

Abnormal Psychology S249 Lab Report 1

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Class: Thursday. 1.30-3.30

## 1. What changes occurred?

### 1.1 Changes in behaviour in walking on the trail.

Baseline data indicates that the behaviour occurred at a high rate, between 46 and 38 occurrences and was relatively consistent, commencing day 1 with 46 occurrences, day 2 with 41, day 3 with 40, declining to 38 on day 4 and increasing slightly to 40 and 39 on days 5 and 6.

On day 7, with intervention its frequency dropped dramatically to 6 occurrences, increased slightly to 10 on day 8, then progressively declined in frequency to 2 on day 10, and 0 on days 12, 14, 15, 17, 18, 19, 20 and 21.

### 1.2 Dining Hall

Overall, bizarre behaviour occurred at a lower level in the dining hall than on the trail (30 vs. 45 on day 1) but was more frequent than at the cabin or education (20 and 12 times respectively on day 1.)

The behaviour was observed as consistent and frequent for the baseline period of twelve days with frequencies varying by 5 or 6 below and above 30. Although the frequency declined slightly on day two to 26, the frequency climbed on days 7 to 12 to around 35. Such an increase in baseline data was only observed for the dining hall.

Following rewarding appropriate behaviour and the ignoring of bizarre behaviour on day 13, the behaviour virtually disappeared with 2 instances as exceptions and was extinguished by day 16. No instances of bizarre behaviour occurred thereafter.

### 1.3 Cabin

Behaviour on day 1 with 20 occurrences was less frequent than for the categories of walking or in the dining hall (45 & 30 respectively) but was more frequent than in education (12 times on day 1).

During the baseline period of 16 days the frequency of behaviour fluctuated but gradually declined to 10 times daily on days 12 to 16.

Following the baseline period, the behaviour dropped slightly to 5 on day 17 and progressively declined to 0 by day 20. The behaviour was extinguished by day 20 through to day 27 at 0 with one slight relapse to 1 on day 22.

### 1.4 Education

The displays in education during the baseline period were minimal compared with the other settings, averaging around ten occurrences daily. These occurrences dropped during the baseline period to 5 on day 14, to 1 on day 17 and 0 on day 20.

Following the baseline period, the behaviours were extinguished at zero, excepting two relapses to 2 on days 23 and 24.

Reliability of the data refers to its consistency in test and retest conditions. In this case it refers to the similarity in data from one situation to the next. The boy emitted bizarre behaviours during the baseline period in all situations, thus demonstrating some reliability of data, although the frequency varied from one situation to another. The decrease in behaviour

in education following intervention in other situations suggests some carry over effect. The decrease in behaviour to zero in all situations following the baseline period demonstrates high data reliability. *what if it didn't work? 94%*

## 2. To what do you attribute any change?

Specific environmental events (attention) reinforce behaviour. Attention is the independent variable. Behaviour is the dependent variable. Control of the independent variable and measurement of the dependent variable showed that attention to bizarre behaviour maintained bizarre behaviour. Attention to appropriate behaviour and ignoring bizarre behaviour brought about behavioural change. As interpersonal relations of the boy improved, it no longer became necessary for him to resort to bizarre behaviour to gain attention and interaction with his peers. The improvement seems self-sustaining. ✓

### 2.1 Trail Walking

During the first six days on the trail walk the boy was being reinforced in his bizarre behaviour because of the attention paid to it. When the behaviour was ignored beginning day 7 and reinforcement was lacking, the behaviour disappeared.

### 2.2 Dining Hall

Attention to the bizarre behaviour in the baseline period reinforced its continuance for two weeks. When reinforcement was withdrawn, the behaviour was discontinued. ✓

### 2.3 Cabin

By the end of the second week of baseline, the removal of reinforcement to bizarre behaviour on the trail and the dining hall and reinforcement of appropriate behaviour was reducing the frequency of unsatisfactory behaviour in the cabin. Lack of reinforcement extinguished this behaviour by week 4.

### 2.4 Education

In the baseline period by day 20 the behaviour was extinguished because of transference or generalisation of lack of reinforcement to bizarre behaviours and reinforcement of appropriate behaviours in the other settings.

### 2.5 External Validity

The study was a multiple baseline design using four different situations. Baseline measures were taken for all situations, with the independent variable controlled progressively in each situation a few days apart. It may be hypothesised that the cause was the new camp situation and the beneficial change was due to a confounding variable such as growing familiarity with peers in a camp situation. The reduction of bizarre behaviour in one area only following manipulation of the independent variable, but its continuation in other situations, where intervention had not occurred, suggests that inappropriate attention was the cause of the bizarre behaviour. Finally, the occurrence of good behaviour in all four situations following the withdraw of inappropriate attention for bizarre behaviour demonstrates a causal connection between reinforcement through attention and the inap-

propriate behaviour. The results were, in fact, achieved through the intervention. ✓

### 3. How might the programme be improved?

#### 3.1 Strengths ✓

The programme succeeded in reducing the child's bizarre behaviour to zero in each of four different situations over 27 days. In the evening walk the rate of change was rapid and extreme. The design also showed the causal connection between behaviour and attention and how the manipulation of attention could alter behaviour in one situation without affecting other situations. ✓

#### 3.2 Weaknesses

The rate of change was much slower for the cabin and education, with baseline periods extending over 2 to 3 weeks rather than 6 days. The experiment did not adequately discuss the definition of the independent variable, attention. No information was provided on the history of the bizarre behaviour. One wonders if it began at the camp or was bought as 'baggage' by the child.

#### 3.3 Degree of change relative to baseline. ✓

The degree of change was substantial and rapid in trail walking and the dining hall with a reduction from 40 to 10 behaviours in one week. The reduction in bizarre behaviours was substantially less in the cabin, from 10 to 5 although a zero target was reached. In education zero was reached in the baseline phase so no further reduction was possible.

### 3.4 Cost/Benefit Analysis

Costs include:

3.4.1 time taken to train counsellors in defining, observing and recording behaviour, learning to be positive about appropriate behaviours and calculating inter-observer reliabilities.

3.4.2 Suffering bizarre behaviours for two to three weeks in the cabin and education settings.

Benefits include:

3.4.3 successfully altering behaviour in a positive way and avoiding punishment or intervention by outside help such as the parents.

3.4.4 maintaining good relations with the child and allowing him to enjoy the camp.

3.4.5 obtaining skills in using behavioural modification techniques.

Benefits are perceived to outweigh costs.

## 4. How might the programme be improved?

### 4.1 Conclusions

The programme was successful in achieving its goal in altering the behaviour of the camper towards more socially acceptable modes of behaviour. Unacceptable behaviour was adequately described and recorded with good inter-observer reliability. (94%) Procedures and timelines were adequate. Causality of attention to

behaviour was demonstrated and used appropriately for intervention. Counsellors succeeded in ignoring inappropriate behaviours and using operant conditioning to reinforce appropriate behaviours. A zero response rate was achieved in all situations. Unfortunately, the programme was slow to accomplish its ends in the areas of cabin and education. ✓

#### 4.2 Recommendations

The multiple baseline design slowed treatment down. Concentration on the evening alone initially slowed the programme's impact across camp activities. The design may have been compressed to allow treatment in all areas simultaneously with a reversal (ABAB) (baseline, intervention, baseline, intervention) design to check the relationship of the dependent and independent variables. Use of two rather than four situations by combining interventions in different situations could also have increased the speed of intervention. Introduction of a fading process whereby the amount of attention provided the child overall should be added to the programme.

Perhaps behavioural modification techniques would work more effectively if combined with other treatments. Modelling of appropriate behaviour, according to social learning theory may have helped.

Good effort ✓

Pls to consider

1. Treatment is not a natural thing
2. Intervention is time-based application
3. Which activities were done in a field context or was another?

S249 ABNORMAL PSYCHOLOGY: ASSIGNMENT 1 MARKING SCHEDULE

Name of Student: \_\_\_\_\_ Study selected: A / B

QUESTIONS	YES	PARTLY	NO
1. <u>What changes occurred?</u> Did the student correctly:			
(a) interpret the data correctly, in general?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) identify specific trends in the data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) discuss the reliability of the data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. <u>To what do you attribute any changes?</u> Did the student correctly:			
(a) examine the links between therapeutic change and data change appropriately?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) discuss if/how the design guarded against threats to external validity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. <u>How efficacious was the program?</u> Did the student correctly:			
(a) discuss the strengths and weaknesses of the program as indicated by the data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) discuss the degree of change obtained relative to baseline?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) conduct an appropriate cost/benefit analysis of the program	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. <u>How might the program be improved?</u> Did the student:			
(a) summarise the conclusions adequately	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) subsequently make relevant recommendations for improving the program or the research design?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Style of presentation?</u> Did the student:			
(a) meet the assignment length conditions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) present the material neatly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) submit the assignment on time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Allocated mark (out of 15)

13

Tutor's Initials

PKK

Date

12/9

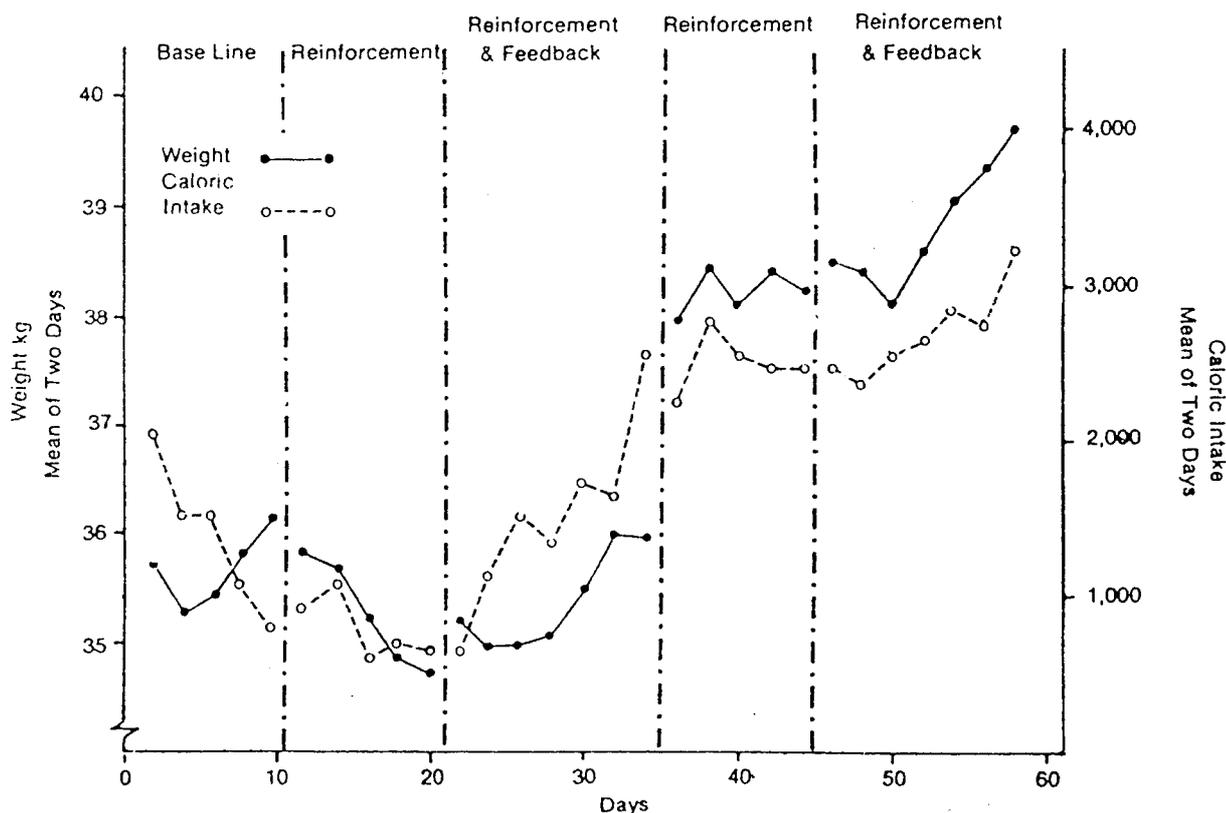
A-

S249 ABNORMAL PSYCHOLOGY

ASSIGNMENT 1: Due at Lab. Weeks 5/6

Choose 1 of the 2 studies described here and answer the questions listed on page 4 of the Course Outline. Remember to attach the marking schedule to your assignment when you hand it in.

(A) A patient was hospitalised with a diagnosis of anorexia nervosa. As part of her treatment, she was presented with food to the value of 6000 calories daily, divided into 4 meals of 1500 calories each. Two measures of eating behaviour - weight and caloric intake were recorded. Patients were also asked to record number of mouthfuls eaten at each meal. During baseline, no treatment was given. During the reinforcement conditions, the patient received privileges based on increases in weight. If weight gain exceeded a certain criterion, the patient could leave her room, watch television, play table games with the nurse, etc. Feedback consisted of providing precise information on weight, caloric intake, and number of mouthfuls eaten. Specifically, the patient plotted on a graph information that was provided by hospital staff.



(B) The subject was an 8-year-old boy who had been given a diagnosis of minimal brain damage. This child evidenced a high frequency of bizarre verbalisations, primarily concerned with 'penguins'. During camping activities, the child's high rate of bizarre verbalisations interfered with his developing good interpersonal relations both with peers and adults. However, it was observed that camp counselors frequently reinforced these verbalisations by their paying attention to them. An intervention was planned to systematically reduce the child's high frequency of bizarre verbalisations in 4 separate camp activities (walking on trail evening activity, dining hall, cabin, education). During the first 6 days of baseline assessment, counselors were asked to record the child's rate of bizarre verbalisations in these 4 designated settings, but they were not given specific instructions as to how they were to respond. Beginning on Day 7, a treatment procedure (Ignore), consisting of inattention to bizarre responses and attention to the child's positive initiatives, was implemented during the evening activity. The highest rate of bizarre verbalisations had been recorded during baseline in this setting. Treatment (Ignore) was then applied in sequence to the remaining 3 settings, with some days delay occurring before implementation occurred in each, until it was concurrently in place in all 4 (Day 21). Inter-observer reliability for the 27 days of observation ranged from 81 to 100 % (mean = 94%).

