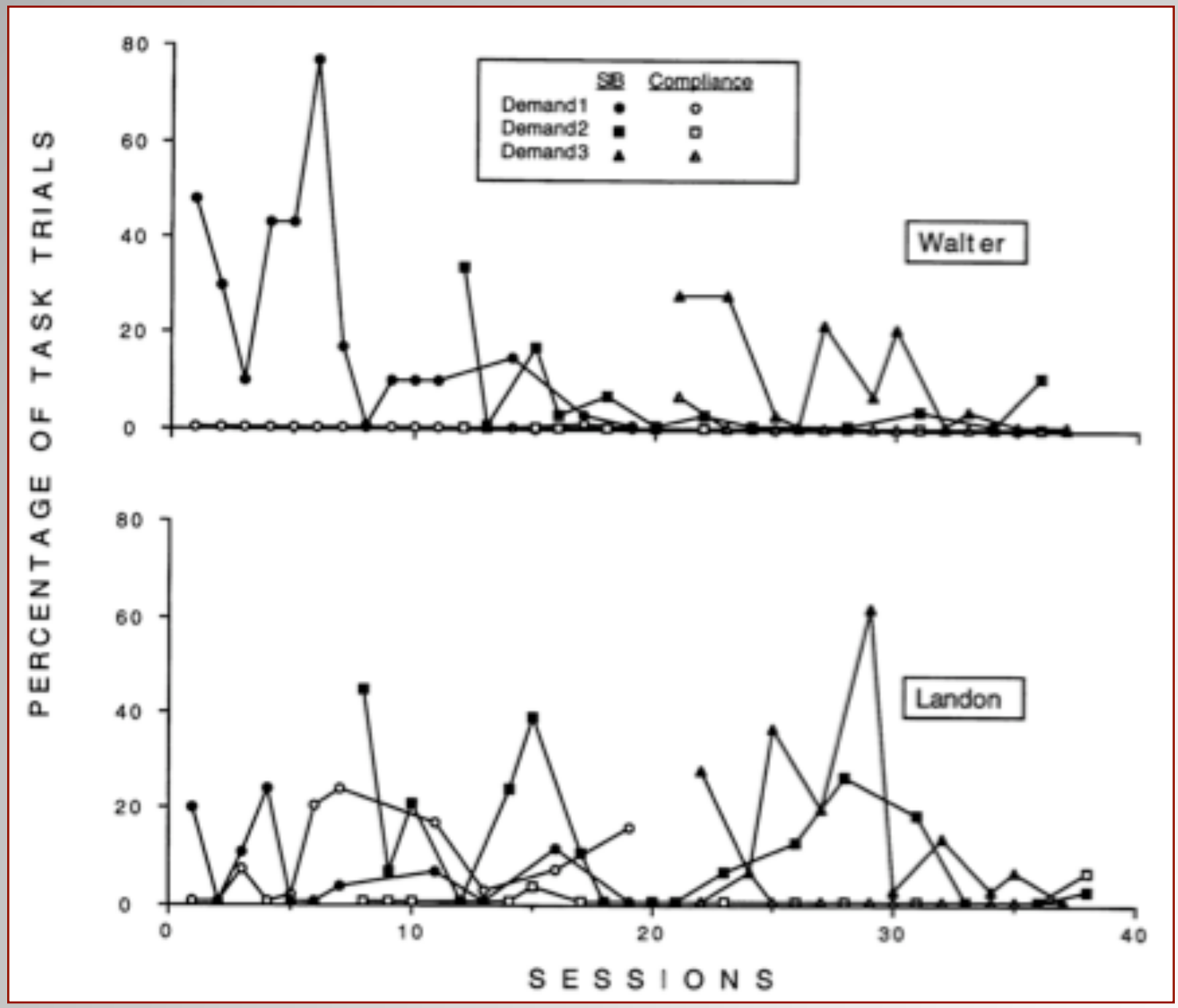

RESPONSES PER MINUTE--SIB
SESSIONS
BASELINE
NONCONTINGENT ESCAPE
(8.3)
1:30
2:00
1:00
2:30
50s
3:00
40s
2:30
30s
20s
3:00
10s
4:00
C
5:00
10:00
KEVIN
BL
DNRO
BL
NONCONTINGENT ESCAPE
15s
20s
10s
35s
30s
40s
35s
1:30
1:30
2:30
2:30
MARK
5
2.5
0
15
10
5
0
10
20
30
40
50
60
70

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Establishing Operations for Escape Behavior*
## *(Smith, Iwata, Goh, & Shore, 1995)*
## *Study 2: Novelty*

- *Participants: N=2, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
  - *Exposure to "novel" tasks*
  - *Continued exposure to determine whether novelty abated*

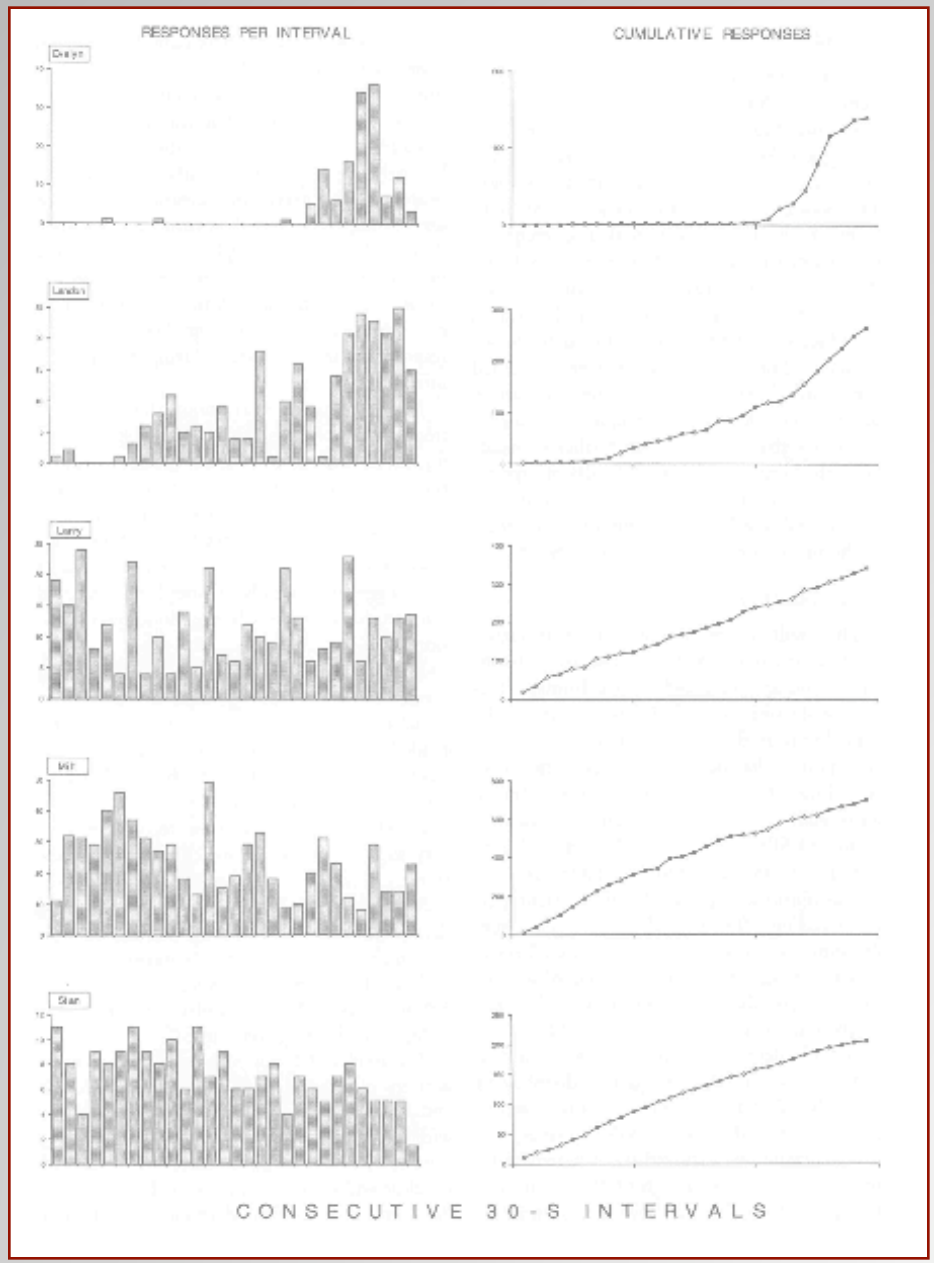

PERCENTAGE OF TASK TRIALS
SESSIONS
SIB
Compliance
Demand1
Demand2
Demand3
Walter
Landon
0
20
40
60
80
0
10
20
30
40

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Establishing Operations for Escape Behavior*
## *(Smith, Iwata, Goh, & Shore, 1995)*
## *Study 3: Session Duration*

- *Participants: N=5, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
  - *Exposure to 15-min sessions*
  - *Data analysis in 30-s bins*

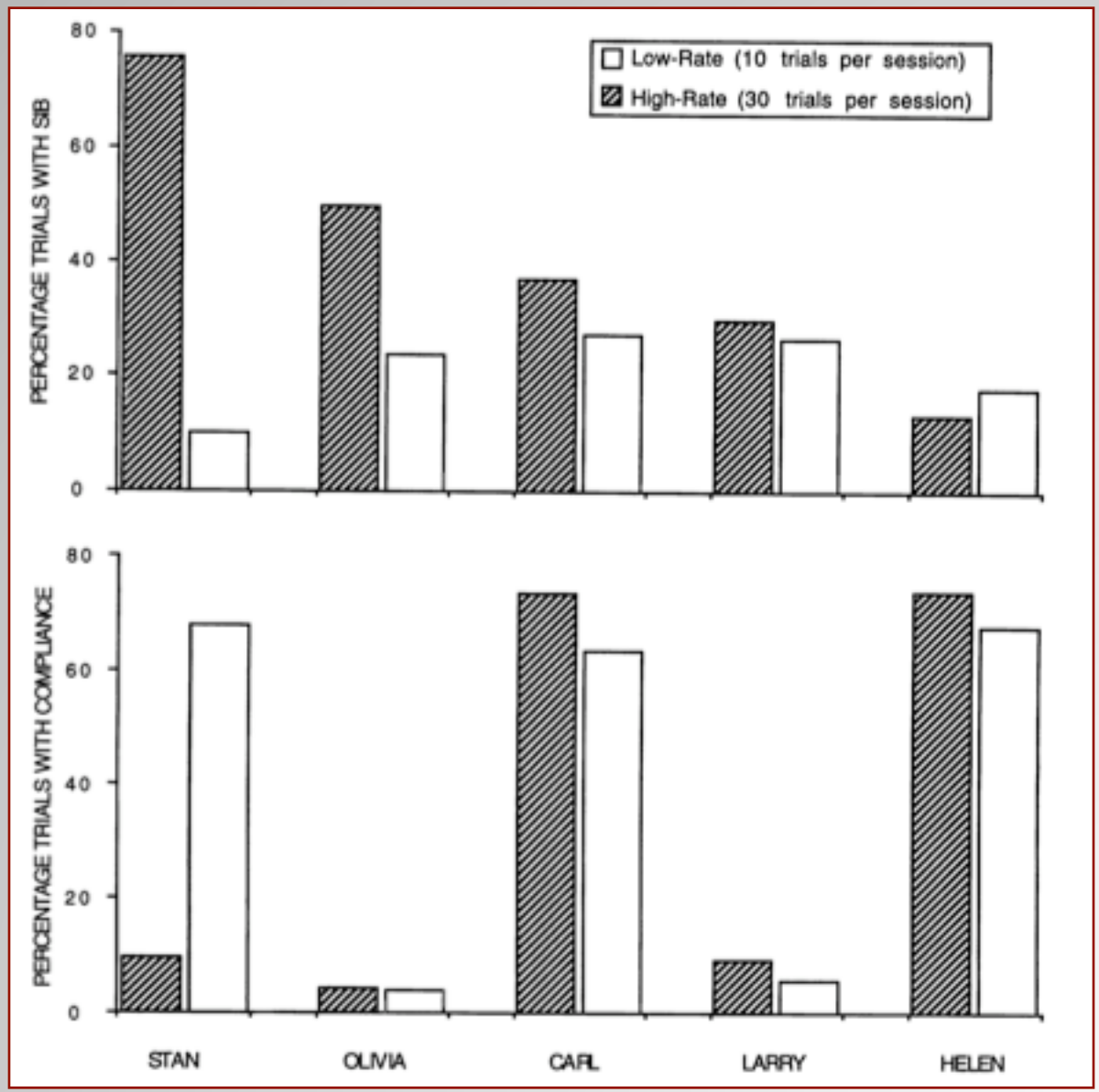

RESPONSES PER INTERVAL
CUMULATIVE RESPONSES
CONSECUTIVE 30-S INTERVALS

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Establishing Operations for Escape Behavior*
## *(Smith, Iwata, Goh, & Shore, 1995)*
## *Study 4: Rate of trial presentation*

- *Participants: N=5, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
  - *High-rate trial presentation (30 s)*
  - *Low-rate trial presentation (90 s)*

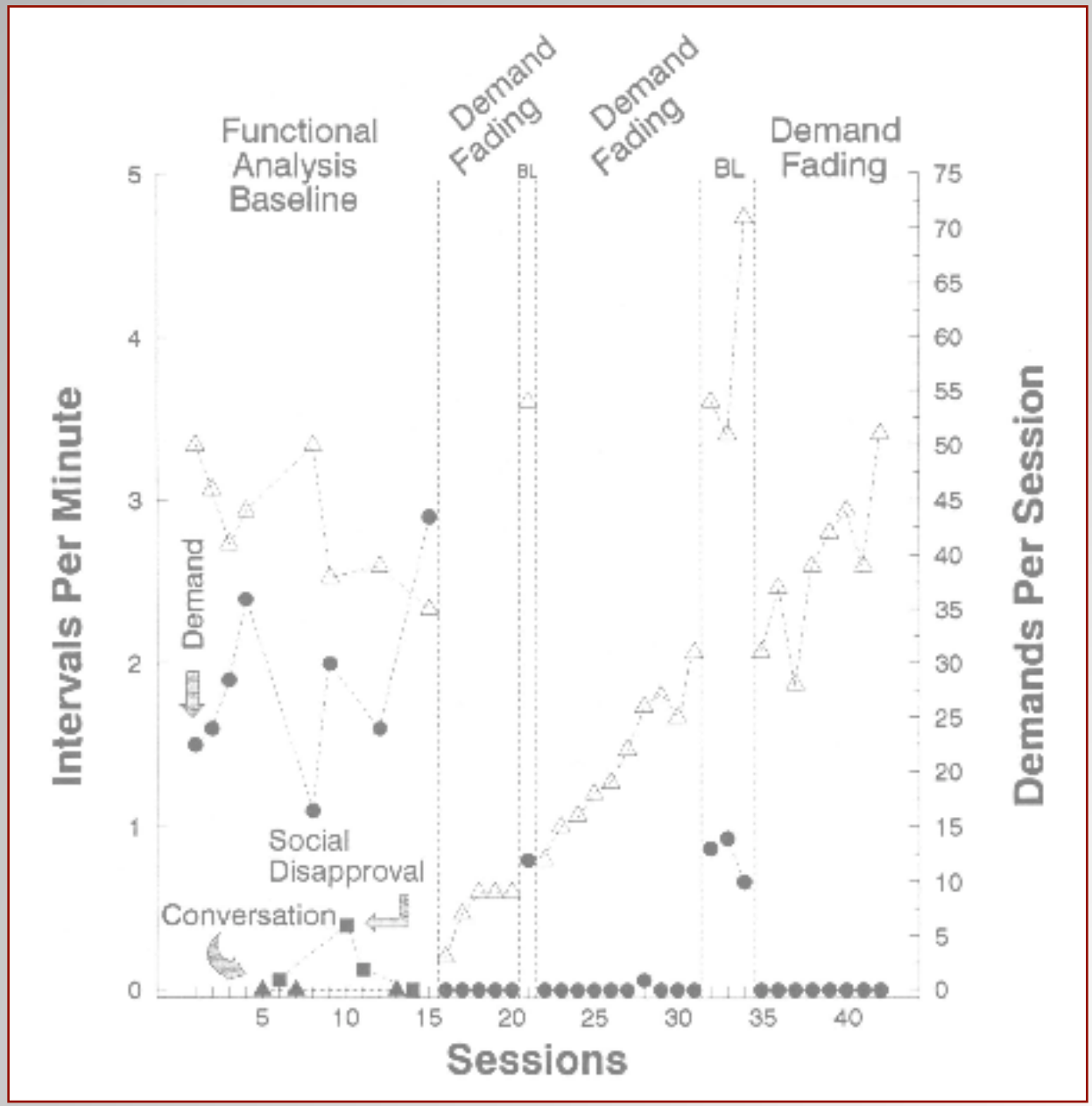

Low-Rate (10 trials per session)
High-Rate (30 trials per session)
PERCENTAGE TRIALS WITH SIB
80
60
40
20
0
PERCENTAGE TRIALS WITH COMPLIANCE
80
60
40
20
0
STAN
OLIVIA
CARL
LARRY
HELEN

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Stimulus (demand) Fading*
## *(Pace, Ivancic, & Jefferson, 1994)*

- *Participant: N-1, TBI, obscenity*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
- *BL: Obscenity ➔ 30-s break*
- *DF (No EXT): 3 demand trials ➔ 52 demand trials /session*

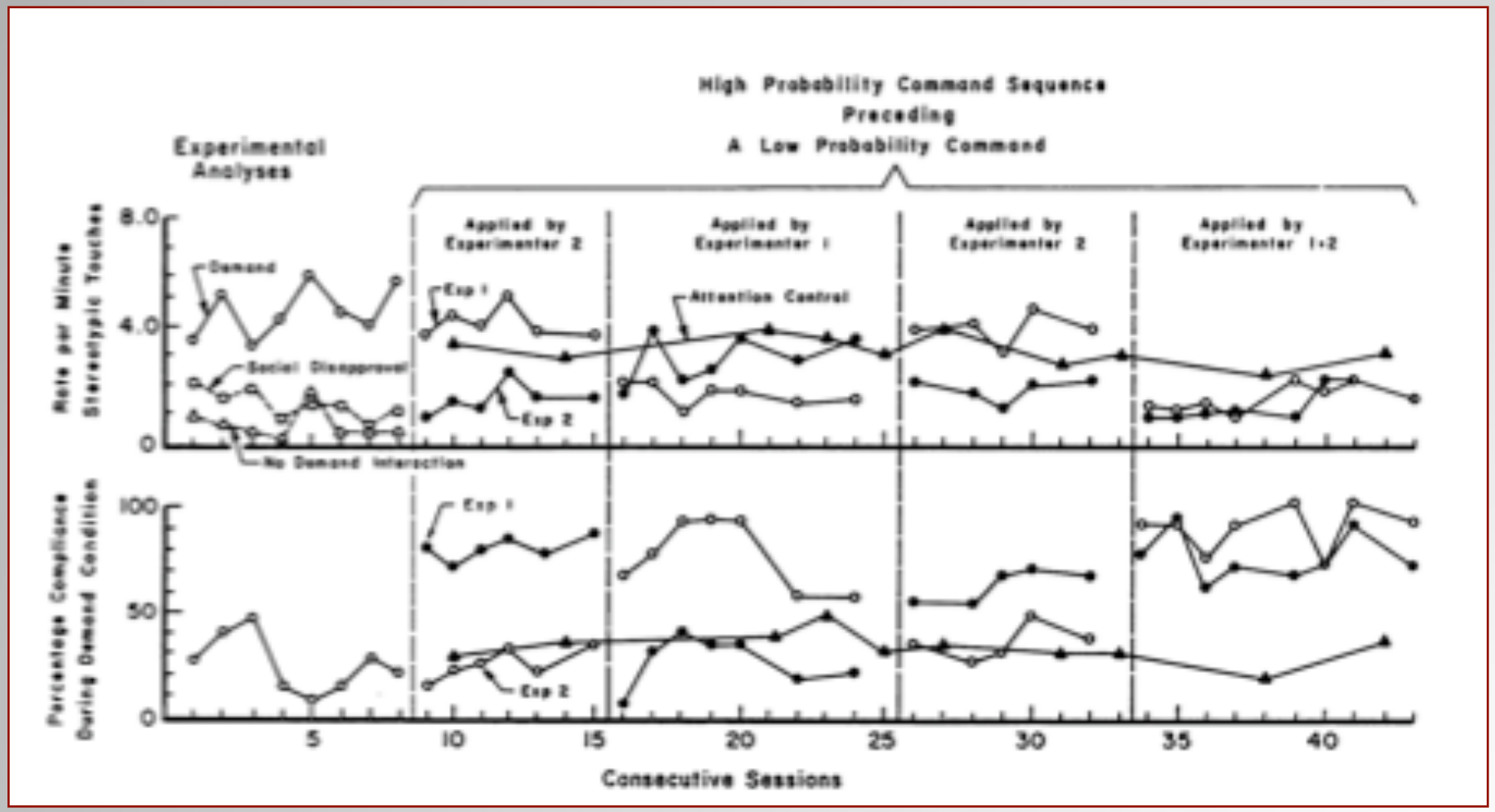

Functional Analysis Baseline
Demand Fading
Demand Fading
Demand Fading
BL
BL
Demand
Social Disapproval
Conversation
Intervals Per Minute
Demands Per Session
Sessions
0
1
2
3
4
5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
5
10
15
20
25
30
35
40

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *"Behavioral Momentum"*
## *(Mace & Belfiore, 1990)*

- *Participant: N=1, DD, "STR" (hand/foot contact)*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions:*
  - *Low-p: 1 low-p/min; STR ➔ Th leaves room*
  - *High-p: 3 high-p ➔ 1 low-p/min; STR ➔ EXT*
  - *Low-p and high-p alternated between 2 TH*

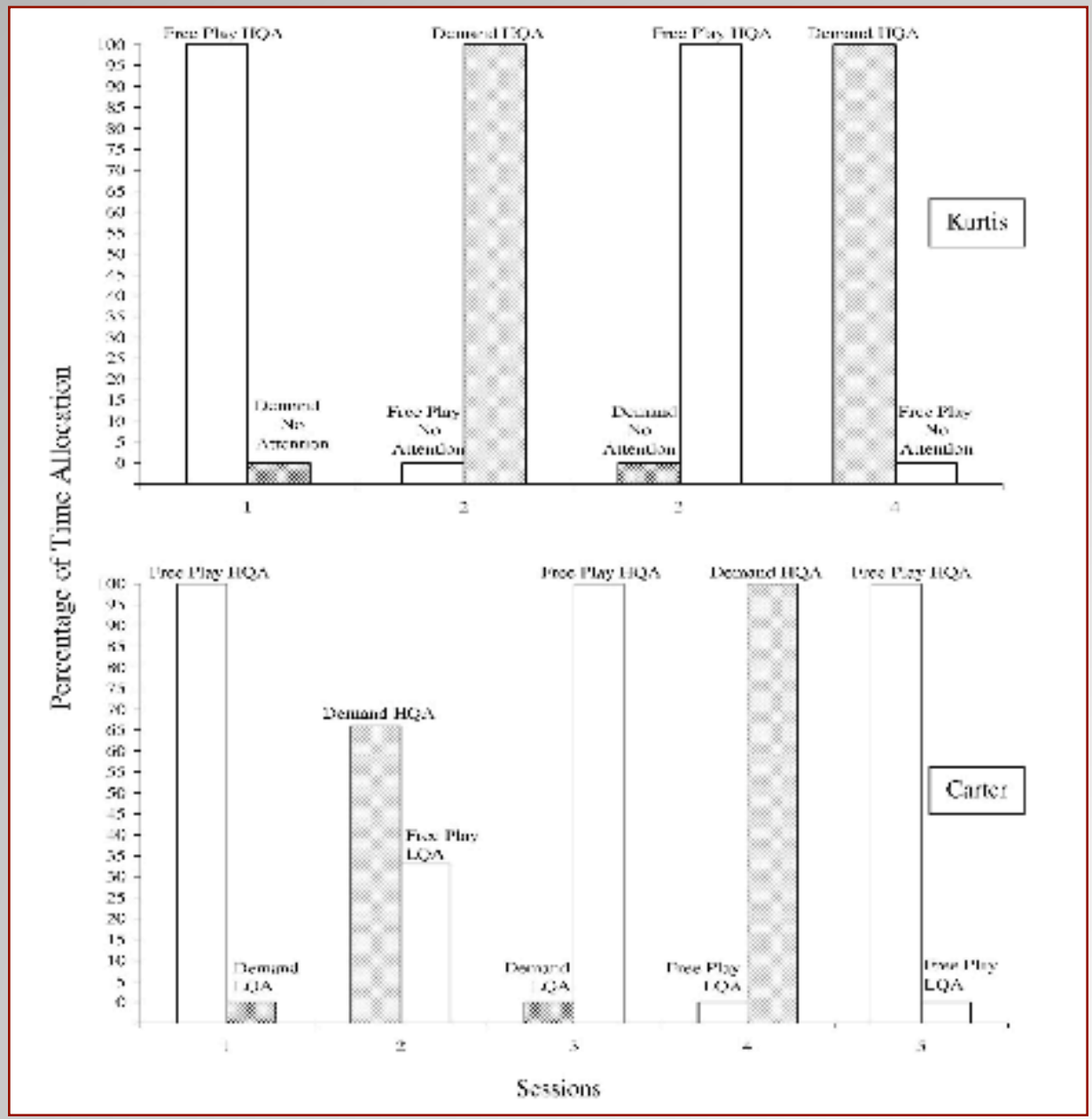

High Probability Command Sequence
Preceding
A Low Probability Command
Experimental
Analyses
Applied by
Experimenter 2
Applied by
Experimenter 1
Applied by
Experimenter 2
Applied by
Experimenter 1+2
Rate per Minute
Stereotypic Touches
8.0
4.0
0
Demand
Social Disapproval
No Demand Interaction
Exp 1
Exp 2
Attention Control
Percentage Compliance
During Demand Condition
100
50
0
Exp 1
Exp 2
5
10
15
20
25
30
35
40
Consecutive Sessions

# *Problem Behavior Maintained by Social Sr- Antecedent Interventions*

- *Establishing operation: Aversive stimulation (demands)*
- *Treatment options*
  - *Noncontingent task removal (NCR)*
  - *Frequent breaks from work*
  - *Maintenance tasks substituted for acquisition tasks*
  - *Reduced session duration*
  - *Reduced rate of task presentation*
  - *Demand fading (frequency or difficulty)*
  - *High probability (Hi-p) instructional sequence*
  - *Noncontingent Sr+*

# *Attention and Negative Reinforcement (Gardner, Wacker, & Boelter, 2009)*

- *Participants: N=2, typically developing, NC, AGG, PD*
- *Functional analysis: PB maintained by escape*
- *Attention conditions*
  - *HQA: eye contact, close, enthusiastic praise*
  - *LQA: no eye contact, far, negative or neutral tone*
  - *No attention*
- *Activity conditions*
  - *Free play: free access to preferred activities, no demands*
  - *Demand: Demand presentation, no preferred activities*
- *Attention & Activity pairs presented as concurrent choice*


Free Play HQA
Demand HQA
Free Play HQA
Demand HQA
Demand No Attention
Free Play No Attention
Demand No Attention
Free Play No Attention
Kurtis
Free Play HQA
Demand HQA
Free Play HQA
Demand HQA
Free Play HQA
Demand LQA
Free Play LQA
Demand LQA
Free Play LQA
Free Play LQA
Carter
Percentage of Time Allocation
Sessions

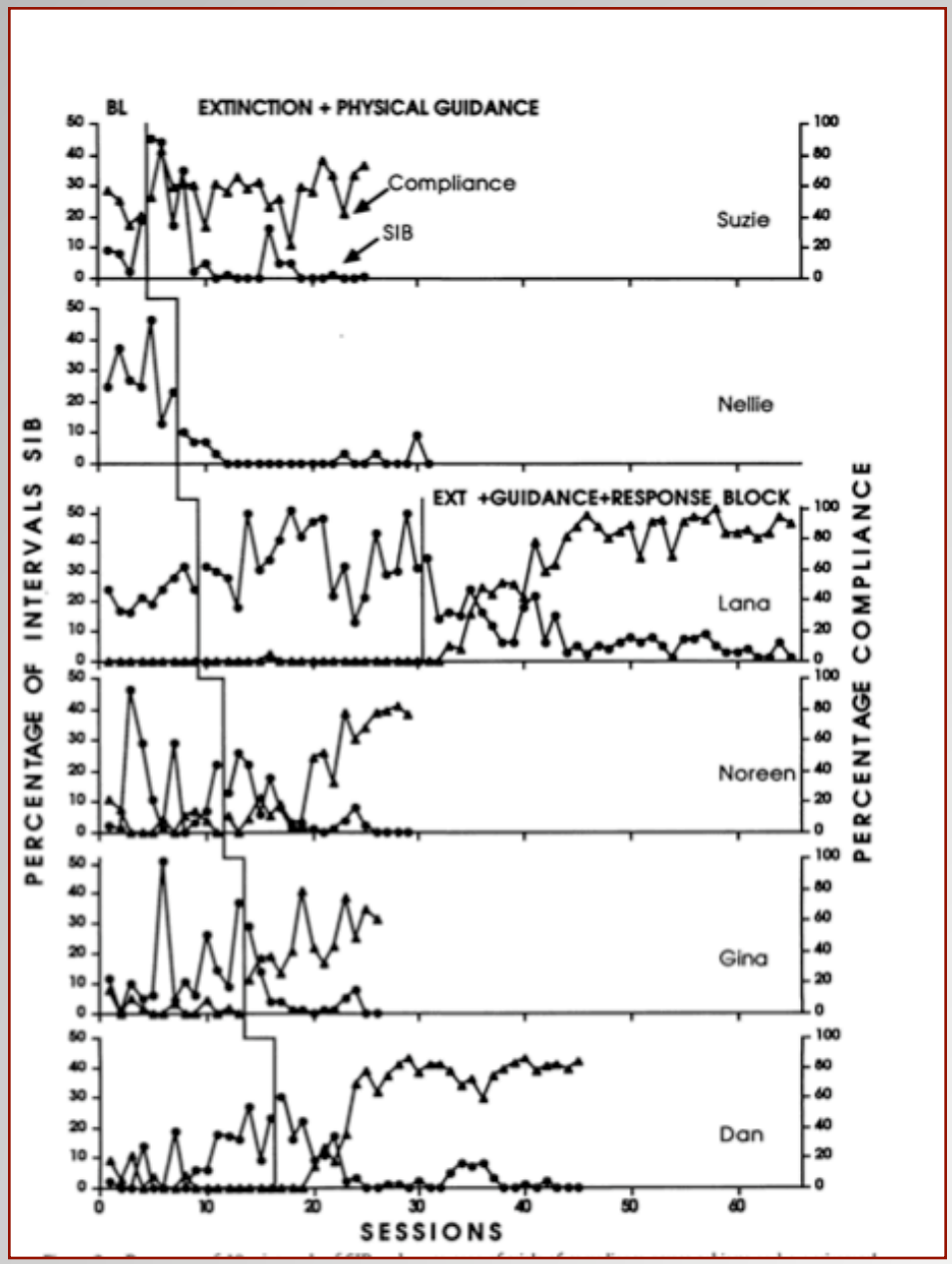
# *Problem Behavior Maintained by Social Sr- Extinction*

- *Maintaining Reinforcer: Escape*
- *Treatment options*
  - *EXT (escape); EXT (attention) contraindicated*

# *Escape Extinction*

## *(Iwata, Pace, Kalsher, Cowdery, & Cataldo, 1990)*

- *Participants: N=7, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatment conditions*
  - *BL: Compliance ➔ Praise, SIB ➔ Escape*
  - *EXT: Compliance ➔ Praise, SIB ➔ Prompting*

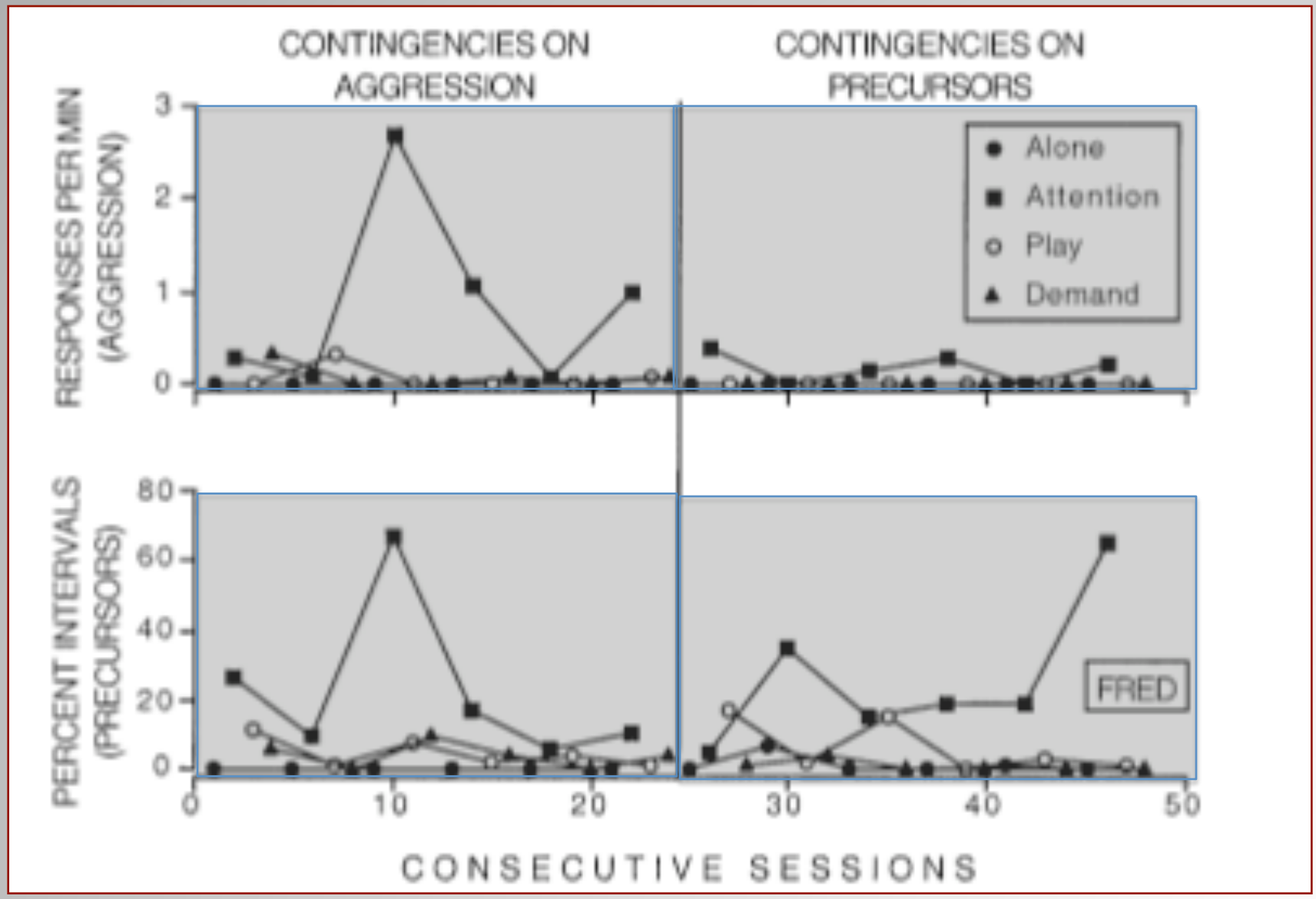

BL
EXTINCTION + PHYSICAL GUIDANCE
Compliance
SIB
Suzie
Nellie
EXT +GUIDANCE+RESPONSE BLOCK
Lana
Noreen
Gina
Dan
PERCENTAGE OF INTERVALS SIB
PERCENTAGE COMPLIANCE
SESSIONS

# *Problem Behavior Maintained by Social Sr- Differential Reinforcement*

- *Replacement of escape response*
- *Treatment options*
  - *Reinforce precursor behavior*
  - *Establish an alternative escape behavior*
  - *Strengthen compliance via enhanced Sr+*
  - *Strengthen compliance via enhanced Sr-*

# *Functional Analysis of Precursor Behavior (Smith & Churchill, 1995)*

- *Participants: N=4, DD, SIB or AGG*
- *Functional analysis: PB maintained by escape*
- *Assessment conditions*
  - *FA #1: Contingencies on precursors*
  - *FA #2: Contingencies on severe PB*

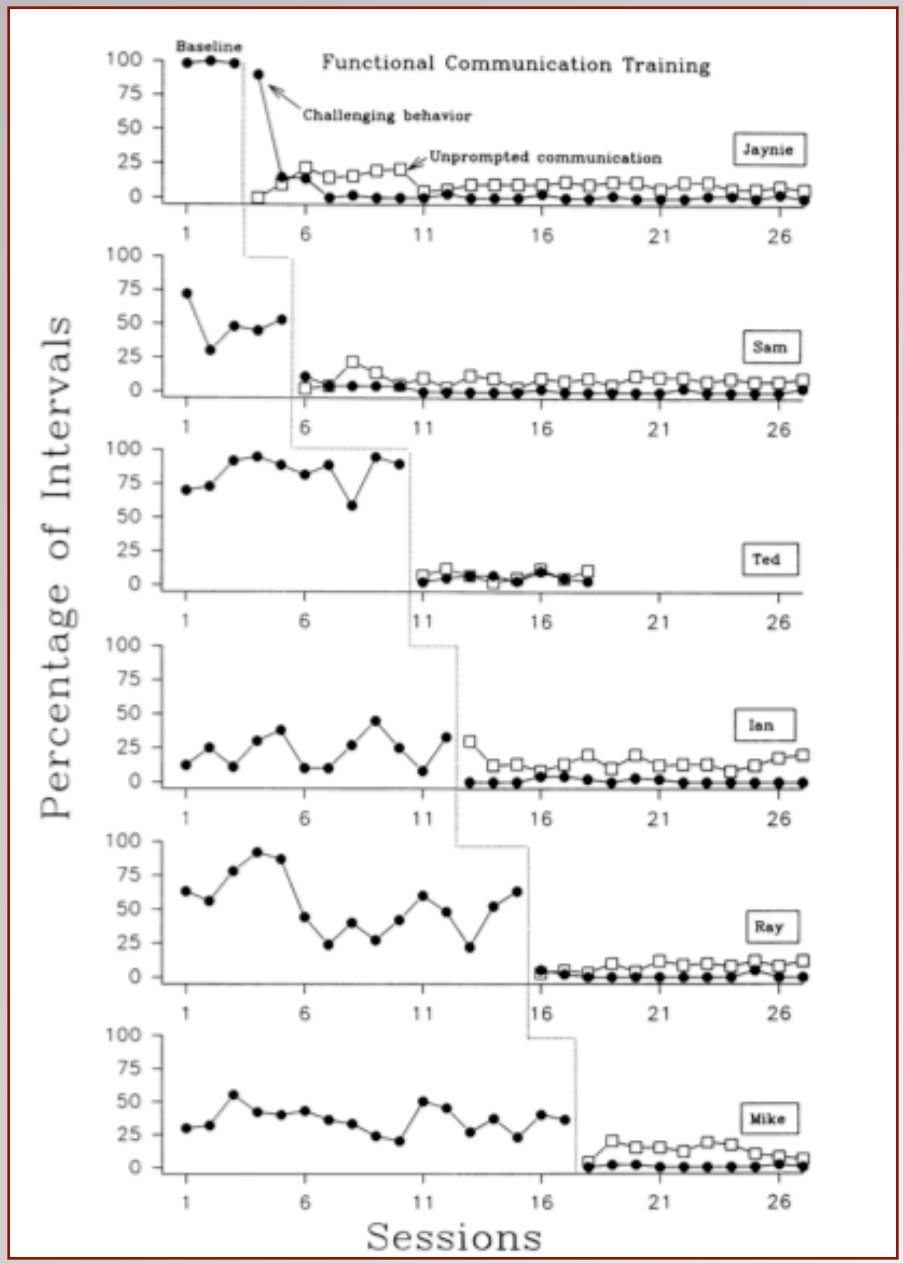

CONTINGENCIES ON AGGRESSION
CONTINGENCIES ON PRECURSORS
RESPONSES PER MIN (AGGRESSION)
PERCENT INTERVALS (PRECURSORS)
Alone
Attention
Play
Demand
FRED
0
1
2
3
0
20
40
60
80
0
10
20
30
40
50
CONSECUTIVE SESSIONS

# *Problem Behavior Maintained by Social Sr- Differential Reinforcement*

- *Replacement of escape response*
- *Treatment options*
  - *Reinforce precursor behavior*
  - *Establish an alternative escape behavior*
  - *Strengthen compliance via Sr+*
  - *Strengthen compliance via enhanced Sr-*

# *Functional Communication Training (Durand & Carr, 1992)*

- *Participants: N=6, DD, varied PB*
- *Functional analysis: PB maintained by escape*
- *Treatmentconditions*
  - *BL: PB ➔ Escape*
  - *TR: PB ➔ EXT, Alt R ➔ Escape*

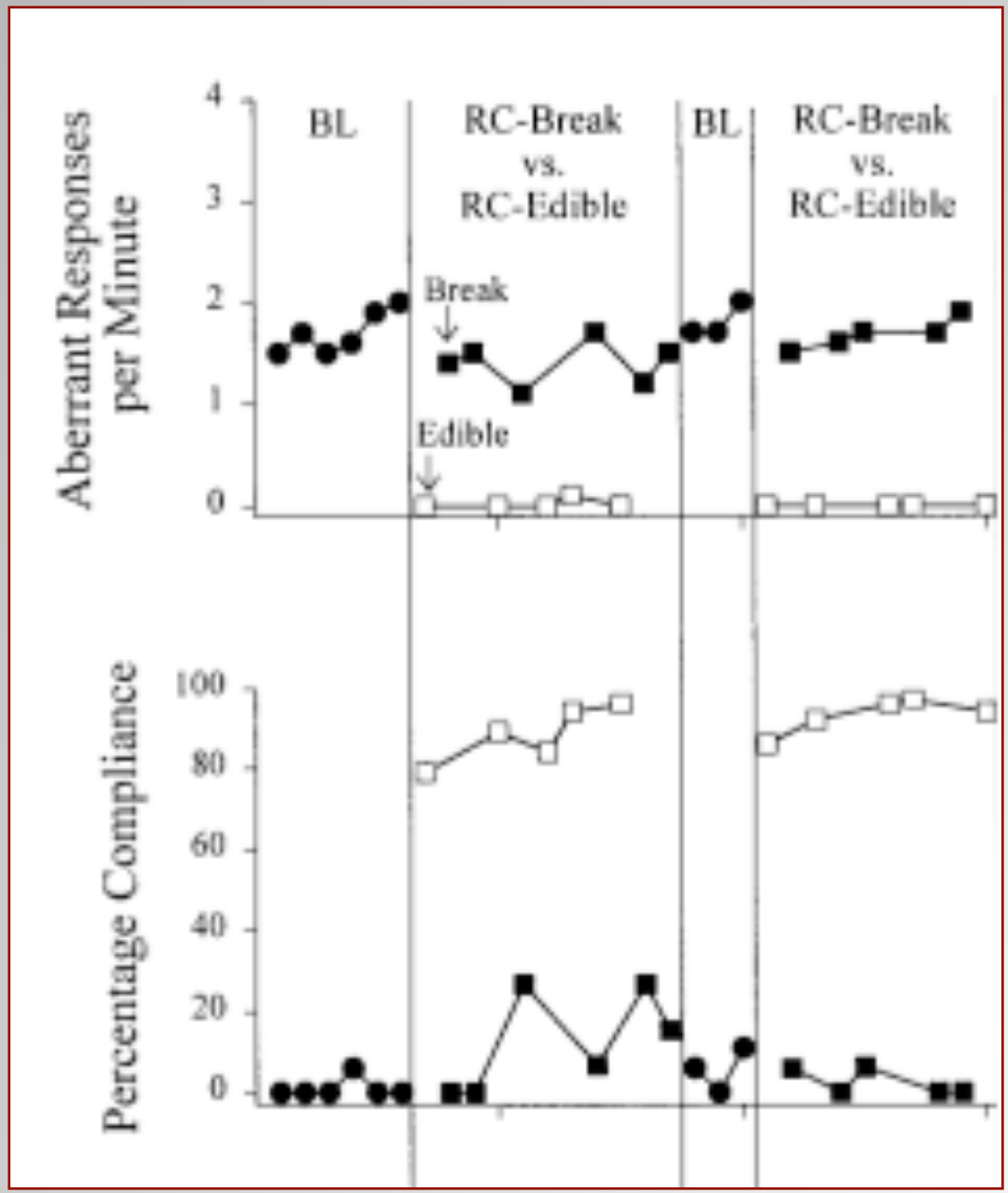

Baseline
Functional Communication Training
Challenging behavior
Unprompted communication
Jaynie
Sam
Ted
Ian
Ray
Mike
Percentage of Intervals
Sessions
100
75
50
25
0
1
6
11
16
21
26

# *Problem Behavior Maintained by Social Sr- Differential Reinforcement*

- *Replacement of escape response*
- *Treatment options*
  - *Reinforce precursor behavior*
  - *Establish an alternative escape behavior*
  - *Strengthen compliance via Sr+*
  - *Strengthen compliance via Sr-*

# *Sr+ vs. Sr- for Compliance*
## *(DeLeon, Neidert, Anders & Rodriguez-Catter, 2001)*

- *Participants: N=1, DD, varied PB*
- *Functional analysis: PB maintained by escape*
- *Treatmentconditions*
  - *BL: PB ➔ Escape*
  - *RC-edible (Sr+): Compliance ➔ chip*
  - *RC-break (Sr-): Compliance ➔ EXT, 30-s break*

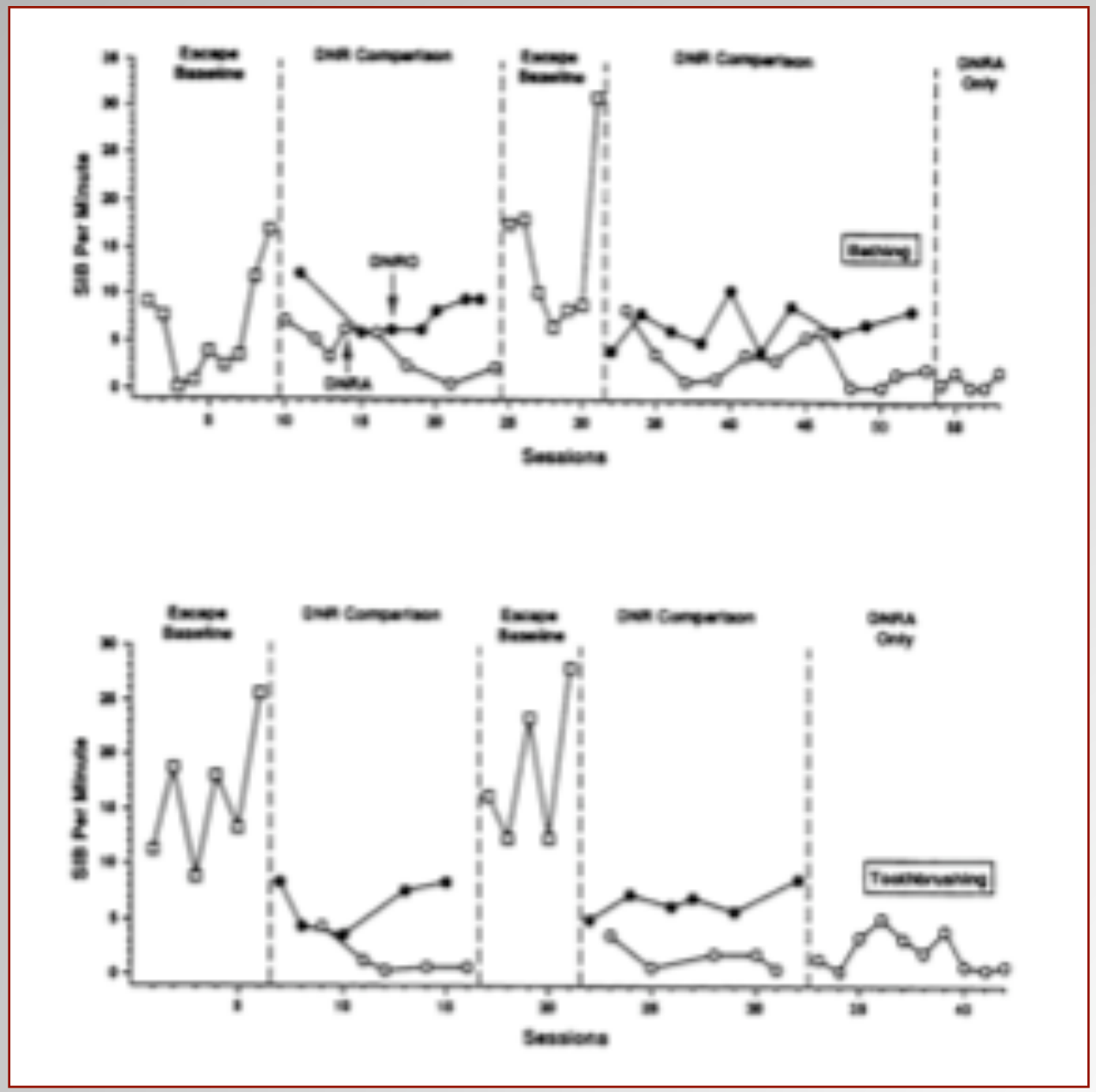

Aberrant Responses per Minute
4
3
2
1
0
BL
RC-Break vs. RC-Edible
BL
RC-Break vs. RC-Edible
Break
Edible
Percentage Compliance
100
80
60
40
20
0

# *Problem Behavior Maintained by Social Sr- Differential Reinforcement*

- *Replacement of escape response*
- *Treatment options*
  - *Reinforce precursor behavior*
  - *Establish an alternative escape behavior*
  - *Strengthen compliance via Sr+*
  - *Strengthen compliance via Sr-*

# *Comparison of DNR Procedures (Roberts, Mace, & Daggett, 1995)*

- *Participants: N=1, DD, SIB*
- *Functional analysis: PB maintained by escape*
- *Treatmentconditions*
  - *BL: PB ➔ Escape*
  - *DNRO: PB ➔ EXT, 20-s No PB ➔ 15-s break*
  - *DNRA: PB ➔ EXT, Compliance ➔ 15-s break*


Escape Baseline
DNR Comparison
Escape Baseline
DNR Comparison
DNRA Only
DNRC
DNRA
Reliving
SIB Per Minute
Sessions
Escape Baseline
DNR Comparison
Escape Baseline
DNR Comparison
DNRA Only
Toothbrushing
SIB Per Minute
Sessions

# *A WORD OF CAUTION*

- *Almost all studies in which EO or DR interventions have been used incorporated EXT*
- *Effects of EO and DR interventions w/o EXT have been negative or inconclusive*
- *Combine antecedent interventions*
  - *Reduced rate, effort, duration*
  - *DF + Hi-p sequence*
- *Combine DR interventions*
  - *Sr+ + Sr-*
  - *DNRO + DNRA*

*The End*