



Research Bulletin

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Prediction of Performance in a Work Release Programme

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INTRODUCTION

Work Release

Work Release is a programme in which selected offenders approaching the end of their sentences are allowed to go to work in the community while residing in a low security prison.

Advantages and Disadvantages of Work Release

Numerous advantages have been claimed for such programmes. These can be grouped as advantages to the prisoner and his family; economic advantages to the community; and organizational advantages.

The suggested gains for the prisoner and family include:

- increased income during the pre-release period, and consequently reduced personal and family economic hardship before and following release;
- taking more personal responsibility before release makes release a less sudden and thus less difficult transition;
- building (and re-building) social relationships at work and with family also smooths the transition on release;
- work habits are reinforced under normal industrial conditions in a situation offering stronger incentives and support than would be available after release;
- contact with the prison community, which could discourage rehabilitation, is minimised at the key pre-release period.

The economic advantages to the community are that the cost of holding a prisoner on work release is about half that of holding a prisoner in ordinary custody, and the need for social welfare support for prisoners' families is reduced. The organizational advantages include easier management of prisoners through the incentives for good conduct and industry that are integral to the programme and reduced pressure on the strained employment capacity of prison industries.

Prediction of Performance in a Work Release Programme

Summary:

Work Release is a programme in which selected offenders near the end of their imprisonment are allowed to work in the community while residing in a low security prison. The programme has been claimed to have advantages for the prisoner and his family, economic advantages to the community and advantages to the prison service. The main disadvantage is the certainty that some prisoners will abscond or commit other offences while in the programme. It would be useful to be able to so select candidates as to minimise such 'failures'. The main purpose of the work reported was to test the usefulness of data on personal and social background and on past criminal history in predicting 'failure'.

Weak but statistically significant prediction of programme performance was demonstrated with data on 296 work releases. Performance was classified as successful ($n = 233$, 75%), failure by technical breach ($n = 48$, 16%), or by criminal breach ($n = 25$, 8%). The level of prediction was too low to be of practical value in selection for the programme. It was found that measures of prior criminal history were the best, if weak, predictors of which prisoners would abscond or otherwise re-offend while in the programme, and of which would be withdrawn for non-criminal breaches of programme rules. Programme failure showed a quite strong relationship to re-offending after discharge.

The findings imply that something other than the personal, social and criminal history data that were measured determines both who fails in the programme and who re-offends after discharge. It is suggested that variations in the programme itself, such as the rate of earnings and type of work, could be important and deserve further study. The results show that the administrative criteria in use to select candidates for the programme (such as type of offence) are irrelevant to programme performance. The possibility of using the programme itself to identify prisoners who are good risks for early parole is considered and the logic of including only low-risk candidates (if this could ever be achieved) is challenged. The use of predictors to identify candidates who might benefit from special support in the programme is suggested. Finally, the possibility is raised that Work Release is actually reducing recidivism and further research to assess this is recommended.

In his analysis of employment for prisoners, Braithwaite (1980) reviewed evidence on the success of work release programmes in terms of personal and family benefits and effects on recidivism. All studies found such programmes either reduced or did not increase recidivism. The effect on recidivism appeared to depend on success in

delivering personal and social advantages such as those listed above. Studies which do not find significant effects do not prove work release programmes to be ineffective as the programmes studied might not be properly conducted and other, uncontrolled factors might have blurred the results.

The main disadvantage of work release is the certainty that at least some prisoners placed on the programme will abscond or in some way re-offend while in the community. Since the time spent on work release in New South Wales is usually not long and just precedes release such individuals would soon be at large and it might well be easier to apprehend them for offences committed while in the programme than for offences committed after release. Such occurrences can, however, create unfavourable reactions in the mass media and cause alarm in the community. This is particularly true where the offence is a dramatic violent crime.

The Research Problems

The above discussion shows that it would be useful to know whether it is possible to select prisoners for work release in a way which would minimise 'failures'. An investigation of this question could also answer other questions such as the relationship between criminal failure and failure due to non-criminal breach of work release programme rules, and the relationship between programme performance and performance after release.

THE STUDY

Procedures

The study has been described in detail by Turnbull, Porritt and Cooney (1980).

Information was collected from the records of 296 offenders who were placed on the Work Release I programme in 1977 and early 1978. The data were used to answer the following questions about the programme.

1. Which attributes of offenders predict performance within the programme?
2. Which combination of attributes best predict performance within the programme?
3. Are removal from the programme for "technical breaches" and for "criminal breaches" different degrees along one dimension of failure or are they two different types of failure?
4. Which attributes of individuals (including performance in the programme) predict subsequent re-offence?

Programme performance was assessed as 'success' (released to parole from the programme $n = 223$, 75%), technical breach (removal for breaches of house rules not involving any criminal offence $n = 48$, 16%) or 'criminal breach' (removal following criminal offence committed while in the programme, $n = 25$, 8%). In all, 292 of the 296 offenders were followed for 15 months after their release from prison and classified as 're-convicted' (convicted of a criminal offence committed in the follow-up period, $n = 119$, 40%) or 'not re-convicted' (see Table 1). Of those re-convicted 80 (27% of the total sample) were sentenced to imprisonment and 39 (13% of the total sample) to other penalties.

Data were obtained in a large number of variables. These described:

- juvenile and adult convictions and the sentences given;
- demographic characteristics (age, marital status, education, employment history and socioeconomic status);

- psychological test results (performance on intelligence tests and scores on the Cornell Index which is a measure of psychological disturbance);
- administrative assessments (overall ratings by the psychologist assessing the prisoner at classification, and most recent rating by a Programme Review Committee; these Committees regularly review prisoner needs and conduct and recommend educational and work programmes as appear appropriate).

The data were analysed by Multivariate Analysis of Variance (MANOVA). The technique works out the combination or combinations of measures that most clearly distinguish between two or more criterion groups, and shows how accurate the prediction can be at its best.

Results

Some data were only available on part of the sample. A preliminary MANOVA was conducted testing discrimination by these variables (assessment by psychologist and by Programme Review Committee, intelligence test results and Cornell Index) between the three programme outcome groups. No one of these variables nor any combination of them discriminated between the outcome groups.

A two-way table showed that programme performance was correlated with performance after release; the 15 month re-conviction rates were 33%, 54% and 83% for those succeeding, removed for 'technical breaches' and removed for 'criminal breaches' respectively (see Table 1).

The key analysis was a two-way MANOVA. This involved classifying each prisoner on programme performance as a Success, a Technical Breach or a Criminal Breach and on post-release outcome as Re-convicted or Not Re-convicted. The six groups so formed correspond to the six sub-groups shown in Table 1. These sub-groups were then compared by the MANOVA programme.

The results of the MANOVA showed that both the Programme Performance and Post-Release Outcome criteria could be predicted with better than chance accuracy. For each criterion some of the fourteen variables contributed more to this prediction than others. Table 2 presents the statistical details.

Programme Performance tended to be worse as the number of juvenile and adult convictions and incarcerations increased. Three variables made substantial independent contributions to the prediction equation: number of juvenile offences, number of juvenile incarcerations and number of previous adult offences.

A similar result emerged for Post-Release Performance. In this case adult offences and adult incarcerations made the largest independent contributions to accurate prediction. Some other variables with large weights can be discounted as by-products of the method which do not help in understanding the results.

For both criteria, prediction was not very accurate. The results thus do not provide a useful guide to selection of prisoners likely to succeed or fail in the programme or after release. The results do show, however, that "criminal history" as measured has some effect on performance in the programme and that those who "fail" in technical ways lie between the successes and those who commit criminal offences in the programme, but are more similar on average to the criminal breaches than to the successes.

To summarise, the answers of the four questions are:

1. Prior criminal convictions and imprisonments predict programme failure.
2. A combination of number of juvenile offences, number of juvenile institutionalisations for criminal offences

and, number of previous adult offences best predicts programme performance, but gives very weak prediction.

3. 'Technical breach' offenders differ from programme 'successes' in ways similar to but less extreme than do 'criminal breach' offenders.
4. Re-offence after release is associated with 'failure' in the programme and, when programme performance is held constant, with previous criminal behaviour, especially as an adult.

Implications

The outstanding point is that the individual characteristics assessed do *not* contribute very much to variation in programme performance. Despite this, performance is not random. This is shown by the relationship found with outcome after release. If performance was random, this relationship would not exist. Thus, it is possible that data on events within the programme and/or on the individual's recent behaviour within the prison could be useful in predicting performance in the programme.

None of the variables which have been stated at various times as administrative criteria for entry to the programme were in fact related to programme outcome. Thus, the poor level of prediction achieved was not likely to be due to pre-selection. This finding also raises questions about the selection criteria that have been used. There is no justification in these data for the comment by Braithwaite (1980 p. 42), that "the apparent success of the . . . New South Wales work releasees is largely due to the selection for the programmes of the best behaved prisoners".

The strongest relationship found was that between programme performance and post-release recidivism. This suggests that work-release could be used as a means to 'screen' prisoners for their suitability for early release and to identify those for whom some special efforts might be needed to reduce recidivism. If used in this way, community acceptance would have to be gained for the proposition that it is better to have any re-offences occur while the offender is under close surveillance in the programme than after full release when detection of offences and apprehension might well be more difficult. It is also possible that "failure" and withdrawal from the programme *causes* poorer prospects after release by denying the benefits of income and job, and (for those withdrawn for criminal breaches) lengthening the exposure to the damaging effects of secure imprisonment.

If better predictors could be found then programme administrators would face a dilemma. Selection, however valid, would inevitably exclude some offenders who would not re-offend. It would also concentrate the programme on those prisoners who have the best chance of staying out of trouble without going through work release. Perhaps prisoners with a greater chance of re-offence are those that the programme has the greatest potential to help. Braithwaite (1980, p. 38) reports overseas research that found exactly this effect. If events within the programme are crucial to performance it is surely better to attempt to control these events than to exclude prisoners who are more likely to be involved in them. Perhaps valid and powerful predictors (if these can be found) could better be used to identify prisoners who require special attention of some sort if they are to succeed in the programme and after release.

Finally, the recidivism data in themselves appear quite promising. It would be useful to test whether the programme is indeed achieving the benefits claimed, and to investigate what events and conditions experienced within the programme improve or worsen participants' chances of successful completion and reduce or increase recidivism rates. Such studies might produce hard data to

support the expansion of work release recommended by the Royal Commission into Prisons, and supported by Braithwaite (1980, Ch 4, Ch 14).

Other Findings

The study collected a great deal of data on these work release prisoners. Some points deserve mention.

To enter the programme requires spending some time in prison as a low security prisoner. Caution has always been exercised in accepting offenders convicted of 'violent' crimes despite evidence that they perform at least as well as other offenders, and perhaps slightly better.

The effect on the selection procedures appears to be that offences against property (typically break, enter and steal) are the most common conviction in the sample (42%), and the work releasees tended to have long histories of convictions (38% with 6 or more adult convictions and 57% having served 1 or more prison sentences exceeding 1 week). In the light of these characteristics the rates in the 15 months after release of re-conviction (40%) and of re-imprisonment (26%) appear promising. Certainly, selection does not appear to be favouring "good risks" in terms of valid predictors of performance during and after the programme.

Re-convictions tended to be similar to (34% in the same category) or less serious than (43%) the original offence. Only 33% of the re-convictions involved more serious types of offence than the original conviction and only 10% of those re-convicted moved from non-violent to violent offences. This is only 4% of the total sample.

Conclusions

The main conclusion must be that criminal offences while on work release are rare and cannot *usefully* be predicted from the few measures identified as being correlated with performance in the programme. Failure in work release, whether by technical or criminal breach, was associated with re-conviction for offences committed after release. The re-conviction rate did not appear high given the criminal history of the participants.

Given these results, further research should be concentrated on factors within the programme which affect success. Evaluation of the benefits actually achieved, of their correlation with post-release outcome, and of any factors within the programme which could be modified to improve performance would be of great value.

References:

- Braithwaite, J.: *Prisons, education and work*. Canberra—Australian Institute of Criminology, 1980.
- Turnbull, J. Porritt, D. and Cooney G.: *Prediction of performance on work release and after*. Unpublished report, N.S.W. Department of Corrective Services, 1980.

TABLE 1: Programme Performance by Post-Release Outcome

POST-RELEASE OUTCOME	PROGRAMME PERFORMANCE			
	Success	Technical Breach	Criminal Breach	TOTAL
<i>Re-convicted—</i>				
Number	73	26	20	119
Per cent	33.1	54.2	83.3	40.8
<i>Not Re-convicted—</i>				
Number	147	22	4	173
Per cent	66.8	45.8	16.7	59.2
TOTAL	220	48	24	292

Chi square = 9.7, 4df, $p < .05$

NOTE: 4 cases did not complete the follow-up period and were excluded. Of these, 3 were Programme Successes and 1 was a Criminal Breach.

TABLE 2: Results of MANOVA, Programme Performance by Post-Release Outcome

Variable	(a) Outcome			(b) Re-Conviction		
	p	S.D.F.C.(1)	$r_{V,DF}(2)$	p	S.D.F.C.(1)	$r_{V,DF}(2)$
V1 N.P.P.	.519	.251	.208	.775	.045	-.057
V2 Juvenile Record (Yes/No)	.716	.341	-.138	.197	.375	-.257
V3 No. of Juvenile Offences	.005	.600	.555	.026	.367	.445
V4 No. of Juvenile Probations	.753	-.209	.028	.078	.252	.351
V5 No. of Instances in Juvenile Institutions	.003	.351	.609	.058	.020	.378
V6 No. of Previous Offences (Adult)	.011	.498	.543	.004	.514	.577
V7 No. of Treatments (Previous Adult)	.075	-.030	.412	.028	.203	.440
V8 No. of Prison Sentences more than 1 week	.003	.052	.486	.021	.453	.461
V9 Total Sentence (Current Offence)	.944	-.388	-.009	.363	.154	-.181
V10 Current Offence	.218	.398	.259	.656	.007	.089
V11 Time in Prison Prior to Work Release	.510	.481	.212	.383	.463	-.174
V12 Age first Criminal Conviction	.806	.289	-.084	.014	.484	-.491
V13 Age Current Conviction	.035	-.019	.246	.042	-2.973	-.406
V14 Age Entry to Work Release	.032	-.032	.278	.039	1.983	-.412

(1) Standardised Discriminant Function Co-efficient.

(2) Correlation of Variable V with Discriminant Function.