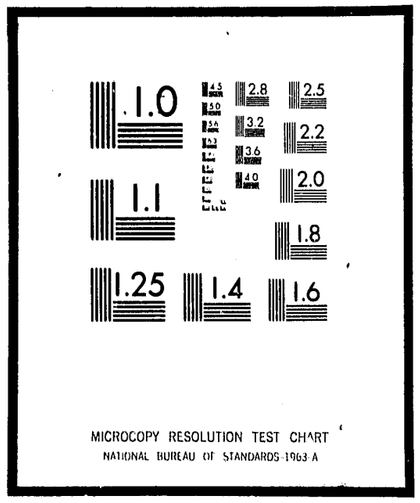

THE BOULDER BAY EXPERIMENT [1].

Sveinn A. Thorvaldson, M. A. and Malcolm A. Matheson, Ph. D.

Criminal Justice Planning and Research Unit
Department of the Attorney-General
British Columbia

ABSTRACT

The experiment tested the comparative effectiveness in terms of recidivism of two correctional programmes for young adult male offenders. Ss (N = 197) were "first committals", age 16 - 21, in good physical health and not seriously psychopathic or criminally sophisticated. Classification was random. The experimental Ss (N = 111) were sent to a 4-month forest camp programme in groups of 10 - 12. Manual labour and strenuous physical challenge were stressed, and parole granted on successful "graduation". The control Ss (N = 86) were sent to a modern medium security institution (Cap. 400) designed for young offenders and stressing, in addition to maintenance labour, vocational and educational courses, counselling and a wide recreational programme. Parole procedure was conventional and the average term 9 months.

Recidivism in the experimental group after 3 years follow-up was significantly lower than that of the control Ss (51.4% to 69.8%), accounted for entirely by the difference in major violations (26.1% to 46.6%). Some of the weaknesses of the experimental programme and of the study are discussed.

Boulder Bay (BB) is a correctional forest camp operated by the British Columbia Corrections Service and designed for young male "first offenders". It offers a programme based on physical challenge, group influence and clear incentive. It is located in rugged mountain terrain about 40 miles from Vancouver, with access by boat.

Although personality growth is the ultimate goal, the programme is structured for the most part around tasks. Performance is measured in terms of practical achievement and social behaviour rather than professed insight or inferred change of attitude. The prospect of meaningful, fairly immediate, and dependable rewards is presumed to be the chief motivator, with the ultimate reward the prospect of early discharge.

Offenders, or "residents", are admitted to the programme about once per month in groups of 10 - 12 members. Unless they are demoted to the group following ("backtrooped") or transferred out, they remain with their group until discharge on parole. The offender is required to proceed, with his group, through four one-month stages which involve increasing demands for cooperative social behaviour, skill, and physical competence.

Tasks for the most part take the form of camp construction and maintenance, and clearing a lake of logging debris. Most tasks are organized on a project basis, are manifestly of a social service character, and involve immediate knowledge of results due to the setting of short-term goals. The work programme is supplemented by a) physical training, b) a series of short courses (e.g. tool handling, ropes and knots, wilderness survival, first aid, mountaineering, etc.) the relevance of which is apparent to the offender, and c) group discussion sessions which attempt to fill an integrative and tension reducing function. The resident is left in fact with very little free time.

Some of the staff members are assigned on a group basis (three per group to cover all shifts) and the staff member lives and works with his group. He tries to inspire maximum effort both by example and verbal encouragement, and endeavours to suit his leadership style to the varying personalities of the group members. He also systematically and frequently informs both the group and individual members of their progress.

Group identification and cohesion is fostered by several means: e.g. a) each stage is designated by clear insignia and brings increasing status, pay rates, and privileges; b) tasks are organized on a team basis; and c) some obstacle course challenges require cooperative effort. Further, though competition with the achievements or records set by previous groups is not actively encouraged, such competition frequently arises spontaneously.

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1. The assistance of then Warden E. Epp, and staff of Haney Correctional Centre, L. Hopper and staff of Boulder Bay, S/S J.E. Olson, of the R.C.M.P., and A.O. Delisle, H. Dodge, and J. Burnett of the B.C. Corrections Service, is gratefully acknowledged. Alan Hale and Robert Young of the Central Classification Unit deserve special thanks.

A rotating 'foreman' system requires group members to practise leadership and to assume responsibility. The group may in fact participate in planning the day's work or setting goals. The final month culminates in the "solo", i.e. individual survival in the wilderness for several days. By arrangement with both the national and provincial parole boards, parole is then granted on successful completion of the programme regardless of specific parole plans.[2]

The programme is based on a number of practical and theoretical considerations which will be listed here very briefly and in very general terms. On a practical level it was designed to assist in coping with the disturbing increase in number of young offenders received (Ouimet Report, 1969; B.C. Corrections Service Annual Reports, 1966-70). Theoretically, it is an effort to respond to the need for programmes a) which are "normative" in approach and avoid unnecessary negative labelling (Conrad, 1967); b) which are more consistent with social learning theory in bringing relevant reinforcement closer to response, facilitate modelling, and proceed via change in behaviour to change of attitude (Bandura and Walters, 1963; Ullman and Krasner, 1969; Levis, 1970); c) which are consistent with therapeutic approaches which stress individual responsiblity (Mowrer, 1965; Glasser, 1965; Szasz, 1970); d) which are consistent with social influence theory and small group theory in attempting to change individual behaviour by changing social structure or group norms (Asch, 1951, 1959); Milgram, 1965); e) which increase the range of programmes available to different types of offenders (Warren, 1966; Eysenck, 1964; Hare, 1969); and f) which have a "face validity" or intrinsic appeal and apparent relevance to the needs and values of delinquent youth (cf. Miller, 1958). Other encouraging factors were a) the inspiration of "Outward Bound" training methods, b) the dismal record of longer programmes based on vocational training and counselling (Glaser, 1964, Wilkins, 1969; Crowther, 1969), c) the availability of base expectancy scales (Gottfredson and Ballard, 1965) which promised to improve the selection of offenders who likely did not require and would not benefit from longer programmes, and d) the availability of staff experienced in previous stage or challenge programmes within our service.

The camp was ready to receive its first residents in July, 1968 (See Matheson, 1970 for a description of planning and staff selection). It was decided to test the effectiveness of the programme against a conventional programme for this offender group. The programme at Haney Correctional Centre, (HCC), a medium Security institution, was selected as the control. HCC has a capacity of approximately 450 inmates - 365 in the main building and the remainder in a nearby forest camp. The institution was opened in 1957 and was designed for the rehabilitation of young offenders. In addition to maintenance tasks, the programme offers a range of vocational and academic courses along with recreational and leisure time facilities. Classification, counselling and parole planning procedures are well developed.

2. Since that time the Board has added a provision that it may insist upon residence in a half-way house for some offenders.

The general hypotheses were that the BB group would show less recidivism, that their reconvictions would be for less serious offences, and that their reconvictions would occur later in the post-release period, i.e. that the rehabilitative effects of BB would be longer-lasting. Specifically, it was predicted that a) BB would result in a lower percentage of violators, b) that the difference would be accounted for mostly by a difference in major violations, and c) that the difference in violation rate would be greatest in the first year of the post-release period.

METHOD

Subjects The sample was selected according to the following criteria:

a) Serving a definite/indeterminate sentence (age 16 - 21 inclusive)
b) Definite portion of sentence not more than 12 months
c) Total sentence not more than 36 months
d) No intent to appeal and not expecting further charges
e) Not homosexual
f) Not seriously psychopathic or criminally sophisticated
g) Serving first (non-trivial) sentence to an adult institution (i.e. previous sentences of less than 3 months were disregarded)
h) Not currently addicted to opiates
i) Physically fit
j) No evidence of disabling fear of heights
k) Score of 40/76 or higher on the CDCBE61A [3] (representing, in American studies, 50% or better probability of parole success)
l) Considered suitable for placement either in BB or HCC
m) Not considered more suitable for other young offender programmes

The characteristics of the groups are given in Table I. None of the differences between groups approach significance. In any event other research locally (Thorvaldson and Matheson, 1973) has failed to demonstrate the relevance of certain factors to outcome, e.g. court location, length of definite portion of the sentence, and education below Grade 11. Further, although the BE 61A Scale data is included, an analysis of the results for each item indicates that only one of them shows a significant relationship with outcome (i.e. #L, $x^2 = 8.88$, $p < .01$). Two others do yield Chi Squares at the $p < .20$ level, i.e. #A and #H.

Procedure Subjects (Ss) were selected in the course of the usual classification procedure. All who met the clinical criteria for inclusion in the experimental pool were then subjected to the following random procedure to determine placement in either the experimental group (BB) or the control group (HCC): a pack of 22 cards had been shuffled and laid face down on the table. Half were marked "BB" and the other half "HCC". Unknown to the S, one of the classification officers turned the top card, and the decision would be made according to the group designated on the card. The BB Ss but not the HCC Ss were aware of the experimental nature of the programme, but not of the random selection procedure. All staff were aware of the experiment, but the identities of the control Ss placed in HCC were not revealed.

3. Refers to California Department of Corrections Base Expectancy Scale 61A.

Table I Characteristics of the Groups

Variable	Measure	Groups BB	Groups HCC
Age (years)	M	19.3	19.6
Education (grade)	M	9.0	9.1
Race			
White	%	78.5	82.5
NA Indian	%	21.5	17.5
Marital Status			
Single	%	97.2	84.0
Married	%	2.8	16.0
Court Location			
Metropolitan area	%	30.0	47.3
Medium City	%	26.0	29.7
Town or village	%	44.0	23.0
Length of Definite Portion of Sentence			
≤ 3 months	%	43.0	31.0
4 - 6 months	%	30.0	34.0
7 - 12 months	%	26.0	30.0
13 months or over	%	1.0	5.0
Total Length of Sentence			
≤ 15 months	%	49.5	41.0
16 - 27 months	%	45.0	50.0
≥ 28 months	%	5.5	9.0
BE 61A Scale Score	M	50.8	49.3
BE 61A Scale Items			
A No arrests in 5 yrs. or more	%	18.7	17.5
B No Opiate Use in Past	%	98.0	74.3
C Few Prior Committals	%	95.3	74.3
D Offence not B/E, Fraud, etc.	%	56.0	63.5
E No Family Record	%	53.3	62.1
F No Alcohol involved in offence	%	57.0	42.0
G First Offence not auto theft	%	92.5	73.0
H Employment 6 months or more	%	74.7	63.5
I No Alias in Record	%	96.2	58.0
J No Parole/Probation Violation	%	88.7	77.0
K Living Arrangement Satisfactory	%	29.5	32.4
L Few Prior Arrests	%	45.8	40.0

Measures The measures of the independent variable (programme) were date admitted, data discharged, and reason for discharge. This permitted analysis of outcome in terms of those Ss completing the programme ("graduates"), those failing to complete ("dropouts"), or both of these groups combined. No measures of programme variables (e.g. behaviour ratings, academic marks, shop placement, etc.) were recorded.

The measures of the dependent variable (post-release performance) chosen were simply a) parole board action and/or b) a new conviction. The primary source of outcome data was corrections service records. These, however, indicate only when an offender re-enters the correctional system. The data were therefore supplemented by a check of R.C.M.P. fingerprint files.

Violations were graded in two degrees: major violations were new convictions which resulted in a prison sentence of more than 90 days or revocation of parole; minor violations were convictions leading to a prison sentence of 90 days or less or a prison sentence (of any length) in default of fine, any non-prison sentence, or (temporary) suspension of parole.

The measures of the control variables consisted of a) a selection of data available on standard admission records and b) the offender's item score and total score on the Base Expectancy Scale 61A (BE 61A) (Gottfredson and Ballard, 1965).

RESULTS

Type of Violation In only a relatively small number of cases did Parole Board action alone account for a violation, with no new conviction recorded, and these were confined to major violators, i.e. only 4 (10%) of the HCC group and 8 (27.5%) of the BB group were violators simply by revocation of parole. Parole Board action thus did not emerge as a significant measure of outcome.

Violation Rates The BB programme was, of course, considerably shorter than the HCC programme and its graduates were therefore discharged earlier. This meant that the BB Ss would accumulate greater post-release time than the HCC Ss. To control for this difference, a simple expedient was adopted: a) only those subjects who had 36 months or more post-release time were included; and b) only those violations which occurred within the first 36 months of the S's post-release, were included in the analysis. As a result of this procedure, two of the original 88 HCC Ss were excluded; all of the BB Ss were within the criteria and were thus all included. Four Ss were removed from the analysis (three BB and one HCC) due to deportation or successful appeal.

The data are given in Table II. Parts A and B present the results separately for graduates and drop-outs. Of those who graduated, it is

Table II Violation Rates

Group	HCC N	HCC %	BB N	BB %
A. Graduates				
Non-violators	25	32.9	47	48.4
Minor Violators	14	18.4	24	24.8
Major Violators	37	48.7	26	26.8
TOTAL	76	100.0	97	100.0
B. Drop-Outs				
Non-Violators	1	10.0	7	50.0
Minor Violators	6	60.0	4	28.5
Major Violators	3	30.0	3	21.5
TOTAL	10	100.0	14	100.0
C. Graduates + Drop-Outs				
Non-Violators	26	30.2	54	48.6
Minor Violators	20	23.2	28	25.3
Major Violators	40	46.6	29	26.1
TOTAL	86	100.0	111	100.0
D. Graduates + Drop-outs (Violations from date of admission)				
Non-Violators	39	45.4	63	56.7
Minor Violators	13	15.1	22	19.9
Major Violators	34	39.5	26	23.4
TOTAL	86	100.0	111	100.0

noted that the BB programme yields significantly lower violation rates ($x^2 = 8.81$; p. $<$ .02). Ss who dropped out of BB also appeared to perform better in the community although the numbers are very small here and the result not significant ($x^2 = 4.23$; p. $<$ .20).

Although the proportion dropping out is approximately the same for both groups (11.6% for HCC and 12.6% for BB), the two programmes may well differ in policy or criteria for removing an inmate. If one programme can remove its potential failures prior to discharge, then the ultimate results might well be biased by such a "backdoor" selection factor. To control for this the outcome based on total admissions is given in Part C. Again BB shows significantly lower failure rates ($x^2 = 9.86$; p. $<$ .01), strongly supporting the hypothesis.

Table II, to this point, presents outcome in the conventional way, i.e monitoring violations for a certain period from date of discharge from a programme. It can be argued that this assumes the bias of the rehabilitator who measures outcome only in terms of his treatment methods. The citizen may assert that his interest is in protection from the moment the offender

is first apprehended or at least from the moment of sentence. In other words the citizen may have little interest in the methods used and may point out that at least institutions effectively control the offender for the period of incarceration. Part D of Table II therefore presents the results from date of admission to the programme. As expected HCC improves its relative performance showing an appreciable drop in violation rates. The BB group, however, still shows a much lower percentage of major violators, and the results are just short of statistical significance ($x^2 = 5.94$; p. $<$ .10).

Severity of Violation Table II, Part C shows most of the difference between groups occurring in the major violation category. Of all HCC violations about two-thirds are major, while only about half of the BB group's violations are classed as such. The difference approaches significance ($x^2 = 3.01$; p. $<$ .10), giving some support to the hypothesis.

Violation Rate Trends The rates of violation per unit time (1-year periods after discharge) are given in Fig. 1. The rate is expressed as a percentage of violators in each period in relation to the total number of Ss still "at risk" in the community, i.e. the total Ss less those who violated in the previous period (See Hood and Sparks, 1970). A Chi Square test based on the total violators (Fig. 1a) for each period yields a significant result ($x^2 = 9.22$; p. $<$ .01) suggesting that the groups show different trends. The graph does not appear, however, to support the hypothesis that differences are greater in the early period. Separate tests of the two types of violation reveal the difference to be due to the variance in minor violations (Fig. 1b; $x^2 = 11.54$; p. $<$ .01). The major violation trends do not show a significant difference between groups (Fig. 1c; $x^2 = 2.47$; p. $<$ .30).

Cost Effectiveness Estimates of the relative costs of the programmes were based on figures for the fiscal year 1971 - 72, since these were conveniently available (Thorvaldson, 1972). Actual costs might be slightly less. The results are given in Table III. As indicated in the table, care was taken to adjust the relative costs to account for the longer time waiting for admission to programme and longer community supervision time for BB Ss. Still, it is apparent that BB operates at considerable savings.

DISCUSSION

In the light of the fact that there are very few studies showing overall differences in the effectiveness of various Correctional methods, particularly when design, numbers involved, and measures are at all rigorous (See Bailey, 1966; Wooton, 1959), the results here must be considered encouraging. As Hood and Sparks (1970) point out even a marginal improvement in 'success' can appreciably reduce recidivism. In the present case, the 18% better performance the Boulder Bay group yields more than a 25% reduction in recidivism. Further, the difference appears accounted for entirely by the variance in major violations, which, of course, entail

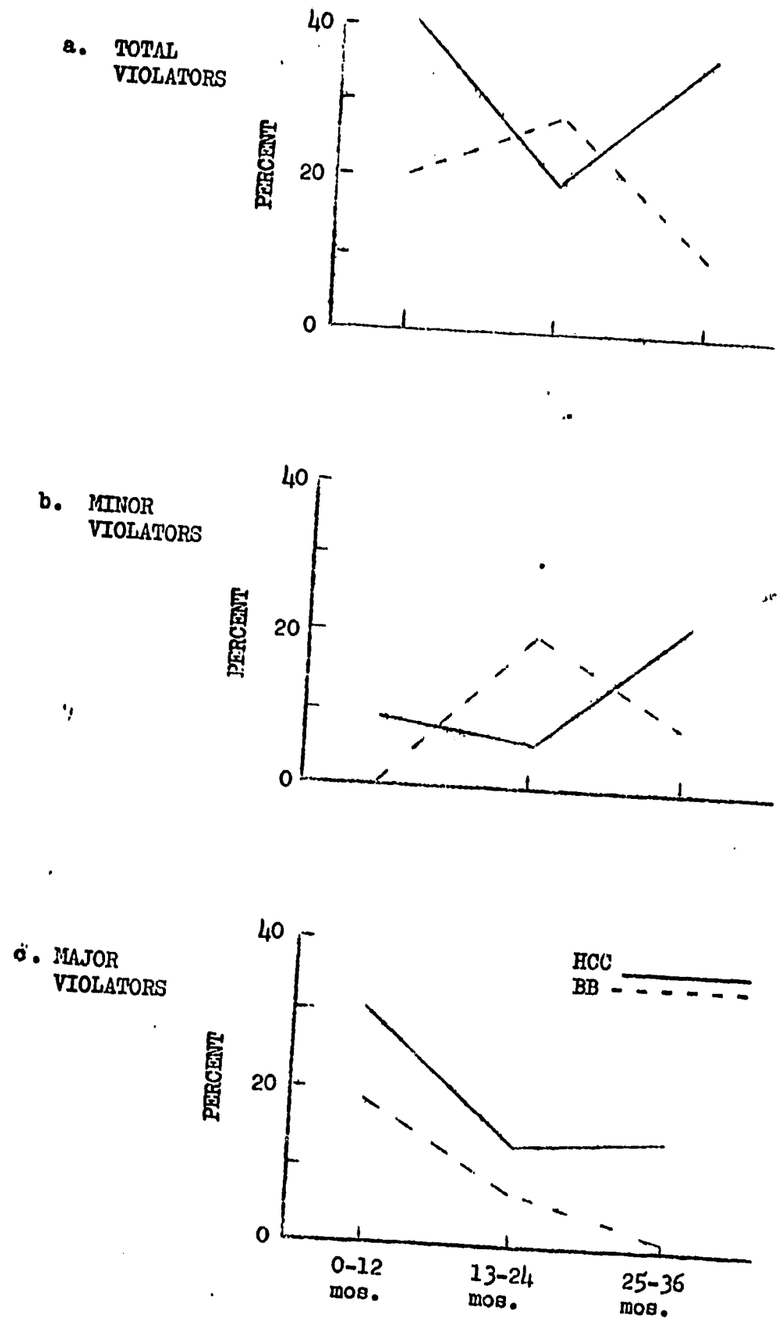

Fig. 1 Violation Rate Trends

Table III Cost Data

Measure	Programme HCC	Programme BB
Mean waiting time [a]	15 days	22 days
Mean Time in programme [b]	8.4 mos.	5.3 mos.
Est. costs per inmate-day	$24.15	$19.28 [b]
Total cost (All Ss)	$550,251 [c]	$433,810 [d]
Cost per S [e]	$6,398	$3,908 [f]
Cost per 'successful' [g] graduate	$21,164	$8,034 [h]

a. At estimated $21 per day.
b. Includes adjustment for administrative and other "hidden" costs of service provided by HCC.
c. Includes adjustment for shorter time waiting to enter programme (at est. $21.00 per day).
d. Includes adjustment for costs of longer supervision in the community (2.9 mos. at est. $138.60 per month. (Note: costs of community supervision are based on total field staff costs less 40% for court services, or 4.62 per parolee-day.) Apart from this adjustment, total costs do not include community supervision costs.
e. Total Cost/N
f. BB savings = $2,490 per S. Total (111 Ss) $276,396. BB costs/HCC costs = 61%.
g. Defined as no violations.
h. BB costs/HCC costs = 38%.

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greater social harm. More modestly, the result certainly appears consistent with considerable research suggesting that humanitarian approaches, community methods, or short term programmes in open institutions, are at least as effective as traditional imprisonment in reducing recidivism (See Wilkins, 1969; Hood and Sparks, 1970, for review).

There are, however, several obvious criticisms of the study. First it employs a reasonably clean but very crude design. It is a comparison of the total or gross effect of two programmes each of which is complex in itself. There are no measures of achievement or performance in specific areas of either programme and thus no attempt to isolate the possible effects of particular programme factors. Nor were there adequate measures of the offender's background or personality to permit measurement of the possible differential effects of treatment. A base expectancy score was obtained only to find, both from this study and from others, that it is not useful for young offenders in this province (Thorvaldson, 1973).

A plausible criticism concerning the outcome measure (reconviction or Parole Board action) is that the BB graduate, due to the wide appeal of the camp programme, may have experienced more lenient treatment once back in the community. Such leniency might first be shown by parole officers and the parole board, but it might also affect decisions of the police or the courts, particularly if pre-sentence reports were prepared in connection with any new conviction. The data show, however, that the revocation rate was in fact higher for the BB group and that, in any event, revocation was of marginal significance as a measure of outcome. Certainly the parole officers report, for whatever its value, that the experimental nature of the programme was of no real concern to them and that they judged the performance of BB graduates by standards equivalent to those applied to other parolees. As to any bias by the courts or the police, the data provide no way of judging the matter.

Apart from the above observations, it may be noted that although the BB programme appears the more effective of the two, its failure rate is still appreciable particularly considering the fact that the subjects for the experiment were "first offenders". This leads to more searching questions in the realm of treatment theory. A few comments may be included here. First, concerning the general approach of the BB programme, it relies on a type of "crash course" aimed at personality change, or at least change of certain habits, in the hope that when the offender is left largely on his own after discharge the lessons will remain. This is consistent with the emphasis on personality that has been conventional in corrections. Accordingly it tends to underestimate the influence of situational or environmental determinants of behaviour or, at least, the need to practise new roles or fledgling habits over prolonged periods. Speaking figuratively, although the graduates tended to emerge from the programme with buoyant optimism, they found another wilderness in the community, and the "solo" a very long journey.

An alternate view would assign institutions a much more limited role in the context of a coordinated correctional system. The institution might, for example, be required simply to disrupt a previous pattern of life, attempt to initiate a change of iden ity or response to problems, and inspire a change of intent. This implies adequate, sufficiently intensive, and appropriately structured community support services, capitalizing so far as possible, on the useful beginning made in the institution.

It may also be charged that the BB programme, for all its honest sweat and fresh air, faces problems familiar to most institutions, i.e. relevance to the offender's life in the community. The programme assumes, for example, that the experience of overcoming physical challenge and living cooperatively with a group will affect the offender's response to the more complex and ambiguous social or economic problems he will face after release. Parole officers have noted, in this connection, that some BB graduates arrive on parole with unrealistic expectations of success, and experience considerable "let down" when they discover their problems in the community to be both more numerous and more difficult than those in camp, with far

from positive results. No doubt there is some relevance, and the intrinsic appeal of the programme makes it saleable to young offenders, but there may be more efficient methods, e.g. "life skills" training. There seems no adequate research on the issue.

Another familiar but more general problem concerns the attempt to train an individual in captivity to function in freedom. It can be observed that like most institutions the BB "resident" is subjected to strong group and organizational pressures to "play it cool" in a rather highly structured situation. The offender's opportunities to practise making responsible choices are here seen as more apparent than real. This argues for means of allowing the resident greater autonomy and accordingly demanding greater responsibility of him. Token economy or contract systems and procedures for allowing inmates much greater participation in programme planning and execution, are current and promising methods of coping with the problem. It may be observed here that even in the present programme the residents tended to have a very different view of the camp "office staff" than they had of the "group staff" with whom they lived and worked (Solomon, 1971).

Finally the weaknesses of challenge techniques may be pointed out. The level of task decided upon often involves a nice judgement in determining the appropriate level of challenge. It must be sufficiently difficult to result in satisfaction (reward) when accomplished but not so difficult that too many failures occur. Usually the problem appears to be solved well within the orbit of success, particularly if the group enjoys a good level of cohesion and mutual assistance. But the attempt is not always successful - a programme based on the ability of the average can clearly mean failure for individuals, some of whom may start a downward spiral toward dropping out. Recently, in fact, an entire group was disbanded due to failure to gel and worsening performance.

These and other criticisms of the BB programme suggest a series of local research studies manipulating particularly such variables as offender personality type, challenge techniques, inmate participation, and the incentive system employed. A more basic study, however, would compare the effectiveness of short term institution programmes with immediate release to the community under appropriate residential and other controls. There would seem every reason to expect (cf. Palmer, 1969) that many 'first committals' at least would be less dangerous to the community if the institutions can be avoided entirely.

REFERENCES

Asch, S. E. Effects of Group Pressure upon the Modification and Distortion of Judgment. In H. Guetzkow, (Ed.), Groups, Leadership and Men, Pittsburgh: Carnegie, 1951

Asch, S. E. A Prospective of Social Psychology. In S. Koch (Ed.), Psychology: A Study of a Science. Vol. 3. Formulations of the Person and the Social Context, New York: McGraw-Hill, 1959, 363-383.

Bailey, W. C. Correctional Treatment: An Analysis of One Hundred Correctional Outcome Studies, J. Crim. Law, Crime, & Pol. Sci., 1966, 57, 2, 153-160.

Bandura, A. and Walters, R. H. Social Learning and Personality Development, New York: Holt, Rinehart and Winston, 1963.

Conrad, J. P. Programme Trends in Correctional Rehabilitation. In Research in Correctional Rehabilitation, Joint Commission on Correctional Manpower and Training, Wash., D.C., 1967, 6-12.

Crowther, C. Crime, Penalties and Legislatures, The Annals, 1969, Vol. 381, 147-158.

Eysenck, H. J. Crime and Personality, London: Methuen, 1964.

Glaser, D. The Effectiveness of a Prison and Parole System, New York: Bobbs-Merrill, 1964.

Glasser, W. Reality Therapy: A New Approach to Psychiatry, Harper and Row, N.Y., 1965.

Gottfredson, D.M. and Ballard, K.B. Prison and Parole Decisions, a Strategy for Study, Institute for the Study of Crime and Delinquency, Vacaville, California, 1965.

Hare, R. D. Psychopathy: Theory and Research, New York: Wiley, 1970.

Hood, R. and Sparks, R. Key Issues in Criminology, New York: McGraw-Hill, 1970.

Levis, D. Behavioural Therapy: The Fourth Therapeutic Revolution? In Levis, D. (Ed.) Learning Approaches to Therapeutic Behaviour Change, Chicago: Aldine, 1970.

Matheson, M. A. The Boulder Bay Experiment: A Short Term Training Programme for Young Adult Offenders, British Columbia Corrections Service, Mimographed, 1970.

Milgram, S. Liberating Effects of Group Pressure, J. Pers. Soc. Psychol., 1965, 1, 127-134.

Miller, W. B. Lower Class Culture as a Generating Milieu of Gang Delinquency, in Wolfgang, M. E., Savitz, L., and Johnston, N. (Eds.), The Sociology of Crime and Delinquency, New York: Wiley, 1962, 267-276.

Mowrer, O. H. Learning Theory and Behaviour Therapy, In Wolman, B. (Ed.) Handbook of Clinical Psychology, New York: McGraw-Hill, 1965, 245-276.

Palmer, T. California's Community Treatment Project in 1969: An Assessment of its Relevance and Utility to the Field of Corrections, 1969, U.S. Joint Commission on Correctional Manpower and Training.

Report of the Canadian Committee on Corrections, Toward Unity: Criminal Justice and Corrections (Ouimet Report), Ottawa: Queens Printer, 1969.

Solomon, J. Draft Report on "Boulder Bay", Prepared for the LeDain Commission, Ottawa, 1971.

Szasz, T. S. Ideology and Insanity, Anchor Books, New York: Doubleday, 1970.

Thorvaldson, S. A. Centre Creek: a Supplementary Report, British Columbia Corrections Service, mimeographed, 1972.

Thorvaldson, S. A. A Note on the Predictive Validity of the BE 61A Scale in British Columbia, Criminal Justice Planning and Research Unit, Department of the Attorney-General, Victoria, Mimeographed, 1973.

Thorvaldson, S. A. and Matheson, M. A. Parole Performance as a Function of Base, Institution Programme, and Parole Variables, a Pilot Study. Criminal Justice Planning and Research Unit, Department of the Attorney-General, Victoria, 1973.

Ullmann, L. P. and Krasner, L. A Psychological Approach to Abnormal Behaviour, New York: Prentice Hall, 1969.

Warren, M Q. Classification of Offenders as an Aid to Efficient Management and Effective Treatment, President's Commission on Law Enforcement and Administration of Justice, Task Force on Corrections, Washington, D.C., 1966.

Wilkins, L. T. Evaluation on Penal Measures, New York: Random House, 1969.

Wooton, B. Social Science and Social Pathology, Allen and Unwin, London, 1959.

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