

THE SUPERVISION OF OFFENDERS - WHAT WORKS

SECOND REPORT

Christopher Trotter PhD

THE SUPERVISION OF OFFENDERS – WHAT WORKS?

Second and final report to the Australian Criminology Research Council on the project "The Capacity of Community Corrections to Reduce Recidivism"

by Chris Trotter PhD

Social Work Department

Monash University

Published by the Department of Social Work and Human Services, Monash University, Melbourne, 1995, ISBN 0 7326 0850 3

Subject to copyright, Inquiries regarding seminars and other publications may be directed to Dr Trotter, Monash University

CONTENTS

	Page
1. INTRODUCTION	1
2. FOUR YEAR FOLLOW UP OF RECIDIVISM	2
3. VOLUNTEERS	11
4. CONTAMINATION THEORY AND UNPAID COMMUNITY WORK	21
5. RISK ASSESSMENT	41

Introduction

1

Details on this project are available in several reports and articles. The first report to the Criminology Research Council was published in 1993 by the Monash Department of Social Work and the Victorian Department of Justice entitled "The Supervision of Offenders – What Works?". A chapter summarising the work is to be included in a book published by the University of Wales Press "Selected Papers from the British Criminology Conference 1993" (expected publication July 1995). An article focussing on one aspect of the project, entitled "Contamination Theory and Unpaid Community Work" will appear in the Australian and New Zealand Journal of Criminology, Vol 28, No 2, Sept 1995. An article entitled "The Impact of Different Supervision Practices in Community Corrections" has also been accepted for publication in the Australian and New Zealand Journal of Criminology probably in December 1995. A paper entitled "Risk Prediction in Community Based Corrections" was presented to the American Criminology Conference, Miami, in November 1994. A paper was also presented at the World Congress of Social Work, Washington DC 1992 entitled "The Effective Supervision of Offenders".

This final report on the project should be read in conjunction with the first report which provides details of the methodology of the project. Chapter 2 provides a four year follow up of recidivism rates of offenders involved in the project. The first report only provided recidivism rates at 12 and 20 months.

Chapter 3 outlines the outcomes of the study in relation to volunteer Community Corrections Officers. These were not provided in the first report.

Chapter 4 provides more detail (than the first report) about the findings of the study in relation to the influence of differential association in community work. This paper is to be published in the Australian and New Zealand Journal of Criminology this year.

Chapter 5 considers another aspect of the study which was not addressed in the first report, an evaluation of the risk assessment device which was used in Community Based Corrections in Victoria, during the period of the study. This paper was presented at the American Criminology Conference in Miami, U.S.A. 1994.

Once again thanks go to those who participated in the project in particular research officers, Sandra Bowen and Anne O'Brien and David Yee, computer consultant, as well as the Victorian Department of Justice and the Australian Criminology Research Council.

Four Year Follow Up Of Recidivism

2

ABSTRACT

There is a considerable amount of research evidence that some supervision practices in community corrections are more effective than others. This study considers the impact of a supervision model which is based on practices which the research has found to be effective, in particular a focus on high risk offenders, the use of problem solving, a pro-social approach and the use of empathy.

The first report indicated that those who were trained in the model and agreed to make use of it with their clients were in fact more likely to use the model in supervision and their clients had lower recidivism rates when measured after one year and after 20 months, in comparison to a randomly selected control group. This paper reports on a follow up of the clients after four years and finds that on most of the recidivism measures the supervision has continued to have a positive impact.

INTRODUCTION

The first report provided recidivism data up to the time of the initial data collection in July 1992 which was an average of 20 months after clients were initially placed under supervision. This report includes a follow up of the same offenders in October 1994 an average of four years after they were initially placed under supervision.

The data in this report is all collected from Victorian police records.

PROJECT SUMMARY

A training course in the effective supervision of offenders was offered to Community Corrections Officers (CCOs) in Community Based Corrections in Victoria. Twenty nine CCOs participated in the course. The CCOs were asked to supervise their clients using the supervision model they had been taught.

The supervision model included focussing on high risk offenders, use of problem solving, empathy and a pro-social approach.

Twelve CCOs agreed to use the model with their clients over the next 12 months and to participate in ongoing seminars. The remaining CCOs who started the initial training course either left the department or for various other reasons did not continue with the project.

Data was collected from police records in relation to the experimental group (clients of those who agreed to be involved in the project), group 2, clients of those CCOs who undertook the initial training course but did not continue with the project, and a control group, selected using a systematic random sampling technique, from the same offices as clients in the other two groups.

RESULTS

Offenders in the experimental group continued to have lower recidivism rates at the time of the four year follow up.

Table 1 refers to any criminal offence for which an offender has been found guilty within 12 months and within an average of 20 months and 48 months from the commencement of their order. It includes breaches of orders.

It is apparent however that whilst the offenders in the experimental group continued to have lower rates of re-offence this was not at significant levels. It seems that the impact of the supervision on further offences was reduced once the supervision ceased.

Note that the 20 month and 48 month measures refer to average periods from the commencement of supervision. Participants in the project may have started their orders at any time within a six month period. The data was collected for some after 48 months and for some before 48 months however the average period is 48 months. There were however only minimal differences between the groups in terms of allocation and follow up times and the average follow up period therefore provides a meaningful measure.

TABLE 1

ANY FURTHER OFFENCE BY GROUP

	Exp (n=104)	Group 2 (n=105)	Control (n=157)
12 months (p= .08 Exp/Control)	34 (32%)	46 (43%)	65 (41%)
20 months (ns)	42 (40%)	50 (48%)	75 (48%)
48 months (ns)	57 (55%)	60 (57%)	96 (61%)

(note that one tailed tests of significance are used as discussed in the first report)

Table 2 suggests however that in relation to imprisonment the beneficial impact of supervision seems to be maintained. There continues to be a significant difference between the experimental and control groups when the measure of imprisonment is used (including suspended sentences and intensive corrections orders which allow for the imprisonment to be served in the community).

TABLE 2**NUMBER OF OFFENDERS SENTENCED TO IMPRISONMENT
(INCLUDING SUSPENDED SENTENCES) BY GROUP**

	Exp	Group 2	Control
12 months (p= . 04 Exp/Control)	13 (12%)	20 (19%)	33 (21%)
20 months (p= . 08 Exp/Control)	20 (19%)	27 (26%)	42 (27%)
48 months (p= . 02 Exp/Control)	27 (26%)	31 (29%)	61 (39%)

Table 3 confirms this trend suggesting that the impact of supervision is more likely to be sustained in relation to more serious offences. There is a significant difference between the experimental and control groups after 4 years in relation to serious violent offences, in fact even after 4 years clients in the control group committed serious violent offences at three times the rate of clients in the experimental group.

TABLE 3**NUMBER OF CLIENTS WHO COMMITTED SERIOUS VIOLENT OFFENCES**

	Exp	Group 2	Control
12 months (p= . 02)	2 (2%)	7 (6%)	12 (8%)
20 months (p= . 04)	3 (3%)	9 (8%)	13 (9%)
48 months (p= . 00)	6 (5%)	15 (14%)	29 (18%)

Table 4 indicates that the experimental group supervisors were most effective in reducing rates of imprisonment with young offenders. This is consistent with the findings of the study of the impact of association with other offenders reported in chapter 4. Young offenders are high risk and it seems more subject to influence from both supervisors and other offenders.

In relation to any further offences for younger offenders however, there was little difference between the groups by the time of the four year follow up (not reported here). Again this suggests that the impact of supervision is greatest in relation to more serious offences.

TABLE 4

YOUNG OFFENDERS (UNDER 23) AND IMPRISONMENT BY GROUP

	Exp gp n=31	Group 2 N=51	Control N=67
12 months (p= . 04 Exp/Control)	1 (3%)	10 (24%)	19 (28%)
20 months (p= . 08 Exp/Control)	4 (13%)	14 (27%)	24 (36%)
48 months (p= . 02 Exp/Control)	6 (19%)	15 (29%)	25 (37%)

It was evident in the first report that use of the integrated supervision model as reflected in file notes was related to reduced re-offending rates. That is to say, where the research officers provided high ratings on files of use of the supervision model by supervisors, the clients had lower rates of recidivism.

Tables 5 and 6 indicate that those offenders who were supervised by officers who made more use of the model continued to have lower recidivism rates although some of the effect was lost by the four year follow up.

TABLE 5**MEAN RATING ON USE OF THE SUPERVISION MODEL BY CCOs AND FURTHER OFFENCES BY CLIENTS**

1 year (p= .00)	offended	2.66
	no offences	3.30
20 months (p= .02)	offended	2.81
	no offences	3.25
4 years (p= .09)	offended	2.89
	no offences	3.14

TABLE 6**MEAN RATING ON USE OF THE MODEL BY SUPERVISORS AND CLIENT IMPRISONMENT (including suspended sentences)**

1 year (p= .00)	offended	2.66
	no offences	3.30
20 months (p= .04)	offended	2.81
	no offences	3.30
4 years (p= .09)	offended	2.84
	no offences	3.14

It was pointed out in the first report that risk levels could not explain the differences in terms of use of the model and recidivism. In fact where CCOs used the supervision model the clients were on average slightly higher risk.

The first report indicated a strong relationship between evidence of the pro-social approach (modelling and re-inforcement) by supervisors in file notes and lower rates of client recidivism. This relationship continued to be strong at the time of the four year follow up. This is shown in Tables 7 and 8. It was pointed out in the first report that the pro-social approach tended to be evident in file notes where clients were lower risk. However, when the results are analysed using logistic regression taking into account risk levels of the clients the differences remain statistically significant within the .01 level.

TABLE 7

**USE OF PRO-SOCIAL MODELLING AND RE-INFORCEMENT
BY SUPERVISORS BY FURTHER OFFENCES BY CLIENTS**

	Some evidence (n=185)	No evidence (n=199)
1 year (p= .00)	23% (42)	47% (93)
20 months (p= .00)	36% (63)	58% (116)
4 years (p= .00)	51% (94)	75% (146)

TABLE 8

**USE OF PRO-SOCIAL MODELLING AND RE-INFORCEMENT BY SUPER-
VISORS BY IMPRISONMENT OF CLIENTS (INCLUDING SUSPENDED
SENTENCES AND INTENSIVE CORRECTIONS ORDERS)**

	Some evidence	No evidence
1 year (p= .00)	11% (21)	24% (48)
20 months (p= .00)	16% (29)	32% (64)
4 years (p= .00)	23% (42)	41% (81)

The other aspect of the model which showed some relationship with offending although it was not significant was the use of problem solving. Again there was a trend in the results at four years in favour of clients supervised by officers who showed evidence of problem solving, however again the results were not statistically significant.

CONCLUSION

It is apparent from the results of this study that on each of the recidivism measures use of the supervision model continued to have a positive impact on offenders after four years. In most cases the results are at statistically significant levels.

It is apparent however from the results that the supervision had most impact in relation to serious offences (ie imprisonment) and in relation to younger offenders. This is consistent with much current thinking and research about the benefits of supervision for high risk clients (allowing for the fact that age is a major risk factor).

The value of the pro-social approach is re-inforced by the four year follow up. It does appear that the use of a purposeful pro-social approach in supervision is vital. There are now at least eight studies (see the first report for a discussion of these studies) which have pointed to the value of this approach and none, of which I am aware, that have found it unhelpful.

Following the publication of the first report on this project, Community Corrections Departments in both New Zealand and Victoria, Australia, have offered training in the supervision model to most probation officers and community corrections officers in their employment. This four year follow up suggests that this training is likely to be of both short term and long term benefit to the staff involved as well as to their clients and the wider community.

Volunteers

3

ABSTRACT

There are a number of studies undertaken in community corrections or probation which suggest that volunteer Probation Officers or Community Corrections Officers are likely to spend a lot more time with their clients and that they can be particularly effective with high risk clients. This study aimed to consider this question and also whether volunteers can be trained to use a particular supervision model which previous research has found to be effective. The numbers in the study are too small to provide definite conclusions however the study does suggest that volunteers see their clients more, that volunteers can be trained to use effective practices and their high risk clients are less likely to offend than those in a randomly selected control group.

INTRODUCTION

A number of studies have pointed to the value of using volunteers in corrections (Fo and O'Donnell 1974, 1975, Sigler and Leenhouts 1982, Kulhorn 1979, Andrews et al 1979, 1986). One study in particular (Andrews et al 1986) found that volunteer probation officers provided six times as much contact with their probationers in comparison to professional officers and that their high risk clients had significantly lower recidivism rates compared to high risk clients supervised by professional officers. It is argued by Andrews et al (1986) that volunteers as a resource should be devoted to high risk clients and that the high levels of contact which they offer are wasted on low risk clients.

This study aimed to investigate this issue. That is, what levels of contact do volunteers offer to their clients and how effective are volunteers in the supervision of high risk offenders. The study also aimed to consider whether volunteers, after training are able to use the principles of supervision which previous research has found to be effective.

PROCEDURE

A group of volunteers in Community Based Corrections in Victoria was offered a one day training course in the principles of effective supervision (pro-social modelling, problem solving and empathy) and they were allocated high risk clients. Risk levels were determined using the Community Based Corrections standard intake and assessment form. (Whilst this form has limitations [see chapter 5] it does provide an approximate measure of risk levels.) The clients were then followed up in the same way as the clients of professional officers (see first report and chapter 2 this report), in terms of the frequency of contact, client views of supervision and recidivism.

NATURE OF VOLUNTEER WORK IN COMMUNITY BASED CORRECTIONS

Volunteer Community Corrections Officers in Victoria have the same legal responsibilities as professional CCOs. It is common practice in Community Based Corrections in Victoria for clients to be allocated to volunteer CCOs and for those volunteers to take full responsibility for the supervision of the clients. The volunteers report on a regular basis to a volunteer co-ordinator, a professional CCO, and generally attend ongoing training on a regular basis. All volunteers are required to complete a twenty hour training course before commencing work as a volunteer.

Most volunteers see their clients in their own home although some prefer to see clients at the local Community Corrections Centre.

SELECTION OF THE VOLUNTEER SAMPLE

Five CCOs who had responsibility for co-ordination of volunteers undertook a one week training course and agreed initially to participate in the project.

Arrangements were made with the regional offices for the volunteer co-ordinators participating in the project to allocate their high risk clients to volunteers. Permission was given by the Director of Community Based Corrections to break from departmental policy, which did not allow for the allocation of high risk clients directly to volunteers.

The volunteers who agreed to be involved in this project were then trained in the principles of effective supervision in a one day training course. The volunteers were then supervised on a fortnightly basis by CCOs who had completed the longer course and were familiar with the principles.

Unfortunately only 16 clients were allocated to volunteers. Two of the centres used were country centres (Swan Hill and Ballarat) and there were relatively few high risk clients given to the supervisors for allocation. One of the city centres withdrew and the CCOs in the two other city centres (Caulfield and Oakleigh) could only devote a proportion of their time to this particular project. Also the need for the co-ordinating CCO to deal with the remaining low risk offenders seemed in each instance to slow down the allocation of high risk clients to volunteers.

The size of the volunteer sample is obviously too small to provide meaningful results and this study consequently focuses primarily on professional CCOs and their clients. Further those volunteers who were involved volunteered to be involved in the project and may not have been typical of the volunteer population. They were more likely to be predisposed towards the use of the supervision model. This is discussed in detail in Trotter (1994). Nonetheless the results from the volunteer aspect of the study are of some interest and they are reported briefly here.

RESULTS – VOLUNTEERS AND THE USE OF THE INTEGRATED MODEL

It is apparent from the results that volunteers were more likely to make use of the supervision model than professional officers in the randomly selected control group who had not undertaken training in the model.

They were significantly more likely to display evidence of problem solving, pro-social modelling and re-inforcement and empathy in comparison to the control group CCOs. The rating by research officers of the overall use of the integrated model displayed in file notes also indicated that the volunteers were significantly more likely to use the integrated model.

TABLE 1

USE OF THE INTEGRATED MODEL IN FILE NOTES BY VOLUNTEERS AND THE CONTROL GROUP

	Volunteers (n=16)	Control Group (n=157)
Evidence of Problem Solving (p= .03)	75% (12)	44% (70)
Evidence of Pro-social Modelling and Re-inforcement (p= .004)	75% (12)	38% (60)
Evidence of Empathy (understanding feelings) (p= .015]	69% (11)	36% (56)
Use of Model (rated over 4) (p= .007)	50% (8)	16% (25)

Role Clarification is an important part of the problem solving process and whilst the study does not hypothesise about the way the supervisor's role is perceived by the client it is nonetheless interesting. The results suggest that supervision by volunteers is perceived differently by clients. Table 2 indicates that volunteers are more likely to be perceived as friends and less likely to be perceived as supervisors in comparison to the control group. (Note that the numbers in the control group are smaller as all clients did not return questionnaires [see first report]).

TABLE 2

CLIENT PERCEPTIONS OF THE ROLE OF THE CCO

	Control (N=70)	Volunteers (N=16)
Friend	47% (33)	69% (11)
Advocate	6% (4)	6% (4)
Prison Officer	0% (0)	6% (1)
Supervisor	61% (43)	31% (5)
Police Officer	0% (0)	6% (1)
Counsellor	51% (36)	44% (7)
Adviser	47% (33)	50% (8)
Other	4% (3)	0% (0)

RESULTS – FREQUENCY AND DURATION OF CONTACT

It was hypothesised that volunteers would supervise their clients significantly more often and for longer periods than professional CCOs. This was clearly the case as illustrated in Table 3 which indicates the frequency and duration of contact as reported by clients through the client questionnaire. Volunteers saw their clients nearly twice as often and for much longer periods. The differences between the groups is significant ($p=.000$) for both frequency and duration of appointments.

TABLE 3

FREQUENCY AND DURATION OF CONTACT – CLIENT QUESTIONNAIRE;

	Control Clients (N=70)	Volunteers Clients (N=16)
twice weekly	1% (1)	12% (2)
weekly	11% (8)	44% (7)
fortnightly	30% (21)	37% (6)
3-4 weekly	37% (26)	6% (1)
less	20% (14)	0% (0)

Duration of Appointments

5-10 minutes	24% (17)	6% (1)
15-20 minutes	43% (30)	37% (6)
25-45 minutes	29% (20)	31% (5)
over 45 minutes	1% (1)	25% (4)

A comparison of the mean number of appointments revealed by the file analysis saw the same substantial difference between the volunteers and the control group. This is illustrated in Table 4.

TABLE 4

FREQUENCY OF CONTACT – FILE ANALYSIS;

	Control Clients (n=157)	Volunteers Clients (n=16)
Mean Contacts	13.841	23.632
Median	13	23

(Kruskall Wallis $H = 15.550$ $p < .000$)

Note that comparisons have been made between volunteer clients who were high risk and control group clients selected in a systematic random manner. Comparisons with high risk control group clients revealed similar outcomes however and are not therefore reported here.

RESULTS – VOLUNTEERS AND CLIENT RECIDIVISM

It was hypothesised that high risk clients who were supervised by trained volunteers would have lower recidivism rates than high risk clients in the control group. That is, high risk clients who received intensive supervision from volunteers who had been trained in the integrated model, would do better than high risk clients in the control group (clients who had lower levels of supervision by CCOs who had not received training in the integrated model).

Table 5 indicates that this was the case on each of the recidivism measures although the differences are not significant.

(Note that there were only 11 clients who were given a risk score over 12 on the intake form in the group supervised by volunteers. Whilst each of the clients allocated to the volunteers was considered high risk by the Volunteer Co-ordinator some of the clients were not initially classified as high risk and were subsequently re-assessed as high risk prior to their allocation to the volunteers. Comparisons can only be reasonably made between high risk clients who were assessed using the same criteria, hence only 11 of the volunteer clients are included in this table.)

TABLE 5

RECIDIVISM OF HIGH RISK CLIENTS SUPERVISED BY VOLUNTEERS AND BY CCOs IN THE CONTROL GROUP AND EXPERIMENTAL GROUP ;

	Control (N=60)	Volunteers (N=10)	Exp Gp (N=30)
Official breach (1 Yr)	53% (32)	45% (5)	25% (12)
Prison (including suspended sentences)	35% (21)	27% (3)	20% (6)
Broke conditions of order	7% (4)	0% (0)	10% (3)
Any offence 4 yrs	83% (50)	81% (9)	80% (24)
Prison after 4 yrs	55% (33)	27% (3)	43% (13)

Table five suggests that the volunteers did better than professionals in the control group. It is important to remember that the clients of volunteers are being compared to clients in a randomly selected control group who were supervised by CCOs who had not undertaken the training in the effective supervision practices.

It is also apparent from Table five that on all but one of the recidivism measures (imprisonment after four years) clients supervised by professional officers who agreed to make use of the supervision model (the experimental group) had lower recidivism. That is to say, volunteer's clients did better than clients in the control group but not as well as clients in the experimental group.

DISCUSSION

The number of clients allocated to volunteers for the purpose of this study was less than expected for reasons which have been explained. It has consequently not been possible to test all of the hypotheses in a meaningful way. Some clear trends are evident however from the volunteer sample and their clients.

Client responses to the questionnaire and analysis of file notes suggest that the volunteers were more likely to practice the integrated model than the control group. It is also evident from the client questionnaire that clients of volunteers were more likely to perceive the volunteers as friends rather than supervisors in comparison to clients in the control group.

It was demonstrated clearly, as it has been in other studies (eg Andrews et al 1986) that volunteers see their clients more frequently and for longer periods. In fact in this study volunteers' clients were seen nearly twice as often and for longer periods.

The recidivism rates of the volunteer clients were less than the high risk clients in the control group on each of the reported measures (although clients supervised by professional officers who had undertaken training did better on four of the five recidivism measures). The results suggest that volunteers have the potential to be effective in the supervision of offenders and certainly that volunteer supervision which makes use of the supervision model is better than professional supervision which does not. In fact the results on the four year imprisonment measure (where the volunteer clients did better than all of the professional groups) provide some support for the view suggested by Andrews et al (1986) that they can be particularly effective with high risk offenders.

It is interesting that there were no conditions breaches completed on the clients of the volunteers, a finding consistent with a previous study in Victoria with a larger sample (Trotter 1986). It perhaps supports the picture of the volunteer as a friend rather than a supervisor and presents an interesting subject for further research. It is unknown of course whether the lack of conditions breaches was related to the reluctance of volunteers to undertake breaches or the better performance of the offenders supervised by volunteers.

Whilst some trends are clear, most of the results are not statistically significant and it has been pointed out that the small numbers mean that a meaningful test of the hypothesis in relation to recidivism has not been completed. Nonetheless the results support the findings of previous studies which suggest that volunteers may offer a valuable resource in the supervision of high risk clients in community corrections. More information is needed however to determine whether the positive outcomes reported in previous studies can be maintained when compared to the more effective trained professional officers who have been the subject of this study.

Contamination Theory and Unpaid Community Work

4

ABSTRACT

Community work has been available as a sentencing disposition in Australia for about 15 years. Little is known, however, about the relative impact of different types of community work placements on offenders.

There is some evidence that when offenders are placed on worksites with other offenders, they may be influenced by those offenders and in turn become more criminal. On the other hand, offenders who are placed on worksites, where they either work on their own, or alongside members of the community, may be influenced in a more pro-social direction.

This study considers this issue and finds that offenders placed on worksites with other offenders, are more likely to commit breaches of their orders in comparison to those placed on individual worksites. Whilst those placed on group worksites are more likely to be high risk offenders, the differences remain significant, even when the levels of risk are taken into account.

INTRODUCTION

The sentencing of criminal offenders to undertake unpaid community work as a penalty for their crimes has been taking place in Victoria and most other states in Australia for almost fifteen years. In other countries it has been available as a sentencing disposition since the 1960s (McIvor 1992).

Anecdotal evidence from people who have worked in the administration and oversight of community work programs, suggests that the interaction between offend-

ers on community work sites may often be problematic. Stories are sometimes heard of drug exchanges on worksites, of impressionable young offenders learning 'the tricks of the trade' from more experienced or 'hardened' offenders, and of offenders committing offences with other offenders they have met on worksites.

Anecdotal evidence again suggests that offences are sometimes committed on the worksites themselves. These offences range from minor offences such as damage to equipment, to serious assaults of other offenders.

On the other hand, workers in the field sometimes hear good news stories about offenders placed in community agencies where their work was so good, that after completion of their community work, they were offered a paid job by the Director of the agency.

The study reported on in this article, considers whether some worksites are more likely to have a positive effect on offenders in comparison to other worksites, or alternatively, whether some worksites are more likely to have a negative effect on offenders, in comparison to others.

It considers whether offenders placed on worksites with other offenders are more likely to breach their orders, or to commit further offences, than offenders placed on sites where they work alone or where they work alongside members of the community.

EVIDENCE IN SUPPORT OF THE CONTAMINATION PRINCIPLE

There is considerable theoretical support and some research evidence which suggests that group worksites, that is sites where offenders are placed among a group of offenders, may be detrimental to those offenders who are placed on them. More specifically there is some evidence to suggest that offenders placed on group worksites may be more likely to commit further offences, in comparison to offenders placed on individual worksites (where they work alone, or with non criminal members of the community).

"Contamination theory" referred to in the title of this article relates to several criminological theories. These include in particular differential association theory,

social learning theory, and modelling theory. Each of these theories suggest that peer group associations have an impact on the criminality of individuals.

Differential association theory originally developed by Sutherland and Cressey (1970) suggests that people learn to be criminal through association with criminal social groups. It is suggested that people learn criminal behaviour by being exposed to attitudes favourable to violation of the law. Ackers (1973) developed this concept and incorporated it into social learning theory. Ackers' social learning theory suggests that association is a factor however criminal behaviour may also be explained in terms of differential re-inforcement. It links association with social and practical rewards and punishments as joint and interactive determinants of criminal behaviour (Ackers 1994).

Differential association and learning theory have considerable research support. Ackers (1994) following a review of empirical studies relating to learning theory and differential association states: "Other than ones prior deviant behaviour the best single predictor of the onset, continuance or desistance of crime and delinquency is differential association with conforming or law violating peers. Virtually every study that includes a peer association variable finds it to be significantly and usually, most strongly related to delinquency, alcohol and drug abuse, adult crime and other forms of deviant behaviour" (Ackers 1994:104).

Modelling theory suggests that offenders may be less likely to offend if they are exposed to pro-social rather than pro-criminal models. There is considerable evidence which supports this idea (Sarensen and Ganzer 1973, Fo and O'Donnell 1974,75, Andrews, Keissling, Russell and Grant 1979, Andrews, Zinger, Hoge, Bonta, Gendreau and Cullen 1990, Trotter 1990, 1993).

Each of these theories point to the possible criminalizing effects of group work-sites. Working alongside other offenders on worksites certainly provides participants with pro-criminal rather than pro-social models, it provides opportunities for exposure to attitudes favourable to violation of the law and it may also provide for rewards or perceived rewards for criminal views and behaviour (e.g. peer group approval).

Further research evidence that offenders are negatively influenced by their peers on correctional programs is provided by the high levels of recidivism of prisoners compared to offenders placed on community based corrections programs

(Petersilia and Turner 1990). It may be that pro-criminal peer group influence is a factor in this. In fact one study found that prisoners who were exposed to pro-social influences in prison in the form of discussions with community volunteers were likely to become less criminal (Andrews et al 1973).

There is reason to believe therefore, that association with other offenders on community work sites, may have a detrimental effect on offenders, and that placement on worksites, either alone or with other members of the community, might be related to lower recidivism rates.

There appear to be few specific studies which have considered this issue despite its obvious practical importance. A study in Scotland by McIvor (1992) found that offenders on group placements were significantly more likely to be breached for failure to comply with the conditions of their order, in comparison to offenders who were placed in voluntary or statutory agencies. McIvor also found that offenders placed on group sites had more absences, both 'acceptable' and 'unacceptable'. McIvor found however that offenders placed in group placements were more likely to have prior involvement with supervision and that this explained the higher breach rate of that group. She suggests further, that the differences in absences, depending on the type of worksite, may be related to greater flexibility in agencies.

Whilst this study was rather inconclusive McIvor did find in previous studies (1989, 1991) that re-offending was lower among offenders who reported their experience with community work to be 'constructive and worthwhile'. This suggests that the nature of the community work placement may have been related to re-offending.

It seems therefore, that whilst the evidence is inconclusive, there is some reason to believe that community worksites where offenders work together in groups, may lead the participants to become more criminal, in comparison to sites where offenders work alone or with community groups.

PURPOSE OF STUDY

This study, which was part of a larger study (Trotter 1993), aimed to examine whether the nature of community work placements, in Community Based Corrections in Victoria Australia, was related to offending rates of participants in the programs.

More specifically the study aimed to examine whether offenders placed on worksites with other offenders, had higher recidivism rates in comparison to offenders who were placed on individual worksites, where they either worked alone or with other non-criminal members of the community.

The results of this study are likely to be important because, they might influence the nature of community work placements and potentially, the incidence of offending among those sentenced to undertake community work.

SAMPLE

The Victorian Office of Corrections

The data was collected for this study during 1991 and 1992 in the Victorian Office of Corrections. The Victorian Office of Corrections (now known as the Victorian Department of Justice) is responsible for the supervision of all adults (over the age of 16 years) placed on Community Based Orders and Parole in Victoria.

As part of a Community Based Order or as part of a Parole Order offenders may be required to undertake between 10 and 500 hours of community work. If required to do community work they are allocated either to a group community work site or a site where they work alone or with members of the community. If they are placed on a group site they would generally be placed at a school, a hospital or some other public institution. They would then work in a group of between two and eight offenders, often under the direct supervision of one supervisor. They would generally mow lawns, or do routine maintenance tasks such as painting.

If they are placed on worksites without other offenders, they would either work under the supervision of an agency member, or they would work alone. In most

cases they would do similar work to those on group worksites, although they might be involved in tasks sometimes undertaken by community volunteers, such as helping in a sheltered workshop, an elderly citizens centre, or other such non profit organisation.

Whether individuals are placed on group or individual community worksites is dependent on several factors, including the interests of the offender, the policies of the regional centre and the level of risk of the client. Higher risk clients tend to be placed on group worksites.

Sample Selection

The sample was selected in the following manner. A systematic random sample of offenders supervised by Community Corrections Officers who attended a training course in counselling skills was selected. Two hundred and nine clients were included from this group. Nineteen clients supervised by volunteer Community Corrections Officers who completed the training course were also included. Additionally 157 clients were selected by the same systematic random method from the same offices, as the clients of the officers who attended the training course. In all 275 offenders were included in the sample (110 offenders were excluded because they did not undertake community work as part of their orders). The sample included 260 offenders on Community Based Orders and 15 on parole. Forty three were women and 232 were men.

Whilst the sample was not therefore entirely random, the only aspect of the sample selection which might be considered biased relates to the fact that more than half of the offenders in the sample were supervised by Community Corrections Officers who had completed a training course in counselling skills. There is no reason to believe that this would impact on the issues under consideration in the study. Those who completed the training course, were not significantly more likely to have clients on group or individual worksites. Nonetheless account is taken of this factor in the analysis of the results of the study.

As explained above clients were not randomly allocated to group or individual worksites. It could be that client levels of risk or the number of hours of community work that offenders were required to undertake, could explain differences in re-offending rates. Use is therefore made of the statistical technique, logistic regression which enables the isolation of the impact of independent variables on a

dichotomous dependent variable, in this case a measure of recidivism. In other words logistic regression can provide information about whether the impact of the community work site was related to recidivism independently of other factors such as risk, number of hours of community work to be undertaken and the supervisor's involvement in training (Microsoft Corps 1990).

Characteristics of Offenders in the Sample

Forty percent of the offenders in the sample were employed at the time they received the order or the time they were imprisoned. Sixty five percent had some history recorded in the files, of alcohol or drug abuse. On average they had been found guilty of 27 previous offences and had appeared in court 7 times. Thirty three percent had been previously imprisoned at some time and 27 percent had no prior convictions. Sixty eight percent had been convicted of property related offences and 16 percent convicted of assault and other person offences. The mean age was 26.

Recidivism Measures

A range of recidivism measures are used in this study. It can be argued that any one measure may provide an inadequate measure of recidivism. There are many examples of research studies which have found different results depending on the particular recidivism measure used (eg Fo and O'Donnell 1974, Lunden 1989).

The first measure relates to an official breach of parole or a community based order, having been completed, whether by conditions or by further offence, within one year of its commencement. An official breach is defined as, having had a breach report completed by a Community Corrections Officer (CCO), and a decision made that the matter is to be returned to court or the Adult Parole Board.

Note that official breaches by further offence involve the CCO becoming aware that the client has committed a further offence during the period of the order. The CCO gains this information either from the client, from individual police, from the courts or from police records. The CCO then completes a breach report and the matter is, except in the case of trivial offences, returned to court and the client is re-sentenced on the original offence for which they received the Community Corrections Order. In the case of parole a similar system operates with the Parole Board making decisions about breach rather than a court.

Breaches of conditions involve the preparation of a breach report by the supervising CCO, following the failure of the client to complete the conditions of the order as required. In most cases this involves the failure to complete community work, the failure to attend for appointments, or the failure to notify change of address and the consequent inability of the CCO to contact the client. The matter is then returned to court or the parole board, in the same way as it is for offence breaches.

The breach measure is broken down into offence related and conditions related breaches.

A second measure is also used which includes any official breach, plus any additional offence noted on police records which was committed during the period of the order. On some occasions the Office of Corrections, and individual Community Corrections Officers, are unaware of further offences having been committed or that charges have been laid, often because court appearances for offences which occurred during the life of the order, are not heard until after the order has been completed. The information was collected from police records an average of 8 months after the completion of the order and most of the additional offences included in this measure related to offences committed during the latter stages of the order (in most cases after the community work hours had been completed).

A third recidivism measure, imprisonment, is also used in this study. This measure refers to whether or not clients were imprisoned for offences committed during the period of the order. Imprisonment includes both suspended sentences or actual incarceration, received either for the offence which breached the order, or for the disposition imposed for the breach itself when it was returned to court.

Follow Up Period

The follow up period of one year is used for most of the recidivism measures reported in this document. Whilst this period is relatively short, it is seen as appropriate for several reasons. Ninety five percent of the clients in the sample received sentences which were for one year or less and the study is concerned with the impact of the sentence. The average period of community work was 164 hours which would normally be completed within about six months. (In fact if an offender worked for eight hours each week, which is the normal expectation, the

work would be completed within 20 weeks). Further, a number of studies have found that the majority of offenders on Community Based Orders will offend within the first twelve months if they are going to offend (Gendreau and Leipziger 1978, Andrews 1979). One study found that more than half of those who offended within three years in fact offended within six months and seventy percent within one year (Cochran et al 1981).

Despite this, data regarding a twenty month follow up period is also provided in order to consider whether the impact of the community work program reduces after involvement in the program ceases.

Risk Measures

As indicated above, the risk measure used by all CCOs in Victoria is contained in the Community Based Corrections Intake and Assessment Form. This form is completed on all offenders who are placed on orders in Community Based Corrections. The form is either completed at court, when individuals are assessed for Community Based Orders, or it is completed at the Community Based Corrections Centre, for individuals placed on parole.

The form is based on a measure developed in Canada (Andrews 1982) referred to as a Level of Supervision Inventory (LSI). It contains a checklist of forty nine factors which are related to the likelihood of re-offending. It includes items such as: the number of prior offences, the age at which the first offence was committed, whether or not the individual has been imprisoned, educational and employment status, finances, family situation, accommodation, leisure activities, companions, alcohol and drug problems, emotional and psychiatric situation and attitude towards crime.

Each item which is ticked as a risk factor is allocated a score of one and the scores are then totalled to give a total risk score. The risk score is then used to allocate offenders to high or low risk categories. The Intake Form is completed by the Community Corrections Officer or other trained Correctional Worker following an interview and survey of case records.

The LSI as developed in Canada has been subjected to rigorous testing as a measure of recidivism (Andrews 1982, Andrews and Robinson 1984, Motiuk, Motiuk and Bonta 1992). It was initially used in the probation service in Victoria in 1984

and introduced as the standard risk assessment measure across the state in 1985. An evaluation of the assessment measure was completed in the Victorian Office of Corrections in 1987 (Saunders et al 1987) and some changes were subsequently made to it.

As outlined in Chapter 4 there have been difficulties in the administration of the risk profile in Victoria. Consequently the data in this study was also analysed using a measure of risk which includes six factors which have been shown in other studies to be related to re-offending. These include age at first offence, prior convictions, prior imprisonment, prior use of illegal drugs and employment status at time of offence. The results of this study were however very similar using either measure and consequently the results are reported here only using the community corrections intake measure. The six point measure correlated very strongly with other risk prediction factors.

RESULTS

Recidivism Rates

Offenders placed on group community work sites had substantially and significantly higher recidivism rates, in comparison to those placed on individual sites, on the measures used in this study. It can be seen from Table 1, that the recidivism rates on the three recidivism measures are thirty to fifty percent lower, among offenders placed on individual worksites. The difference on each of the measures is significant within the .05 level using a two tailed chi square test. (The more conservative two tailed test is used even though a particular direction was predicted (Weinbach and Grinnel 1987) because of the difficulty of being certain about the direction of results in criminological research).

Those offenders who were placed on both individual sites and group sites at different times during their orders, were less likely to breach, in comparison to offenders placed on group sites for the duration of their community work and more likely to breach in comparison to offenders placed on individual sites. It should be noted however that the numbers who experienced both group and individual worksites were relatively small (33) and the difference with the other groups was not statistically significant within the .05 level using the chi square test. Whilst the direction of the outcomes for those offenders who experienced both individual and group worksites is generally consistent with the expectations of this study, it is difficult to draw any meaningful conclusions given the small numbers.

TABLE 1

COMMUNITY WORK WITH OTHER OFFENDERS AND RECIDIVISM

	Alone (n=127)	Both (n=33)	With Others (n=115)
Official Breach (p= . 003 Alone/With Others)	30% (38)	33% (12)	48% (55)
Police Records (p= . 03 Alone/With Others)	36% (46)	39% (13)	50% (57)
Prison (including suspended sentences) (p= . 01 Alone/With Others)	12% (15)	24% (8)	24% (28)

As shown in Table 2 the recidivism rates for those on individual sites, were lower in relation to both conditions breaches and breaches relating to further offences. As explained above, community workers may have their orders breached after being convicted of a further offence, or for failing to comply with conditions of the order, such as attending for community work or notifying change of address.

It is also apparent from Table 2 that those offenders who were moved from one type of worksite to another during the order, were more likely to breach by conditions. It seems likely that some offenders were moved to alternative worksites because they were problematic or unreliable community workers and this may explain why they had a greater incidence of conditions breaches. The lower rate of offence related breaches may be explained by the fact that some of these offenders were breached by conditions before they had time to offend.

On the other hand offenders are sometimes moved to alternative worksites as a reward for good performance. The findings in relation to those offenders who experienced both group and individual worksites are difficult to interpret and, as pointed out above, they are not statistically significant and may simply relate to chance.

TABLE 2**OFFICIAL BREACHES BY CONDITIONS AND FURTHER OFFENCE**

	Alone (n=127)	Both (n=33)	With Others (n=115)
CONDITIONS (p= .05 Alone/ With Others)	5% (6)	18% (6)	10% (12)
OFFENCE (p= .02 Alone/ With Others)	25% (32)	18% (6)	37% (43)

Risk Levels

Offenders placed on individual worksites were a lower risk group of offenders. The mean risk score for offenders placed alone was 8.8 compared to 10.1 for offenders placed on group sites. The difference between the two groups is statistically significant (Kruskall Wallis H, $p=.03$).

The risk score was even higher for offenders placed on both individual and group sites at different times during the order (12.0), perhaps reflecting that high risk offenders were more likely to be removed from individual sites, because of poor behaviour on the worksite, poor work habits or unreliability.

As explained above, logistic regression provides a method which can determine whether or not the differences between the groups can be explained by other variables (Microsoft Corp 1990). Table 3 indicates that when account is taken of the risk score of the clients, the number of hours of community work which the client was required to undertake and whether or not the offender was supervised by an officer who had been involved in a particular training course, there continues to be a difference between the recidivism rates of those who worked on individual sites and those who worked on group sites. The difference is within the .05 level of significance for two of the measures and within the .10 level for the other measure.

The variable relating to the type of worksite is defined simply as individual worksite versus group worksite. The variable relating to training is included in the analysis because, as discussed earlier, a majority of the supervisors had been involved in a training course on counselling skills and this could be construed as a bias in the sample. The number of hours of community work that the offenders were required to undertake as part of their sentence was also included because it seems likely that those offenders with more hours would have more opportunity to breach by conditions.

TABLE 3

LOGISTIC REGRESSION ANALYSIS OF THE RELATIONSHIP BETWEEN RECIDIVISM, TYPE OF COMMUNITY WORK PLACEMENT, CLIENT RISKSCORE, NUMBER OF HOURS OF COMMUNITY WORK AND WHETHER THE SUPERVISOR WAS INVOLVED IN A TRAINING COURSE

OFFICIAL BREACH

Variable	B	S.E.	Sig
NHOURS	.0005	.0014	.705
TRAINING	-.3266	.2802	.243
COMWK	.6532	.2789	.019
RISKSCORE	.0602	.0287	.035
Constant	-1.9151	.5918	.001

POLICE RECORDS

Variable	B	S.E.	Sig
NHOURS	.0007	.0020	.743
TRAINING	-.0276	.3831	.942
COMWK	.7240	.3808	.057
RISKSCORE	.0782	.0401	.051
Constant	-2.0135	.7830	.010

TABLE 3 Continued

PRISON

Variable	B	S.E.	Sig
NHOURS	.0012	.0018	.500
TRAINING	-.3036	.3621	.401
COMWK	.7631	.3685	.038
RISKSCORE	.1003	.0367	.006
Constant	-3.8056	.8351	.000

(n=232 Note: Number of hours not available for all clients and offenders who experienced both types of worksites excluded therefore n < 275).

As explained earlier the police records measure includes offences which were committed in the latter stages of the order at a time when most of the offenders could be expected to have completed their community work. The lower statistical significance using this measure suggests the impact of the community work may be at least partially lost once it is completed.

It is apparent however that there is a statistically significant relationship (within the .05 level) between recidivism and community work placement on at least two of the recidivism measures used and that this relationship is independent of the risk levels of the clients, whether the supervisor was involved in a particular training course and the number of hours of community work that the offender was required to undertake.

It is worth noting that other factors, not included in the logistic regression (because a full set of data was unavailable) such as the level of experience or education of the Community Corrections Officers, were not factors which were significantly related to client recidivism and again could not explain the differences in recidivism relating to the type of community work placement.

Twenty Month Follow Up

A follow up of files and police records an average of twenty months after the commencement of the orders revealed that offenders who had undertaken Community Work on individual worksites, continued to have lower rates of recidivism. This is significant within the .05 level using the chi square test. This is shown in Table 4 which uses a recidivism measure consisting of any record of breach or offence, noted in files or police records after 20 months of receiving the order.

TABLE 4

**ANY OFFENCES OR BREACHES RECORDED ON POLICE RECORDS
AFTER 20 MONTHS**

	Alone (n=127)	Both (n=33)	With Others (n=115)
Anything Recorded	42% (53)	45% (15)	57% (66)

(p=.01 Alone/With Others)

The percentage differences between the groups is less than the measures used at the 12 month follow up, but there remains a significant difference. Table 5 indicates that when account is taken of other factors using the logistic regression analysis the differences are just outside the .05 level of significance. It does appear from the results of the 20 month follow up, and the police record measure referred to above, that the impact of the type of community work placement was at least partially lost after the offenders had completed their community work.

TABLE 5

**LOGISTIC REGRESSION ANALYSIS OF THE RELATIONSHIP
BETWEEN TYPE OF COMMUNITY WORK SITE, AND ANY OFFENCE
OR BREACH NOTED ON POLICE RECORDS AFTER 20 MONTHS,
AND RISK LEVELS OF CLIENTS, NUMBER OF HOURS OF
COMMUNITY WORK AND WHETHER THE SUPERVISOR WAS
INVOLVED IN THE TRAINING COURSE**

Variable	B	S.E.	Sig
NHOURS	.0015	.0014	.290
TRAINING	-.3240	.2748	.238
COMWK	.5190	.2733	.057
RISKSCORE	.0737	.0286	.010
Constant	-1.5705	.5739	.006

(n=232)

It is apparent from the results that there is a relationship between recidivism and the nature of the community work site. This relationship seems to diminish, as might be expected, after the offenders have completed the period of community work.

The tables suggest that placement on a community worksite with other offenders increases the likelihood of re-offending from between 25 and 100 percent depending on the particular measure used. This impact continues to be evident when account is taken of other variables including risk, training and hours of community work. An analysis of the odds ratios allows for the establishment of probability levels taking these variables into account.

If for example the probability of breaching for an offender placed on a worksite without other offenders was .3 (as it would be for a typical offender) then the probability of breaching would increase to .45 if the offender were placed on a group worksite (the odds ratio of .42 is increased by 1.92 to .80). In relation to the police record measure the probability of recidivism for a typical offender increases from .36 to .46 (odds ratio of .56 increased by 1.52). For imprisonment it is

increased from .12 to .22 (odds ratio of .29 increased by 2.14). And the probability of anything being known to police after 20 months increased from .42 to .54 (odds ratio of .72 increased by 1.68).

Space prevents a more detailed presentation of results in this paper however it is worth noting that the apparent impact of undertaking community work with other offenders was greater in relation to younger offenders. This is perhaps expected given that young offenders seem more likely to be influenced by peer group than older offenders. For example the imprisonment rate for offenders under the age of 25 was 14 percent (9/63) for those on individual worksites, compared to 31 percent (20/64) for those on worksites with other offenders. For those under twenty one the comparison was even more stark with only 9 percent (3/34) on individual sites receiving sentences of imprisonment compared to 28 percent (11/39) on group sites. The logistic regression taking account of other factors revealed a significance figure of .051 and .049 respectively.

DISCUSSION

Conclusions

It seems reasonable to conclude on the basis of this study that offenders who were placed on community worksites with other offenders were more likely to re-offend than offenders who were placed on worksites on their own or with other members of the community. The study suggests that the impact of being placed on worksites with other offenders was independent of other factors such as the training of supervisors, the risk levels of the offenders or the number of hours to which the offenders were sentenced. The study also suggests that the influence of work-site placement diminished after the period of community work had been completed and that its influence was greatest among younger offenders.

Limitations

It could be argued that a limitation of this study is that the levels of significance, particularly in relation to one or two of the outcome measures, are not particularly strong.

It could be argued that because several models have been fitted to the regression analysis a more conservative test could be applied (eg .025 or .01) to protect against type 1 error (concluding that a relationship between variables exists when it is simply a chance occurrence). Given the small numbers in this study however (only 232 because the number of hours was not available for all clients) a more conservative test would increase the chances of type 2 error (concluding that a relationship does not exist when it in fact does). A .05 level of significance seems therefore to be appropriate. This is particularly so given that the more conservative two tailed tests of significance are used.

It is commonly argued that a .05 level of significance is appropriate for social science and criminological research (Phillip McCulloch and Smith 1975, Weinbach and Grinnell 1987, Palmer 1992). In fact it is argued by Weinbach and Grinnell (1987) that a .10 level may be sufficient to accept a hypothesis where it is one of a series of significant findings.

Nonetheless the findings of the study need to be interpreted with some caution given the possibility of type 1 error and the general lack of research in this area.

The study does have other limitations. It has classified the type of community work site in very broad terms. It distinguishes only between worksites where offenders work alongside each other and worksites where they work alone or with community groups. It does not consider the relative impact of more meaningful work versus less meaningful work, or of working with community groups versus working alone. It could be, for example, that individual sites provide more meaningful work, and that this relates, at least in part, to the lower recidivism rates of offenders on those sites. The study does not look at management issues involved in placing offenders on different types of worksites.

Implications for Criminological Theory

As indicated in the introduction "Contamination Theory" referred to in the title of this paper encompasses a number of different criminological theories including social learning theory, modelling theory and differential association theory. The findings of the study are consistent with and provide a practical example of criminological theories which suggest that offenders are likely to learn from a pro-criminal peer group.

The particular contribution of this study is that it suggests that contamination theory may operate within community correctional programs. Considerable evidence exists that criminal peer group associations in the community are related to criminal behaviour (Akers 1994). Some evidence exists that institutional programs may have a "contaminating effect" (Petercilia and Turner 1990) however this study suggests that this effect may extend to community correctional programs.

Implications for Social Policy

At the time the data for this study was collected (1991 and 1992) 54 percent of offenders in Victoria who received sentences of community work undertook those sentences with other offenders. The Victorian department has recently developed a policy of maximising placements on individual and community group worksites. This has occurred as a direct response to the results of this study and it illustrates its direct relevance to the development of correctional policy. Anecdotal evidence suggests that the figure of 54 percent on group worksites has already been reduced.

This has been possible in Victoria where the type of community work placement offered to offenders is, at least in part, at the discretion of the Community Corrections Centre which has responsibility for the administration of the order. In other jurisdictions however placement of offenders on group worksites is more institutionalised and changes of policy may be more difficult. For example Periodic Detention in New Zealand involves the routine placement of offenders on group worksites. A move towards more individualised or community oriented sites would involve substantially more re-organisation and perhaps legislative change in a way that has not been required in Victoria. Nonetheless the results of this study suggest that such changes may well be productive.

The results of this study also suggest that there may be criminalizing effects present in other correctional programs which involve the mixing of offenders with each other. The results perhaps sound a note of caution regarding the use of group programs in corrections generally. There is certainly a need for more research in this area.

A Look Forward

Whilst there is a need for further research in this area, the results of this study do suggest that widespread changes to the proportion of offenders placed on individual community work sites, might have a general impact on the breach rates of offenders placed on community work orders. There are more than 7000 offenders on Community Based Orders in Victoria (Office of Corrections 1992) and most of those have community work conditions. Even a small reduction in the offending rates of these people would have substantial benefits for corrections and the community, not to mention the potential victims of criminal activity.

Perhaps most importantly this study provides further support for the view that community based corrections programs do have an influence on client recidivism (eg Andrews et al 1990, Trotter 1993). The opportunities are increasing for Probation Services or Corrections Departments to develop programs which are based on research findings and which are likely to have a real impact on the re-offending rates of those people under their supervision.

Risk Prediction in Community Based Corrections 5

ABSTRACT

The Victorian Department of Justice has used a risk prediction profile in Community Based Corrections for almost ten years. The profile is completed on most offenders either at court prior to their placement on community programs or at corrections centres before allocation to particular forms of supervision. The aim of the profile is to assist courts in sentencing and to assist the corrections department in allocation to programs and levels of supervision. This article examines the effectiveness of a particular profile (an adaptation of the Canadian Level of Supervision Inventory) which was in use for almost ten years in Victoria and continues to be used in some other states and countries. It is apparent that the profile was not as predictive of re-offending as expected and less predictive than more simple measures. The reasons for this are discussed.

BACKGROUND

In most community based corrections or probation departments routine assessments are made of the likelihood that individual offenders will re-offend. This is usually done by a Probation Officer or a Community Corrections Officer during the first one two or three interviews and often the level of risk as determined by the Officer will influence the type of supervision that the offender will subsequently receive.

There are sometimes arguments presented against use of risk levels for these purposes. It is argued that they provide for a second level of sentencing, that they disadvantage the already disadvantaged and that they set up a self fulfilling prophesy. On the other hand it is argued that higher risk offenders should receive more

attention and that the community will be safer if they do. There is certainly some evidence that higher risk offenders are more likely to benefit from supervision (Andrews et al 1986, 1990, Fo and O'Donnell 1975, Lunden 1990).

Whatever the arguments for and against the use of risk assessment it seems that most corrections departments use some form of risk assessment whether this is formal or informal.

There are two common methods of assessing risk of re-offending. These include clinical or professional assessments whereby the Officer interviews the client and gathers information from other sources such as police and family and then makes a professional judgement about the level of risk of the offender.

The second method often used to assess risk of re-offending involves the use of risk prediction scales. This method is examined in this article. Risk prediction scales are used extensively in community based corrections and in some cases in prisons. The scales usually constitute a battery of questions which are related to the likelihood of an offender re-offending within a certain period of time. Information is gathered by community corrections officers in interviews with the client and other relevant people such as family members, and through written information in police records, file notes, court reports, etc. The officer then completes each of the questions and a total risk score is derived by adding up the positive or negative answers.

There are a large number of risk prediction instruments used in correctional service departments around the world. Most have been developed through some type of research which has involved testing their predictive capacity (eg Andrews et al 1982, Humphrey et al 1992, Cochran et al 1991). Sometimes as has been the case in Australia they have been developed in one place and used as they are or in adapted form (Saunders et al 1986).

Risk prediction devices are most often used to predict risk of re-offending or breaching during a period of probation or some other community based order. They may also be used for other purposes and in other settings, for example risk prediction scales may aim to predict the likelihood that offenders in custody will be re-incarcerated (Shields 1993), to predict success in half way houses or rehabilitation programs (Coulson 1993, Motiuk 1993) or to predict behaviour problems among young people in custodial or residential settings (YMA 1992).

The risk prediction scales may be defined as risk need scales so that the risk score reflects both levels of risk of re-offending but also reflects levels of client need for supervision (Andrews et al 1982) or alternatively they may present separate scores for risk and need (Cochran et al 1981).

The purposes for which the risk prediction scores are used vary between different correctional departments. In community based settings they may be used to allocate offenders to particular levels of supervision and/or they may be used to assist in the provision of advice to courts for input into the sentencing process as is the case in Victoria.

The rationale for the use of risk prediction scores rests on the belief that risk prediction devices are more predictive of risk than simply using professional judgement. There is some research support for this view (eg Hassin 1986).

Risk Prediction in Australia

A risk prediction instrument was introduced into the Queensland Probation Service in the early 1980s following the visit of one of the senior staff members in that organisation to Ontario in Canada. The instrument was developed through research by DA Andrews et al (1982, 84) in collaboration with the Ontario Probation Service and it was known as the Level of Supervision Inventory (LSI). The LSI in modified form continues to be used in Queensland as it is in Ontario.

The LSI was introduced on a trial basis in the Victorian Office of Corrections in 1984 and subsequently adopted on a statewide basis during 1985. It was reviewed within the Victorian Office of Corrections during 1986 (Saunders et al 1987) and some adaptations were made to it. Several of the questions were dropped and some were added.

In 1987 the Department of Corrections in South Australia following consultations with Victoria, introduced the LSI in its amended form for use across the state.

The intake and assessment form as the revised LSI was called continued to be used in Victoria until the introduction of a new form on a trial basis in 1994.

PURPOSE OF THIS STUDY

This study considers the effectiveness of the Victorian Intake and Assessment form in terms of its stated objective. That is to what extent does it predict the likelihood that an offender will breach his/her community based order?

Whilst the intake form is no longer in use in Victoria it continues to be used in Queensland and in South Australia. It is also in use in slightly different form throughout the province of Ontario in Canada and in several states in the U.S.A.

The results of the study are likely to be of interest to people in those states and to others interested in the practicalities of introducing a risk prediction form into a culture and into circumstances for which it was not specifically developed.

METHODOLOGY

Content of the Victorian Intake and Assessment Form

The intake and assessment form includes 49 questions each of which can be answered with a yes/no answer. The questions relate to factors which are likely to be related to the chances of further offending, for example criminal history, education and employment, financial situation, marital and family, stability of accommodation, leisure and recreation activities, companions in the community, history of alcohol and drug problems, emotional and personal adjustment, attitude and orientation towards crime and whether the offender has a current driving licence.

Purpose of the Victorian Intake and Assessment Form

The risk prediction device is used in Victoria to assess the likelihood that offenders will breach (or successfully complete) their community corrections orders or parole orders.

It is completed at the court house at the stage of the initial court assessment in the case of offenders who are placed on Community Based Orders, however it is completed at the Community Corrections Centre after offenders have been released on parole.

The risk assessment is used to determine levels of supervision that offenders receive once they are placed on a community based order or parole and the assessment is also used in advising courts about the appropriateness of particular dispositions. CCOs are likely to recommend lower tariff dispositions for offenders who score low on the assessment form.

Previous studies on the validity and reliability of the Assessment Instrument

The LSI in the form in which it was first introduced into Community Based Corrections in Victoria had been subject to extensive testing in Canada and it was shown to be a valid and reliable instrument for predicting risk.

Andrews et al (1982) indicate that where probationers scored more than 24 on the LSI 60 percent showed "any evidence of recidivism" (including technical violations, further offences and charges pending) where they scored between 12 and 23 the recidivism rate was 33 percent, from 8 to 11 it was 15 percent and 7 or less it was 6 percent. Andrews et al indicate that the correlation between riskscore and in program outcome status was .47 which "is to this authors knowledge, a level of predictability unprecedented in the correctional literature" (Andrews et al 1982:15).

Andrews et al (1982) also refer to high levels of inter rater reliability and stability of scores over one or two months.

Approximately two years after the introduction of the LSI in Victoria an evaluation was carried out by the Victorian Corrections Department. The evaluation among other things attempted to evaluate the extent to which the form was effective in predicting risk levels and the extent to which CCOs actually used it for this purpose..

The report (Saunders et al 1987) found that whilst most staff indicated that they used the form to predict risk and need staff "appeared to rely quite heavily on their personal judgement or gut reaction in addition to the assessment form when making judgements" (Saunders 1987:1) and that staff felt that they needed more training in its use. They also found that in many instances the yes/no answers were not even totalled by the probation officers.

The Victorian report considers only 97 cases where breaches had occurred and the score had been totalled. Those scores were however very predictive of breaches of the probation orders. Low risk offenders (0-9) breached at one third the rate of the average (mean), medium risk offenders breached at the average rate and high risk offenders breached at more than twice the average rate. In fact high risk offenders breached at more than six times the rate of low risk offenders.

Some modifications were subsequently made to the form. Ten questions were removed either because they were answered very rarely or they did not correlate with the overall score. A decision was made to continue to use the form but to try to increase and improve its use by providing more training.

The evaluation which is reported on in this study was undertaken on offenders who received orders in 1990/1 some years after the Office of Corrections evaluation. By this time totals were required to be entered into the computer record system and were in fact added up by the system.

Sample

The sample included 226 Offenders placed on Community Based Orders or parole in 1990 and 1991.

The sample was selected using a systematic sampling method partly from the caseloads of a group of 12 CCOs who undertook a particular training course. The CCOs were located in 9 different Community Based Corrections Centres in Victoria. The remainder of the sample was selected using a systematic sampling method from the same centres. The data was collected in this manner for another study.

Whilst the sample is not entirely selected in a random manner, there were minimal differences between the two groups (the clients of those who did the training course and the clients selected systematically from the same centres) in terms of recidivism rates or risk scores and there is no reason why the method of sample selection would in any way bias the analysis.

Outcome Measures

Two recidivism measures are used in this study. Whilst the aim of the intake and assessment is to predict the likelihood that offenders will breach their orders it is also interesting to consider other measures. An effective prediction instrument it might be argued would predict both the likelihood of breaches, the likelihood of imprisonment and other recidivism measures. For the sake of brevity only two measures are reported here.

The outcome measures used in this study include official breach and imprisonment resulting from a breach. The official breach measure refers to any official breach, whether by conditions (eg failure to report) or by further offence, within the period of the order resulting in the matter being returned to court or the parole board for a hearing for breach of the order. Note that almost all orders were for one year.

The second measure provides an estimate of the seriousness of the breach by considering whether or not the offenders were imprisoned for an offence committed during the period of the order. The imprisonment measure includes imprisonment involving actual incarceration as well as suspended sentences received for an offence committed during the period of the order.

RESULTS

Risk Score and Outcome

Table 1 refers to the relationship between scores on the intake and assessment form and recidivism rates on each of the three outcome measures. Table 1 indicates that the intake and assessment form score is clearly related to the outcome measures. Offenders judged as high risk are clearly more likely to breach their orders than those judged as lower risk. Only on the imprisonment measure is the expected trend less evident and this may be related to the small numbers.

Table 1**RELATIONSHIP BETWEEN RISK SCORE AND OUTCOME MEASURES**

	Official Br	Prison
< 2	3/19 16%	4/19 21%
2-7	24/76 32%	7/76 9%
8-12	33/77 43%	18/77 23%
>12	24/54 50%	16/54 30%

The correlation between the risk score and official breach is .1955 and for prison it is .1954. These correlations are certainly less impressive than that reported by Andrews et al (1982) and it is apparent that the instrument is less predictive of outcome than the Canadian study.

Further analysis of the results suggest that the risk score is not predictive of conditions only breaches. The correlation for conditions only breaches is in fact negative (-.0439) whereas for offence only breaches it was slightly stronger (.2122).

A Simple Prediction Measure

Given the apparent weakness of the Intake and Assessment form risk score it is interesting to compare it to a much simpler measure. If the risk score provides a useful device for risk prediction it would be expected that it would provide for more powerful prediction than a more simple measure.

In an attempt to devise a simpler prediction device a number of variables were selected which could be expected to correlate with outcome measures. These included age at commencement of order, evidence in files of prior drug use, age at first offence, prior convictions, unemployment at the time of the offence and prior imprisonment.

These were analysed through a forward stepwise logistic regression in SPSS PC in order to determine which of the factors were significantly and independently related to the outcome measures.

The variables produced through this process were then related to the outcome measures. The predictive measures include in order of predictive strength for the official breach and the any breach measures, prior convictions, age and prior drug use. For the prison measure only prior convictions and age were significant independent predictors.

A table using 0 to 3 points depending on the number of predictive variables present among offenders in the sample reveals that the simpler measure looks to be a more effective predictor than the intake score.

TABLE 2

RELATIONSHIP BETWEEN A SIMPLE PREDICTION MEASURE AND OUTCOME

Score	Official Br	Prison
0	3/20 15%	1/20 5%
1	19/86 22%	5/86 6%
2	36/70 51%	20/70 29%
3	29/49 59%	19/49 39%

The correlations between the simpler breach measure and official breach is .3391 which is much stronger than the intake score measure although it is not as strong as the correlation between breaches and the LSI in the Andrews et al (1982) study. The correlation for prison and the simpler measure is .3294. Again the measure predicts offence related breaches (.3180 better than conditions only breaches (.0764) which was not significantly related to the simpler risk measure.

It is apparent that the simpler measure is more predictive than the intake and assessment form score. Using the four point scale simple measure indicates that high risk offenders are about 3 times more likely to breach and about six times more likely to be imprisoned in comparison to low risk offenders. The intake score is less predictive, suggesting that high risk offenders are less than twice as likely to breach and more than twice as likely to be imprisoned. The correlation coefficients were also stronger on each of the outcome measures using the simpler measure, in comparison to the intake form measure.

It is recognised that this measure has been developed with a specific sample and could not be expected to be as predictive with another sample. The use of other simple measures are however also more predictive than the Intake and Assessment score. For example the use of the six items referred to above (age, prior illegal drug use, age at first conviction, employment, prior convictions and prior imprisonment) reveal a correlation of .3333 and .3300 for breaches and imprisonment respectively. Simply using the number of prior convictions provides a correlation with breaches of .2323 and with imprisonment of .2718.

CONCLUSIONS, LIMITATIONS AND IMPLICATIONS

Conclusions

It is clear that the Community Based Corrections Intake and Assessment Form does predict with some accuracy the likelihood of breaching and of being imprisoned as a result of breaching offences. The form is however less predictive of recidivism than other more simple measures such as a four point scale incorporating the criteria of prior convictions, age and prior drug use.

It is also not as predictive as it was in the original Canadian research (Andrews et al 1982). This may be explained by several factors. The 10 questions which were taken off the form following the 1987 evaluation may have reduced its predictive capacity. This seems unlikely however given that they were removed because they were the questions which made the least contribution to the overall score.

A more likely explanation relates to the way in which the form is used. The intake and assessment form is completed at court in most instances and it is completed under time pressures. Sometimes CCOs may be forced to complete the form within 15 or 20 minutes. In many instances the answers to the questions are not able to be verified until after the assessment has been completed and hence information may be inaccurate.

On the other hand it may be that the predictive capacity of an instrument such as this will inevitably be reduced as time goes by and as the form becomes a routine part of the work rather than a new innovation. When a practice is new and staff are aware that it is being evaluated they may be inclined to put more effort into its use.

Or perhaps the whole idea of taking an instrument which has proved successful in one country and expecting that it can be adopted in another, with similar outcomes, is unrealistic. Perhaps these results present a strong argument for individual corrections departments to develop their own predictive devices which suit local conditions and cultural expectations.

Limitations of this study

The Intake and Assessment form aims to provide a means of assessing client needs and serves as a check list for a professional assessment of offenders. This study has not examined the extent to which it is appropriate for this purpose. It does involve the collection of a range of relevant information and this alone might justify the use of the form. This study has not aimed to evaluate the use of the assessment form as a whole. It has aimed only to consider its effectiveness as a predictive device.

This study has not considered perhaps the most fundamental question relating to the use of risk prediction instruments. That is, does it predict recidivism better than professional or clinical judgement alone. This question is outside the scope of the study however the justification for use of such devices rests to some extent on the answer to this question.

Whilst the study has distinguished between conditions and offence related breaches it has not addressed the extent to which the form is predictive in relation to particular types of offenders. Does it for example work best with sex offenders or property offenders? Does it predict recidivism among perpetrators of domestic violence or among particular minority groups.

It could also be that the allocation of offenders to appropriate programs as a result of scores on the form results in higher risk offenders doing better. There is some evidence that this might be expected (Lunden 1990, Fo and O'Donnell 1975, Andrews 1990). The risk prediction device may have been excellent however high risk offenders may have offended less because of a treatment effect and as a result the predictive device appeared inadequate. This argument is discussed in more detail in Palmer (1992) and it brings into question the validity of evaluations of any risk assessment device with a treated population. It does not however explain why the simpler prediction device was a more effective predictor following treatment.

It might also be argued that this study is of little value because it presents an evaluation of the inadequate use of an instrument which has been shown in other situations to be effective (Andrews et al 1982, 1983, 1984). A good instrument used badly wont work. So what! It can be reasonably argued that if such an instrument is to be evaluated it should be evaluated in the circumstances for which it was intended?

In responding to this argument it needs to be pointed out that the findings of this study do not suggest that the profile itself is an ineffective prediction device. The findings suggest rather that it was less effective than expected when used in particular circumstances in a particular setting. As pointed out below the implications of this relate to the need to use an appropriate profile for the particular situation and circumstances.

Implications

Scores on the Victorian Intake and Assessment Form are influential in determining the level of supervision offenders may receive and the nature of the programs they are offered. They may even be influential in the actual sentencing process. Any improvement in the capacity of the Intake form to successfully predict recidivism rates might therefore lead to a fairer and more effective process.

It seems that there may be certain principles or guidelines which Community Corrections Departments might keep in mind when making use of risk prediction instruments.

The instrument should be appropriate to the circumstances in which it is to be used. If it has to be completed within 15 or 20 minutes then a short form with only a few questions is likely to provide for more accurate assessment than a longer 50 question battery. More detailed assessment for case planning purposes could then occur later.

Care should be taken in introducing forms which have been developed in other cultures. If a form developed in another country is introduced then it should be evaluated in terms of its appropriateness to local conditions.

Because the form works well one year after its introduction it does not necessarily mean that it will work well five years later. There is an argument for ongoing monitoring or evaluation of the effectiveness of a form the use of which has become routine rather than innovative.

By way of conclusion it should be pointed out that the Victorian Justice Department introduced a form which had at the time very sound research support, albeit in Canada. It has, along with some other states been at the forefront in its willingness to work with the latest technology in the area of risk assessment. This is the second evaluation that has been carried out on the Intake form and the Victorian Department following a review of its risk assessment process has now introduced a new shorter form. Perhaps this study points more than anything else to the need for the kind of ongoing evaluation which the Victorian Department of Justice is in the process of undertaking.

BIBLIOGRAPHY

Akers R L, (1973) *Deviant Behaviour A Social Learning Approach*, Wadsworth Publishing Coy, California

Akers R L, (1994) *Criminological Theories Introduction and Evaluation*, Roxbury Publishing, California

Andrews DA, Young JG, Wormith JS, Searle CA and Kouri M, (1973) 'The Attitudinal Effects of Group Discussions Between Young Criminal Offenders and Community Volunteers' *Journal Of Community Psychology*, Vol 1, No 4, pp417-422

Andrews D A, Keissling J J, Russell R J, and Grant B A, (1979), *Volunteers and the One to One Supervision of Adult Probationers*, Ontario Ministry of Correctional Services, Toronto

Andrews D A, (1982) *The Level Of Supervision Inventory*, Psychology Dept, Carlton University, Ottawa, Canada

Andrews et al 1990

Andrews DA, Zinger I, Hoge R, Bonta J, Gendreau P and Cullen F (1990) "Does Correctional Treatment Work? A clinically relevant and psychologically informed meta-analysis" *Criminology* Vol 28, No 3, pp369-401

Andrews D A, Keissling J J, Mickus S G, Robinson D, (1983) *Some Convergent and Divergent Validities of the LSI*, Paper Presented to the Annual Meeting of the Canadian Psychological Association, Winnipeg, Manitoba

Andrews D A, Zinger I, Hoge R D, Bonta J, Gendreau P, Cullen F T, (1990) 'A Clinically Relevant and Psychologically Informed Meta-analysis', *Criminology*, Vol 28, No 3, 369-429

Andrews D A, Keissling J J, Robinson D, (1986), The Risk Principle of Case Classification: An Outcome Evaluation with Young Adult Probationers, *Canadian Journal of Criminology* Vol 28, No 4

Andrews D A, Robinson D (1984) *The Level Of Supervision Inventory: Second Report*, Ontario Ministry of Correctional Services, Canada

Bonta J and Montiuk L L (1985) "Utilization of an Interview Based Classification Instrument: A study of Correctional Half Way Houses" *Criminal Justice and Behaviour* 12, pp333-352

Bonta J and Motiuk L L (1992) "Inmate classification" *Journal of Criminal Justice*, 20

Cochran D, Brown M E, Kazarian R, (1981), *Executive Summary of Research Findings from the Pilot Court Risk/Need Classification System Report 4*, The Commonwealth of Massachusetts, Office of the Commissioner of Probation

Coulson G (1993) "Using the level of supervision inventory in placing offenders in rehabilitation programs or halfway houses" *The Jarca Journal*, Jan 1993 pp12-13

Fo W and O'Donnell C, (1974) "The Buddy System: Relationship and Contingency Conditions in a Community Intervention Program for Youth with Non Professionals as Change Agents". *Journal of Consulting and Clinical Psychology*, April 1974, pp163-169

Fo W and O'Donnell (1975) "The Buddy System – Effect of Community Intervention on Delinquent Offences" *Behaviour Therapy* 6, pp522-544

Gendreau P and M Leipziger,(1978) The Development of a Recidivism Measure and its Application in Ontario, *Canadian Journal of Criminology*, Vol 20, 3-17

C Greiner and G Roundtree "Predicting Recidivism Among Adjudicated Delinquents – A model to Identify High Risk Offenders" *Journal of Offender Counselling Services and Rehabilitation* Vol 12 1 1987

Hassin Y (1986) "Two models for predicting recidivism" *British Journal of Criminology* Vol 26 No 3 pp270-286

Humphrey C, Carter P, Pease K, (1992) A Reconviction Predictor for Probationers, *British Journal of Social Work*, No 22, pp 33-46

Kulhorn E (1979) *Non Institutional Treatment and Rehabilitation* National Swedish Council for Crime Prevention, Stockholm

Lunden R, (1989) *Parole Release and Discharge from Prison: A Comparison Study*, Massachusetts Parole Board, Paper presented to the American Society of Criminology Conference, November 1989

McIvor Gill, (1992) *Sentenced to Serve* Avebury, London

Motuik M S, Motuik L L, Bonta J, (1992) "A Comparison Between Self Report and Interview Based Inventories in Offender Classification", *Criminal Justice and Behaviour*, Vol 19 No 2

Motiuk L, (1993) "Using the LSI and other classification Systems to better predict halfway house outcome" *The Jarca Journal* Jan 1993

Office of Corrections, (1992) *Annual Report 1991/92*, Office of Corrections, Melbourne

Palmer T, (1991) The Effectiveness of Intervention: Recent Trends and Current Issues, *Crime and Delinquency*, Vol 37, No 3, July 1991, pp 330-346

Philip A, McCulloch J and Smith N (1975) *Social Work Research and the Analysis of Social Data*, Permagon Press, Oxford, England

Sarenson I G and Ganzer V J, (1973) 'Modelling and Group Discussion in the Rehabilitation of Juvenile Delinquents', *Journal of Consulting Psychology*, Vol 20, No 5, 442-449

Saunders P, Ross S, Trotter C, Nelson Z, Abamonte P, and Toner P, (1987) *Evaluation of Community Based Corrections Offender Assessment Form* Office of Corrections, Victoria

Shields I, (1993) "The use of the young offender-level of service inventory with adolescents" *The Jarca Journal*, Jan 1993 pp8-9

Sigler RT and Leenhouts KJ (1982) "Volunteers in criminal Justice" *Federal Probation* pp25-29

Sutherland E W and Cressey D R, (1970) *Criminology*, Eighth Edition, Lippincott, USA

Triplet RA, (1990) *Labelling and Differential Association: The Effects on Delinquent Behaviour*, PhD Dissertation, Criminal Justice Centre, Sam Houston State University, Texas

Trotter C J, (1990) 'Probation Can Work, A Research Study Using Volunteers', *Australian Journal Of Social Work* Vol 43, No 2, 13-18

Trotter C (1993) *The Supervision of Offenders – What Works?, Report to the Criminology Research Council*, Department of Justice, Victoria

Trotter C (1994) *The Effective Supervision of Offenders* PhD Thesis, LaTrobe University, Melbourne

Weinbach R W and Grinnell R M Jr, (1987) *Statistics for Social Workers*, Longman, New York

YMA (1993) *Youth Management Assessment*, Ministry of Correctional Services, Ontario, Canada