

Using the Standard Celeration Chart to Measure Student Attitude

David Keller, Stephen Graf and Bruce Schroeder

Dr. O. R. Lindsley first began using the multiply scale in 1976 to measure the attitudes of his university graduate students. It soon became apparent that attitude scaling could become a far more sensitive and differentiating endeavor than had previously been held by a majority of researchers and practitioners. Adequate measurement of human attitude can no longer be accomplished through use of the traditional 5-point Likert scale.

Major advantages can be accredited to the 19-point multiply scale. The additional scale steps provide an opportunity to identify even subtle attitude differences with far greater precision. The 19-point multiply scale dimension expands measurement to parameters which approach the entire range of human attitude. Use of the traditional 5-point scale to measure human attitude is like trying to measure the length of a 20-foot serpent under a microscope; one will never see the big picture.

The 19-point multiply scale has been field tested in a variety of educational settings. These include university course evaluation; workshop evaluation; and evaluation of an alcohol awareness class. Both the evaluation of two alcohol awareness classes and their

before/after Standard Celeration Charts are included here.

To facilitate audience learning, the 19-point multiply scale was used as a pre-post assessment of this session. Materials were disseminated to assist participants in the construction of 19-point attitude scale items. Additionally, participants had an opportunity to practice the scaling techniques.

The presenters encourage use of the 19-point multiply scale to measure attitude change in a variety of settings. Use of the 19-point multiply scale is restricted only by the limits of human imagination.

Dr. David Keller is Director of Pupil Services, School District of Flambeau in Tony, WI 54563, while Dr. Stephen Graf is a Professor of Psychology at Youngstown State University, Youngstown, OH 44501, and Bruce Schroeder is Director of the Utah Learning Resource Center, Salt Lake City, UT 84117.



"UP YOUR CELERATION"

SUBSTANCE AWARENESS IN-SERVICE - Multiply Scale Questions

Multiply Values

1000x
500x MORE

200x

100x

50x

20x

10x

5x

2x

1x SAME

1/2

1/5th

1/10th

1/20th

1/50th

1/100th

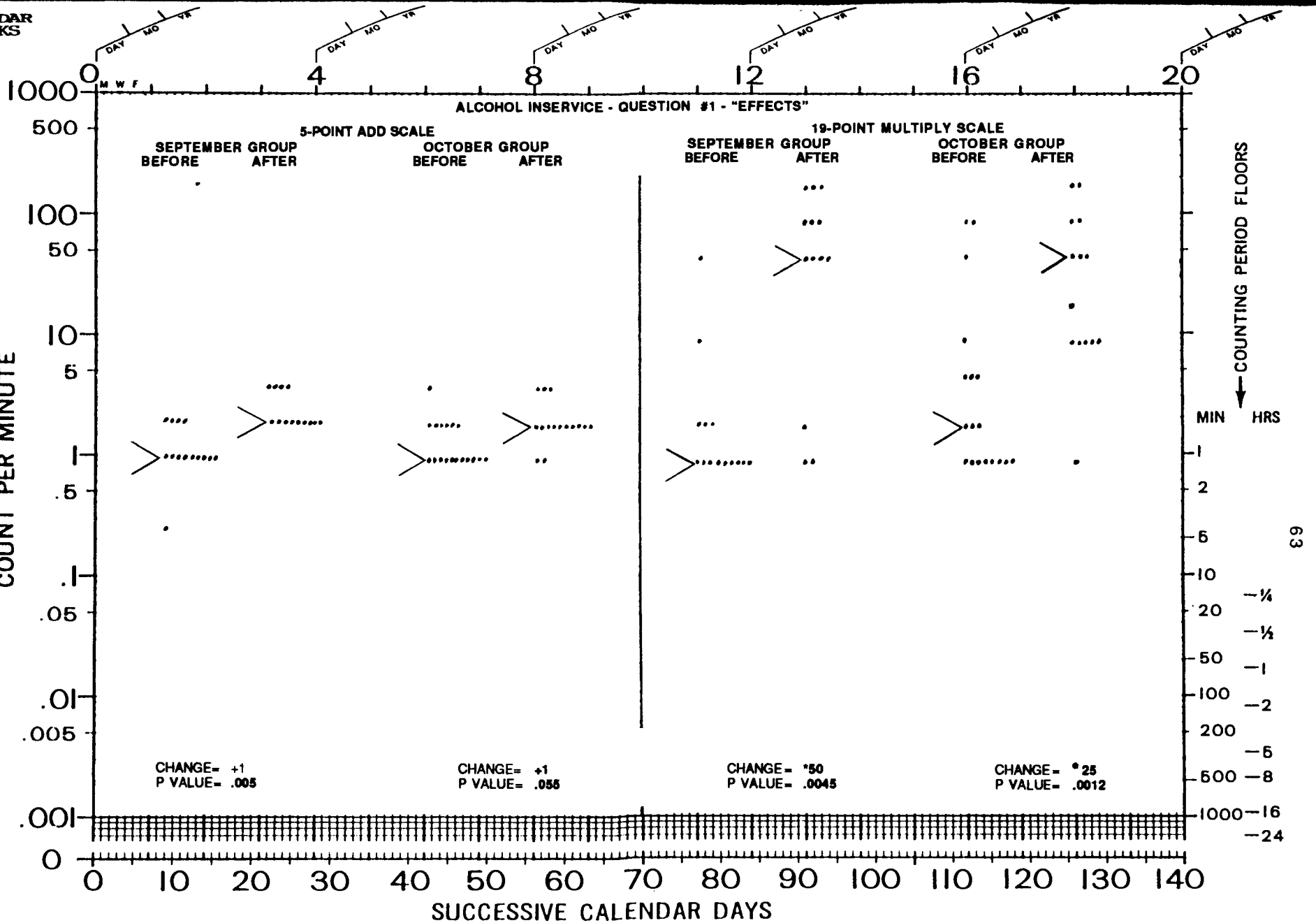
1/500th LESS

1/1000th

Example: I like chocolate ice cream _____ as much as vanilla.

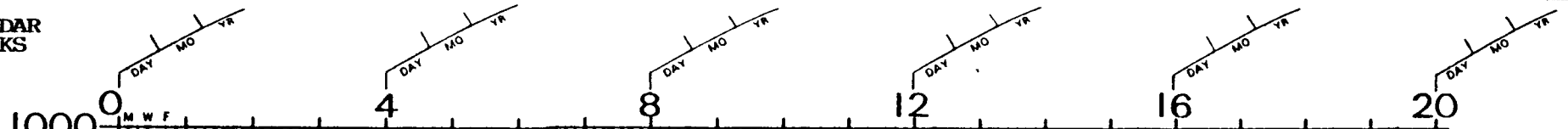
Note: In this case, the rater likes chocolate ice cream very much, and does not like vanilla very much at all. So, he says that he likes chocolate 200x more than vanilla.

1. Compared to the average person, I know _____ as much about effects of alcohol.
2. Compared to the average person, I know _____ as much about causes of alcohol abuse.
3. Recently provided ideas or information has been _____ as useful in changing my decisions about drinking and driving.
4. 8 gallons is _____ as much as 4 gallons.
5. Compared to a more formal lecture type class, I believe that participation from other group members is _____ as useful.
6. Compared to other classes I have taken, the atmosphere in this class is _____ as comfortable.
7. I like using the multiple scale _____ as much as using the add scale.
8. 1 ton is _____ as heavy as 2 tons.

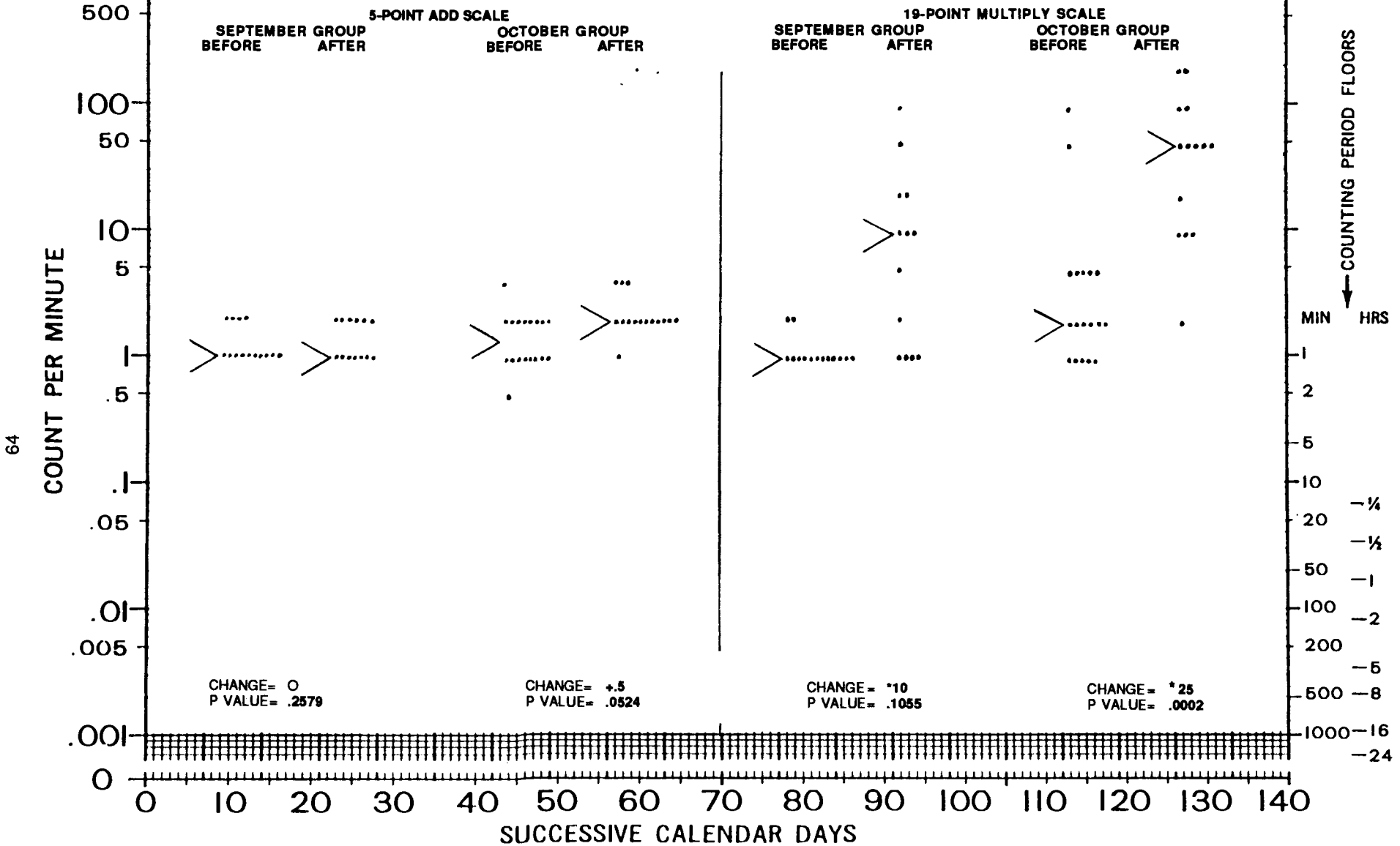


SUPERVISOR	ADVISER	MANAGER		BEHAVIOR	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY		TIMER	COUNTER	CHARTER		

CALENDAR WEEKS

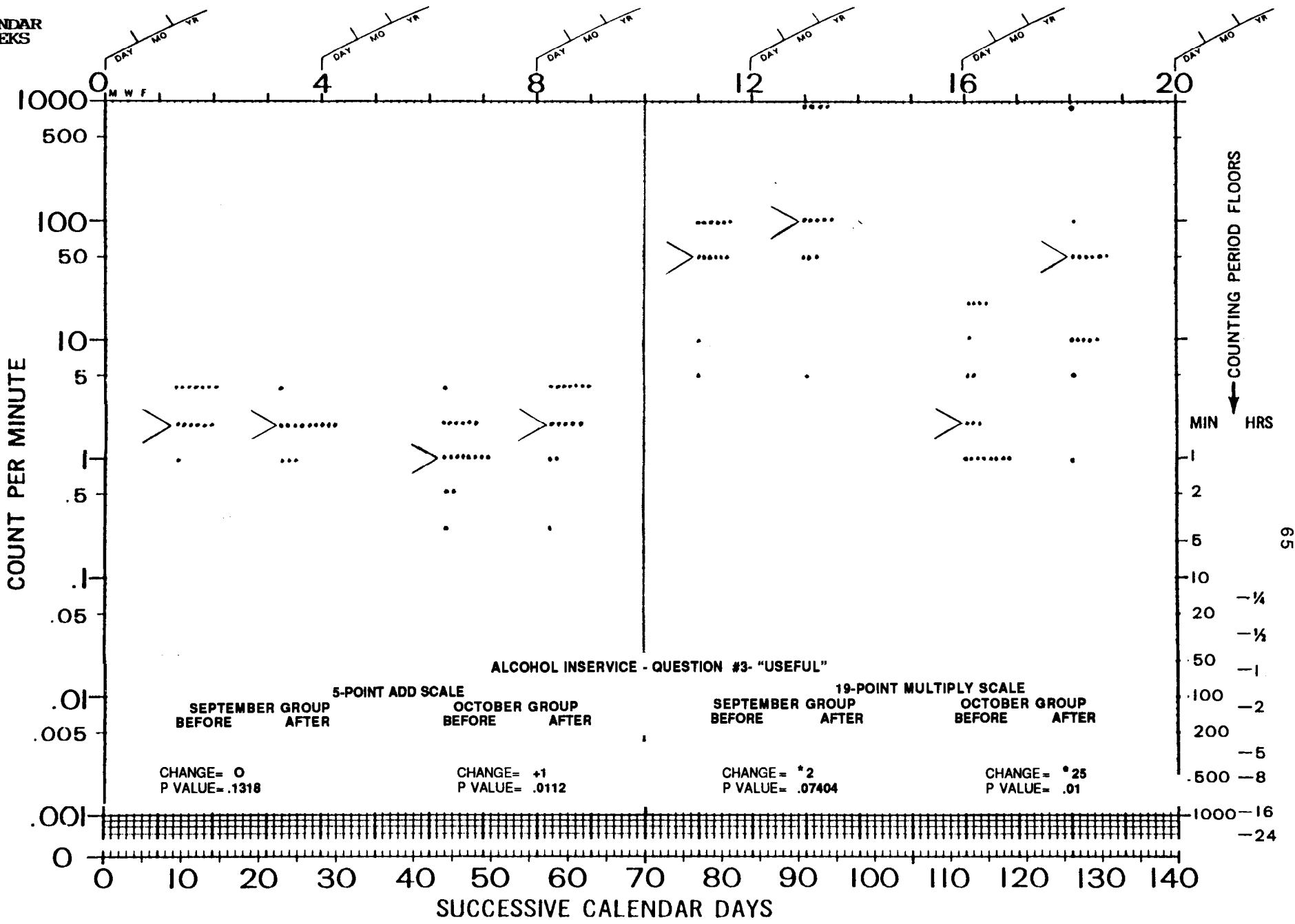


ALCOHOL INSERVICE - QUESTION #2 - "CAUSES"



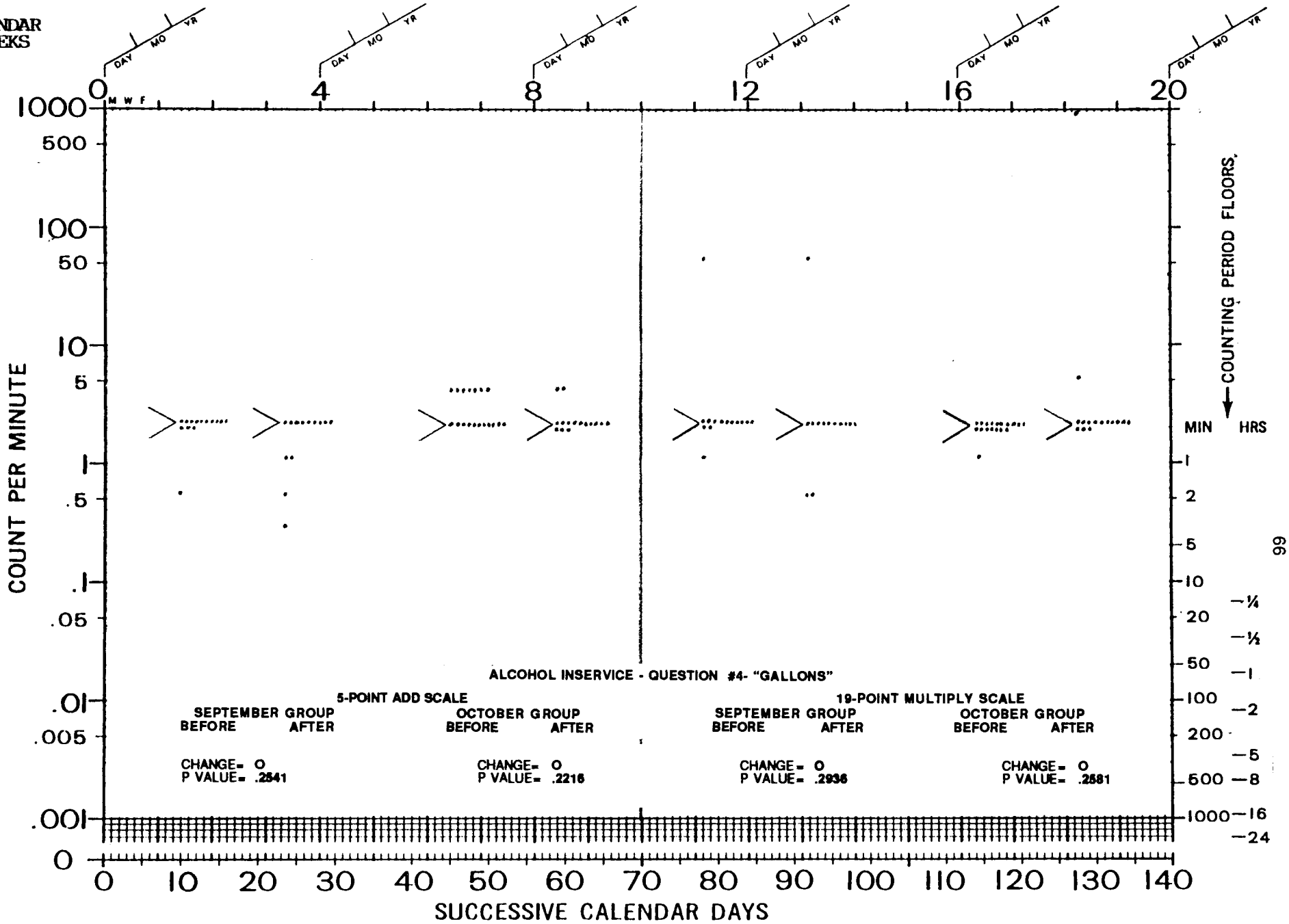
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CALENDAR WEEKS



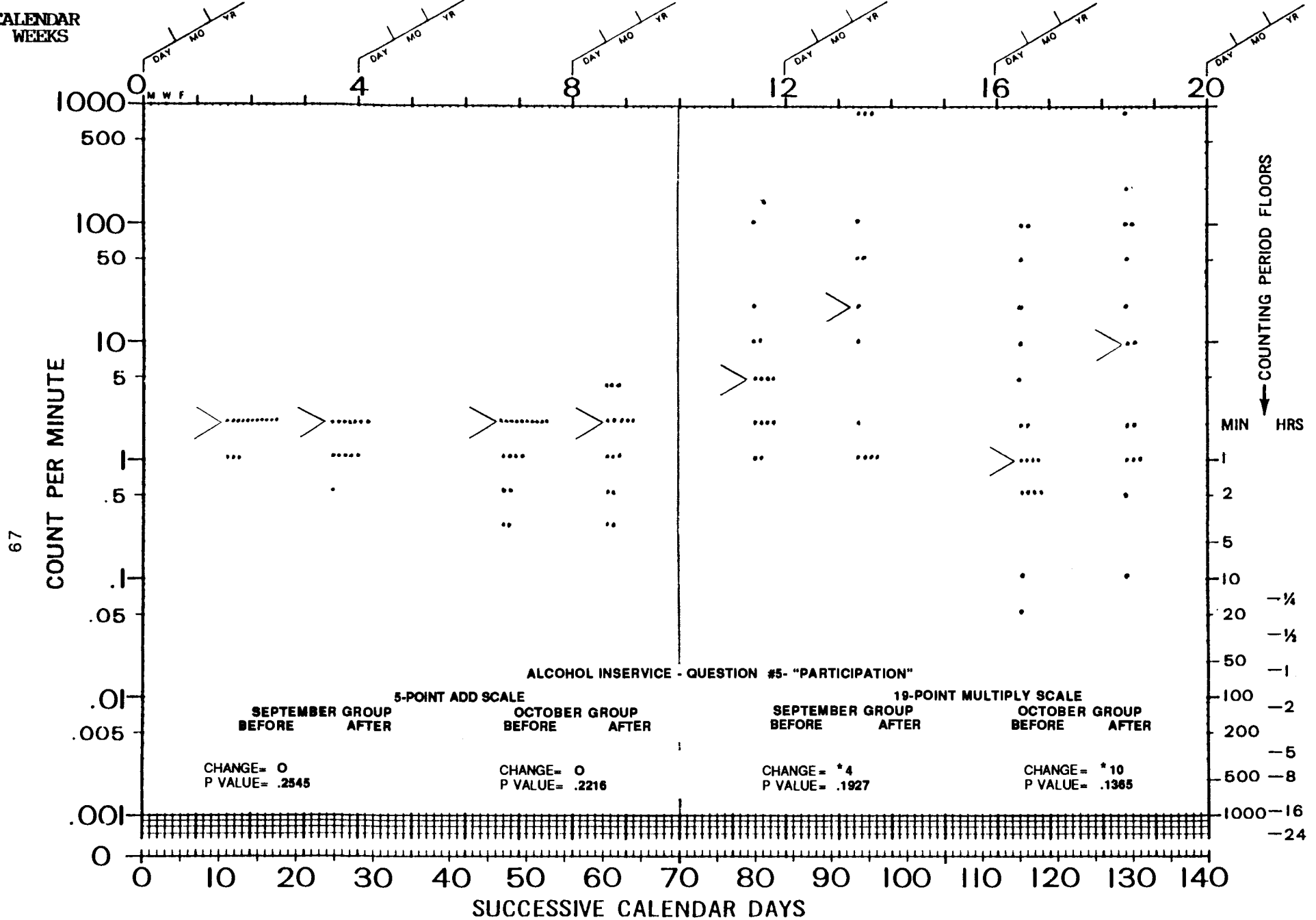
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DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		

CALENDAR WEEKS



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DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		

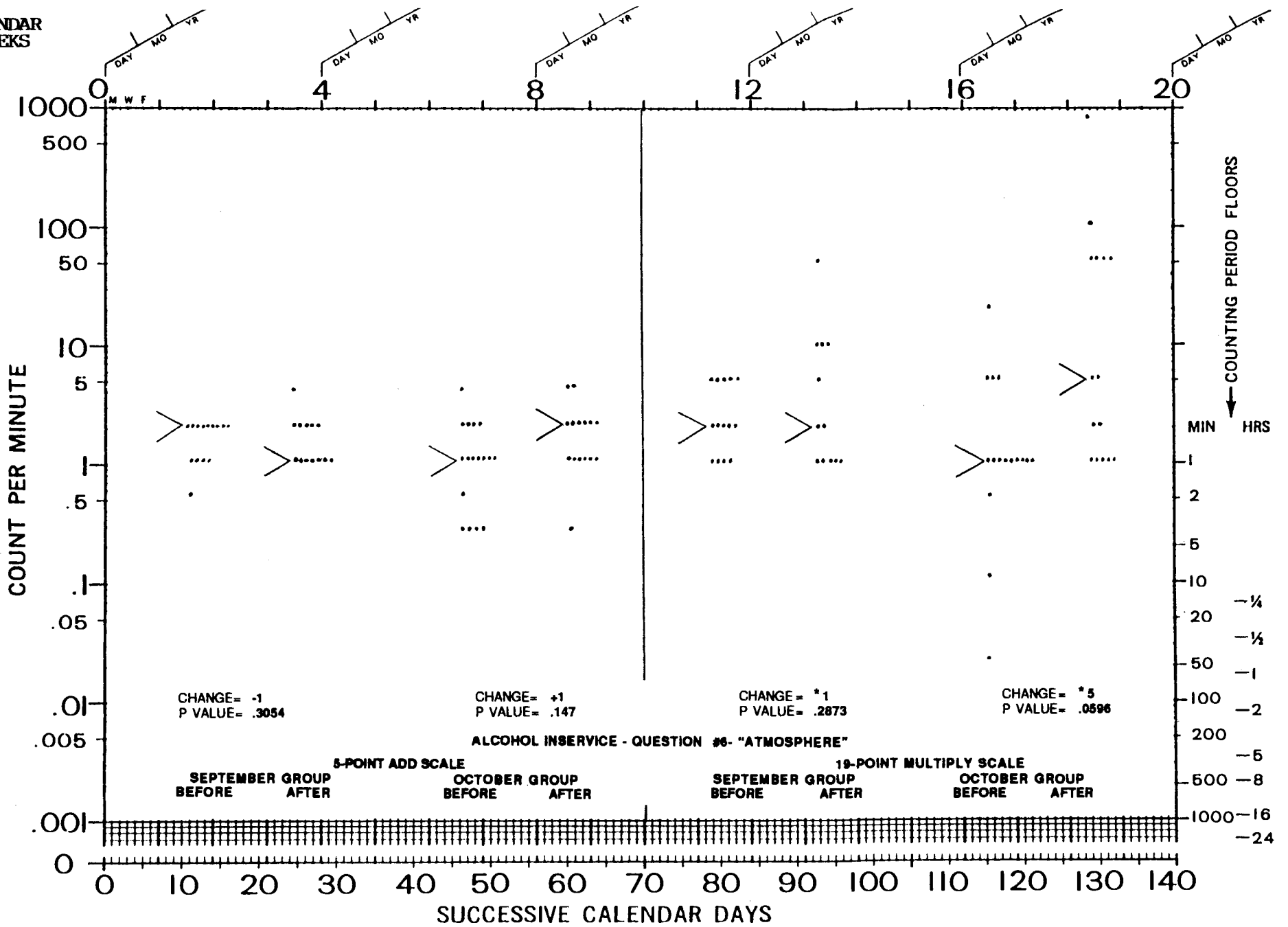
CALENDAR WEEKS



67

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DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		

68

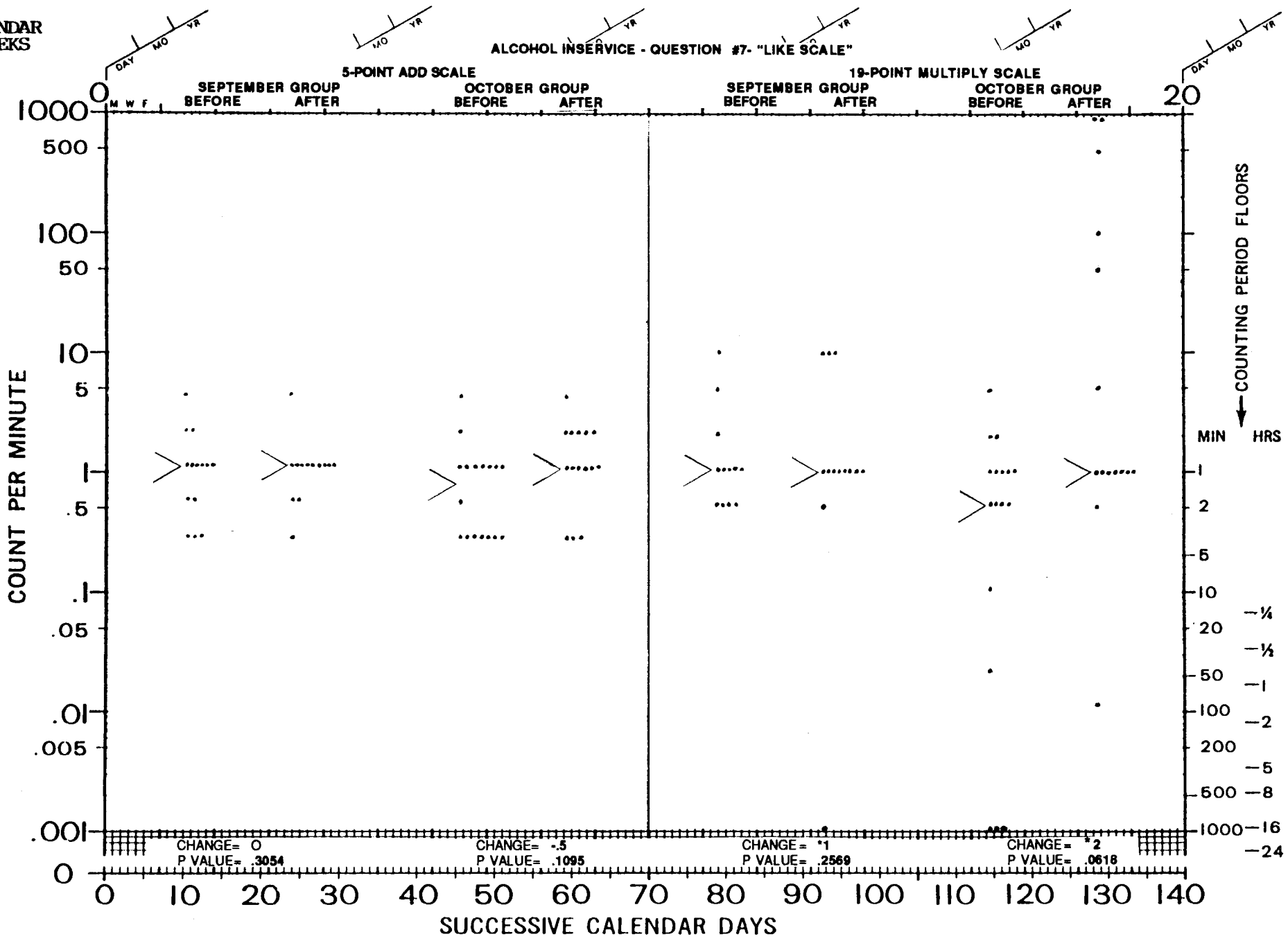


SUPERVISOR	ADVISER	MANAGER	BEHAVER	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		

CALENDAR WEEKS

ALCOHOL INSERVICE - QUESTION #7- "LIKE SCALE"

69



SUPERVISOR	ADVISER	MANAGER			BEHAVIOR	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY	TIMER	COUNTER		CHARTER			

WEEKS

0 4 8 12 16 20
DAY MO DAY MO DAY MO DAY MO DAY MO

1000
500
100
50
10
5
1
0.5
0.1
0.05
0.01
0.005
0.001
0

ALCOHOL INSERVICE - QUESTION #8- "TONS"

SEPTEMBER GROUP BEFORE AFTER 5-POINT ADD SCALE OCTOBER GROUP BEFORE AFTER
SEPTEMBER GROUP BEFORE AFTER 19-POINT MULTIPLY SCALE OCTOBER GROUP BEFORE AFTER

COUNT PER MINUTE

COUNTING PERIOD FLOORS
MIN HRS
1
2
5
10
20
50
100
200
500
1000
-16
-24

CHANGE= 0
P VALUE= .1235

CHANGE= 0
P VALUE= .2346

CHANGE= *1
P VALUE= .3171

CHANGE= *1
P VALUE= .2681

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

SUCCESSIVE CALENDAR DAYS

SUPERVISOR	ADVISER	MANAGER	BEHAVER	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		