

Inner Behavior & Applied Behavior Analysis

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Continuum of Behavior

- Platonic or Cartesian “mind-body” dualism is a myth.
- We have
 - those behaviors others can observe.
 - those behaviors only the individual can sense and observe.
- Outer and inner behaviors lie on a continuum.
- Results, whether with inner or outer behaviors, are based on observations of behavior.

Practice

- You can observe yourself.
- Close your eyes.

- You are one person inside and out.

Mickey Keenan video lesson

- **Black Box**
- <https://www.youtube.com/watch?v=ISuVGWhH8ZU&feature=youtu.be>
- Black Box <https://youtu.be/ISuVGWhH8ZU>
 - [13'47]

Radical vs. Methodological Behaviorism

- Methodological behaviorism needs an external observer.
- Radical behaviorism does not. Therefore, we can view & research inner behavior.
 - Skinner
 - Lindsley
 - Vargas
 - Even if you ignore the authorities, you cannot ignore the science gathered inductively as is astronomy.
 - Keenan's video, Black Box, is a good example of this.
- Inside or outside the skin, behavior is just that: Behavior

A Very Short History

- In *Conditioned Reflexes* (1928), Pavlov discussed the 'nervousness' of the lab dogs after the St. Petersburg flood.
- In *The Operational Analysis of Psychological Terms* (1945), Skinner wrote public and private events being equally lawful and alike in kind.
- Lindsley counted urges to smoke in 1966.
- This produced the category inner behavior with over 1,000 charts in research projects.

Inner Behavior Definitions

- Thought (observe)
 - An idea or concept
 - Operant verbal behavior
- Feeling (sense & observe)
 - A thought with a mild physiological component
 - Operant behavior
- Urge (sense & observe)
 - An impulse
 - Respondent behavior on first occurrence
 - Then usually operant and respondent mixed, but may occur again as respondent only.

Inner Behavior

- **Count** by observing
 - We can and do observe outer behaviors.
 - We can and do observe inner behaviors.
- Record the **count**
 - It is **not** a **report!**
 - I repeat: It is **not** a **report!**
 - **This is a count!**
- Chart

Inner Behavior Research Projects.

Researcher	Date	Total Charts	Total People
Kandel	1971	12	12
Behavior Bank	1971, 1974	219*	unknown
Sokolove	1973	281**	281***
Dean	1973	312**	34
Calkin	1979	161	105
Calkin	1992	35	35
Kubina	1994	2	2
Kostewicz	2000	2	1
Clore	2006	0	10
Cobane	2006	27	22
Patterson	2008	6	9
Rich	2009	3	3
Total		1,060	514

- Inner behavior charts in the Behavior Bank in addition to those Sokolove and Dean deposited.
- ** Sokolove's and Dean's studies separated the positive and negative behaviors, whereas the others usually combined the acceleration, deceleration, and the 1-min timings on the same chart.
- *** Caveat: Sokolove lists hers as phases, so it is unclear if these are all individual people.

File: Inners: Inner Behavior Research Projects 13 MY 2016.

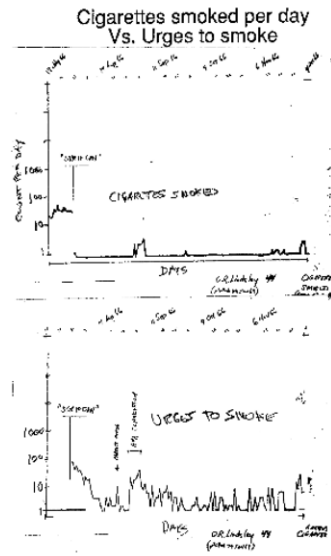
7 Laws of Inner Behavior

- 1. Everything you can do, think, or think of has a frequency.
- 6. Positive and Negative behaviors celerate independently.
- 7. Positive and Negative urges celerate independently.
- 8. Urges to do a behavior and the behavior itself celerate independently.
- 1 thru 8: O. R. Lindsley. I add 9 and 10:
- 9. Positive and Negative thoughts celerate independently.
- 10. Positive and Negative feelings celerate independently.

Beginnings of Research into Inner Behavior

- Lindsley quit smoking in 1966.
- The Before phase was 27 February-31 July...during which he counted his outer behavior.
- Then he counted reaches, which he found was the bridge from the outer to the inner behavior.
- Smokes → Reaches → Urges

7



Notes and ideas:

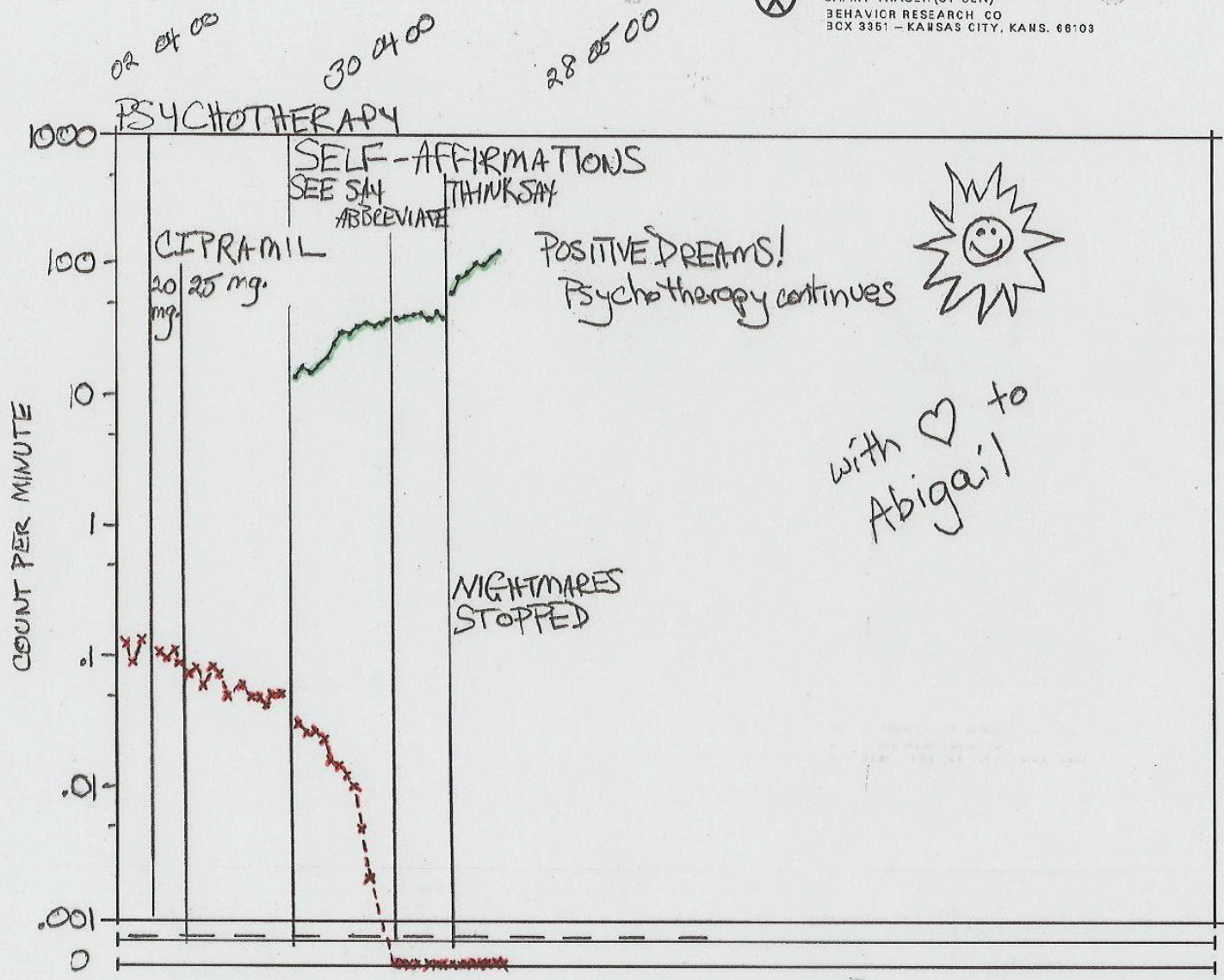
SG Box 28 folder 62 found on 4 Aug 07

Early inner behaviors 1967-1970

- Deceleration of “Judy” (wife) thoughts
- Smoking urges
- Record and heal “hate” thoughts
- Sexual urges
- Selfish acts & kind thoughts (a 3 $\frac{1}{2}$ year old)

Let's take a look at some...

- Judy
- Doug
- Abigail depression 2001



A.B. CALKIN AB. CALKIN JUDY

JUDY JUDY JUDY

JUDY 21+ SELF-AFFIRMATIONS

X SUICIDE THOUGHTS

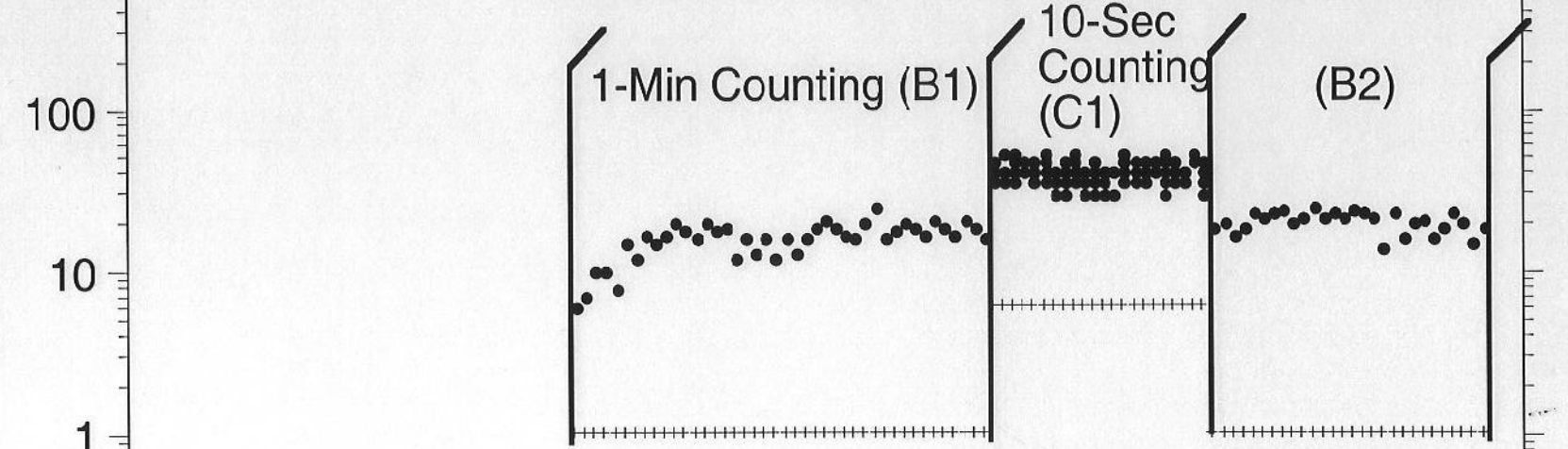
CALENDAR WEEKS

x 2
x 1.4
x 1.0

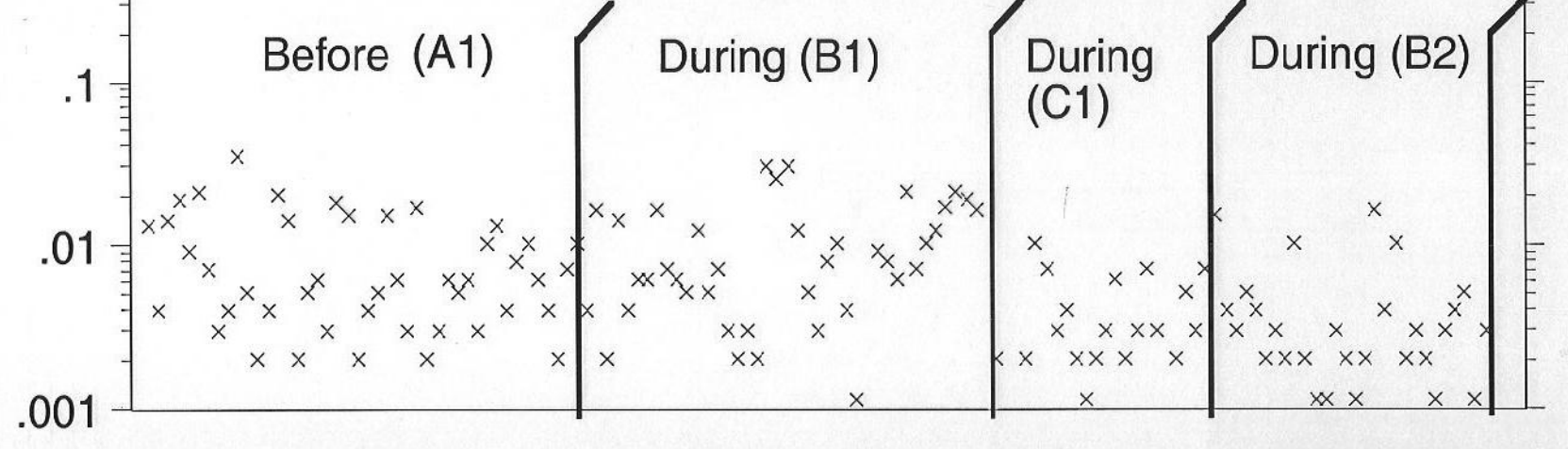
13 | Oct 96 10 | Nov 96 8 | Dec 96 5 | Jan 97 2 | Feb 97

0 4 8 12 16 20

Counts of Non-aggressive Thoughts and Feelings

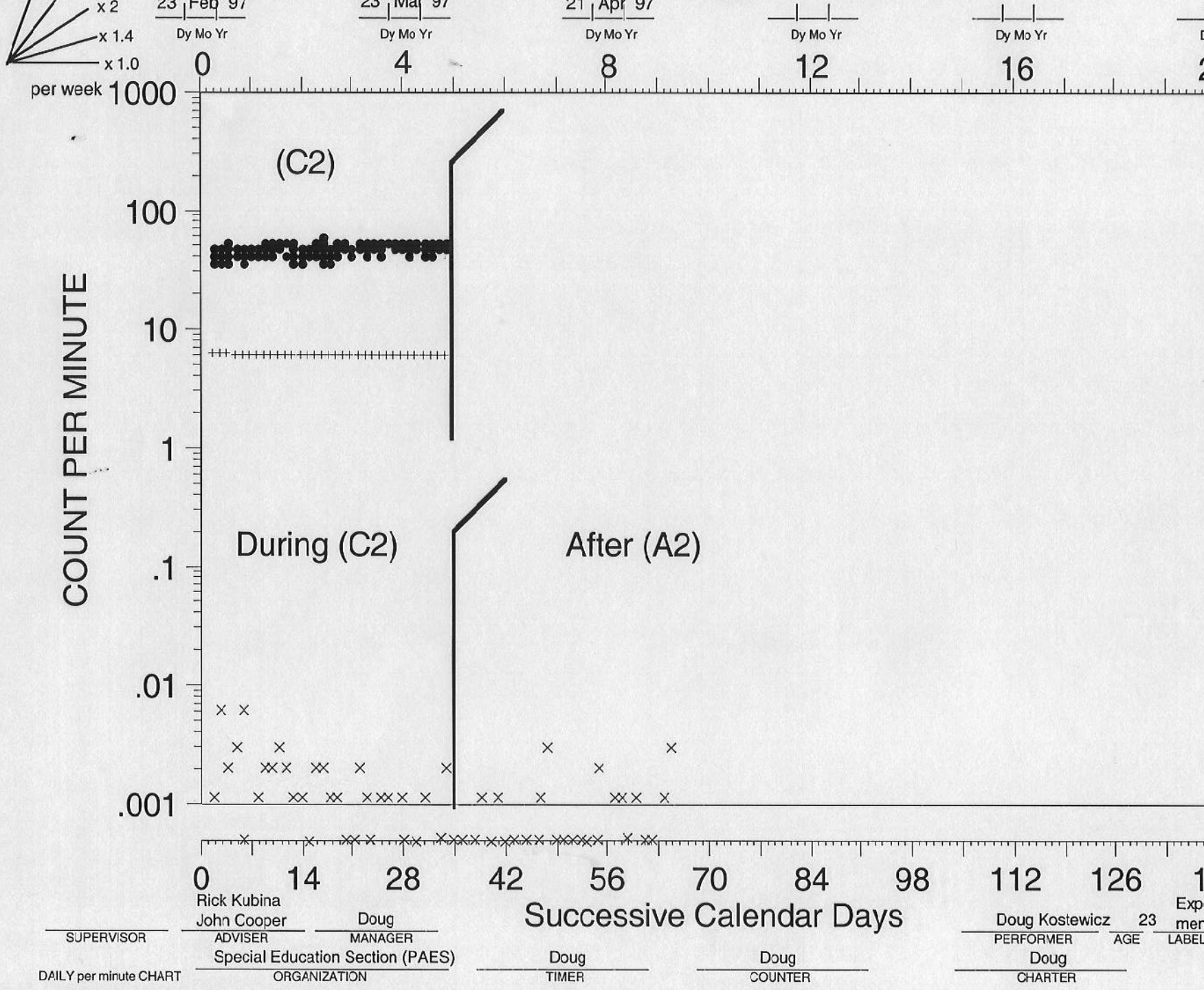


Counts of Aggressive Thoughts and Feelings



0 14 28 42 56 70 84 98 112 126 140

- Time to make a decision...
- What should advise Doug to do next?



Abigail behaves—depression chart

- 1. 9/11--dream & event
- 2. 300-min (5°) record floor
- 720-min (12°) behavior floor
- 3. 10-min record floor
- 1,000-min behavior floor

Dpmin-11EC

DAILY per minute CHART™

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FROM THE BUREAU OF LABOR RELATIONS

2 Sep 01
DAY MO TR

30 Sep 01
DAY MO TR

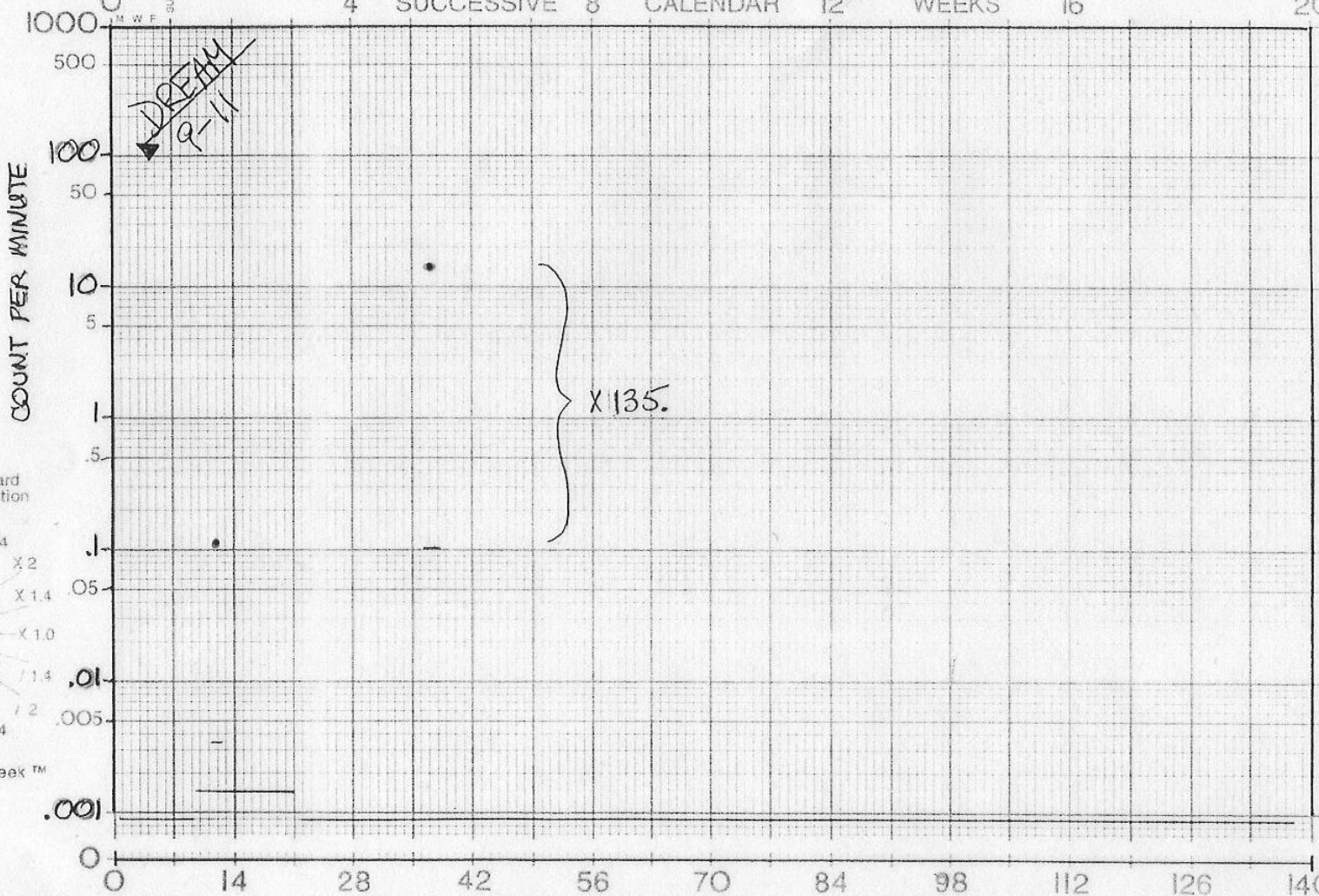
28 Oct 01
DAY MO TR

DAY MO TR

DAY MO TR

DAY MO TR

4 SUCCESSIVE 8 CALENDAR 12 WEEKS 16 20



- Standard celeration
- X16
 - X4
 - X2
 - X1.4
 - X1.0
 - /1.4
 - /2
 - /4
 - /16
- per week™

ABIGAIL B. CALKIN
SUPERVISOR ADVISER MANAGER ABIGAIL PERFORMER BEHAVES COUNTED

ORGANIZATION DIVISION ROOM ABIGAIL TIMER ABIGAIL COUNTER ABIGAIL CHARTER

Some other inner behaviors

- All these should be analyzed into finer behaviors.
 - View of self
 - Suicide thoughts or urges
 - Post-traumatic stress disorder elements
 - Epilepsy
 - General well-being
 - Writing ideas
 - Environmental action thoughts
 - Angry, aggressive thoughts/feelings/urges
 - Positive thoughts/feelings
 - ...plus hundreds more behaviors and specific behaviors!

Inner Behavior Research

- Frequency
- Celeration (change)
- Bounce (variability)

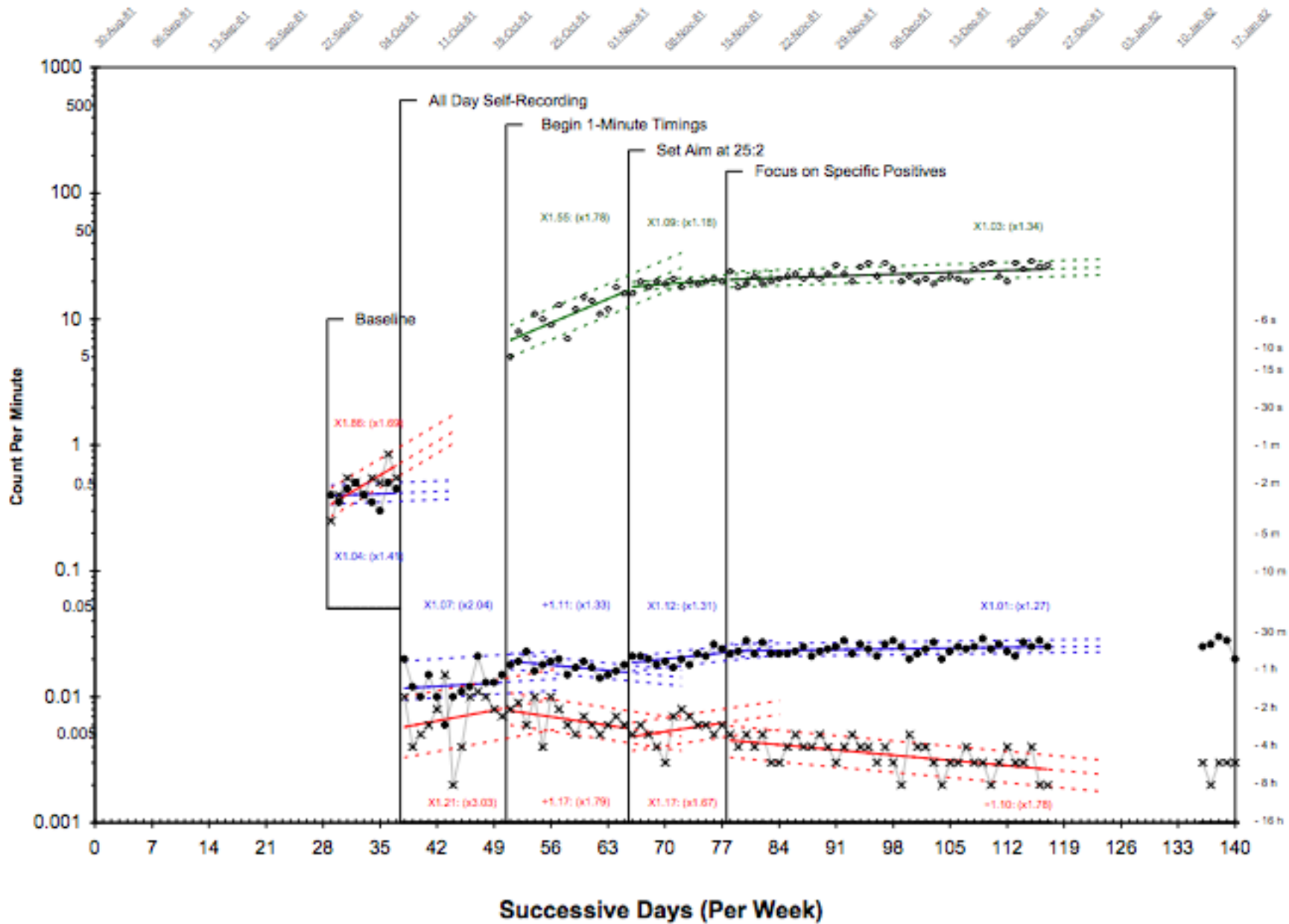
Frequency

- The range of inner behavior is usually between (0) 1 and 100 per day, in the bottom half of the chart.
 - Anything over 100 per day is intrusive to thinking and activity for routine daily events.
 - Obsessional.
- These frequencies are located in the bottom half of the SCC (standard celeration chart)
- The behavior tends to be stable and statistically like outer behaviors. There is no significant difference with other (academic, athletic, medical, etc.) frequencies except location on the chart.
 - Judy's chart
 - Doug's chart

Celeration

- The celerations show no significant difference with other celerations, other being academic, athletic, medical, etc. behaviors.
 - Judy's chart
 - Doug's chart
- Inner behaviors grow or decay at the same celerations as any other behavior.

Bounce



Name of Behavior: Diane (Calkin, A. 1992)

Movement Cycle: Positives (dots) vs Negatives (x's) About Self

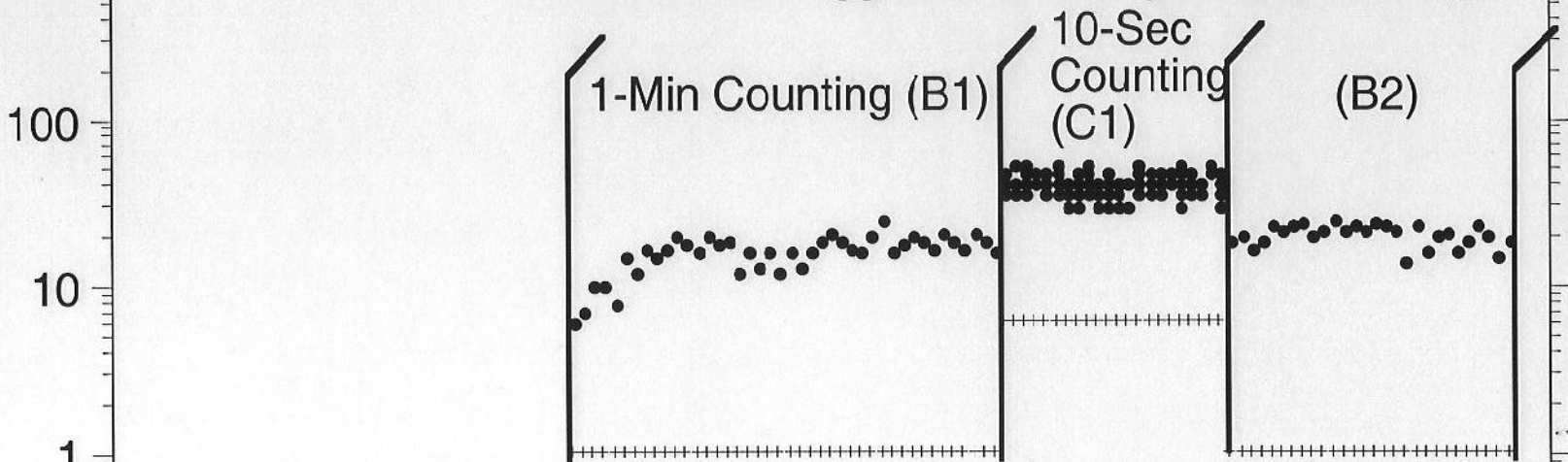
CALENDAR WEEKS

13 | Oct 96 10 | Nov 96 8 | Dec 96 5 | Jan 97 2 | Feb 97

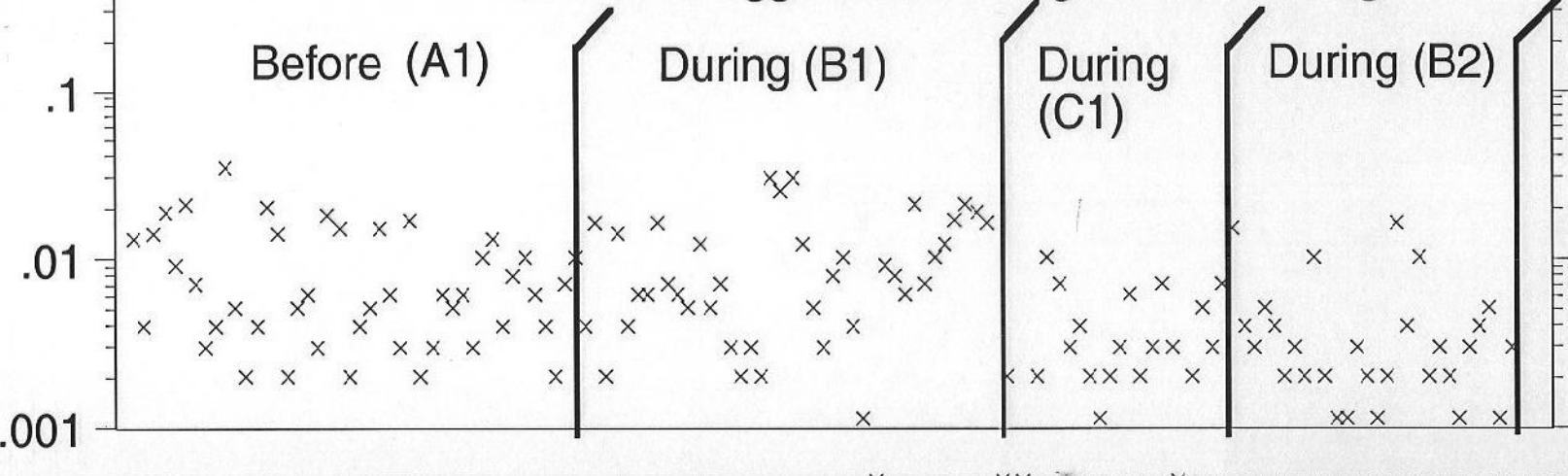
Dy Mo Yr Dy Mo Yr Dy Mo Yr Dy Mo Yr Dy Mo Yr

0 4 8 12 16 20

Counts of Non-aggressive Thoughts and Feelings



Counts of Aggressive Thoughts and Feelings



0 14 28 42 56 70 84 98 112 126 140

Rick Kubina
John Cooper Doug

Successive Calendar Days

Doug Kostewicz 23

Experimenter Thoughts and Feelings

Bounce

- As long as the counting is accurate, the bounce or variability, also resembles that of any other behavior.
 - Diane had very low bounce.
 - Doug had large bounce.
 - Why the difference?

Conclusions

- It turns out that Skinner was right when he said in 1945 and 1953 that public and private events are equally lawful and alike in kind.
- Using the SCC and applied behavior analysis, it is possible to count, chart, analyze and change inner behavior well and accurately.
- We must be able to analyze the behaviors; we cannot simply discuss the theoretical aspects of them.
- Skinner was wrong when he said behavior see-sawed.
- We must be able to make good predictions and decisions from our data.

Inner behavior—

Lindsley, 1971, pp. 117-118

- “Measuring the frequency of behavior was developed to record the *outer* behavior of people. Recently, we have been charting inner behaviors like success thoughts, anxiety feelings, joy, love, and compassion. How many times a day do you feel compassionate? How many ecology thoughts did you have today? Charting may be one of the few sensitive techniques that we have to keep track of these inner thoughts, feelings, and urges. It could be that precision teaching will ultimately provide man with the most good and the most help by being applied to his inner behavior. It is one of the few ways to chart and change inner behaviors.”

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