Anger Management and Violence Prevention: Improving Effectiveness

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The management of anger is a crucial issue in the prevention of violent crime. Programs that aim at anger management can be highly cost-effective. The 1990s and early 2000s have witnessed a renaissance of interest in the rehabilitation of offenders in many criminal justice systems throughout the world. The causes of this re-awakening of interest are many, but include the increasing evidence that rehabilitation programs have a significant impact on rates of recidivism (McGuire 1995; Hollin 1999, 2001). As this evidence has accumulated, the notion that “nothing works” in offender rehabilitation has slowly given way to an emphasis on identifying the characteristics of programs that are likely to be effective and, conversely, the characteristics of those that are likely to have no effect or even an adverse effect on rehabilitation rates (Andrews & Bonta 1998; Howells & Day 1999). This paper focuses on anger and aggression rehabilitation programs within correctional settings in South Australia and Western Australia.

Violent crime is not necessarily related to anger, but it has been argued that poor anger control often plays a role in violent offending and can be considered a criminogenic need for many violent offenders (Howells et al. 1997).

The experience and expression of anger has been studied in a wide range of clinical and non-clinical populations, including students, community residents, health-care clients, psychiatric/residential patients and adolescents in institutional care (Kassinove 1995). Cognitive behavioural anger management programs have been developed for use with many of these populations and initial research suggests that they are effective in reducing problems with anger expression (Beck & Fernandez 1998). Similar cognitive behavioural programs may also be appropriate for offender groups. A number of studies have highlighted the role of cognitive factors in anger arousal and expression in offenders.

Findings such as these have lead to the widespread implementation of anger management programs in prison and community corrections settings around the world. These are often brief (up to 10 sessions) cognitive behavioural programs designed to reduce anger arousal and improve anger control (Novaco, Ramm & Black 2001). Anger management programs take a skills approach and attempt to help program participants develop alternative strategies in the control and expression of angry impulses (for a discussion of the rationale for anger management with violent offenders, see Howells 1998; Novaco 1997).

This paper focuses on anger and aggression rehabilitation programs within correctional settings in South Australia and Western Australia. A review of international literature on the effectiveness of such programs is presented, followed by a discussion of the South Australian and Western Australian programs. The paper concludes with a brief evaluation of the effectiveness of these programs.
programs is provided, before the results of the recent Australian study are discussed. Finally, some recommendations for improving anger management outcomes are offered.

### Content of Anger Management Programs

The content of cognitive behavioural therapeutic interventions for anger and aggression has been described in a substantial number of clinical accounts, research reports and reviews (Howells 1998; Novaco 1997). It is clear that anger management training has a number of possible components, including relaxation training, social skills training and cognitive restructuring, and that these various components may have differential effects on the different dimensions of anger (Edmondson & Conger 1996). An outline of the programs forming the basis of the present study is shown in Table 1.

### Previous Studies of Anger Management

A relatively large number of outcome studies have been reported for anger management programs. However, some of these studies have been conducted with university students with anger problems or similar groups, rather than with offenders. The findings cannot necessarily be generalised to offender populations.

Narrative reviews of the general effectiveness of anger management (Howells 1998; Novaco, Ramm & Black 2001) have concluded that this therapeutic approach is effective. In recent years one of the common methods for evaluating treatment effects has been meta-analysis, which allows for a statistical summary of a large number of outcome studies to determine whether a general pattern of effectiveness is demonstrated. There have been two published meta-analyses of anger management, which have come to similar conclusions; namely, that this form of treatment has a moderate to large effect in reducing anger problems (Beck & Fernandez 1998; Edmondson & Conger 1996).

**Does Anger Management Work with Offenders?**

A small number of studies have been conducted with offenders, but many have methodological problems, including lack of control groups, absence of behavioural measures or poorly specified comparison groups. Among the more promising studies have been those by Stemac (1986), McDougall and Boddis (1991) and recent studies reported in the New Zealand correctional system (Polaschek & Reynolds 2001).

Dowden, Blanchette and Serin (1999) conducted a substantial study of the effectiveness of an anger management program with offenders in Canada. The program itself was a reasonably substantial one—25 two-hour sessions—and was shown to have an impact in reducing recidivism over a three-year period, although this improvement was found only for high-risk offenders. It is noteworthy that this program is far more intensive than anger management programs offered in many Australian jurisdictions.

None of the abovementioned studies were conducted in Australia, however, two small-scale controlled studies have been undertaken in an Australian context. These studies (reported by Watt & Howells 1999) were conducted in Western Australia, and suggest a need for caution before applying anger management indiscriminately with violent prisoners.

The Western Australia studies are of particular interest because the anger management programs evaluated were of a type and format common in various jurisdictions in Australasia. In two separate samples of violent prisoners undergoing anger management therapy, the authors found no difference between the treatment groups and untreated controls on a range of dependent measures, including anger experience, anger expression, prison misconduct and observational measures of aggressive behaviour.

Watt and Howells suggest several reasons for these findings, including:

- poor motivation of participants,
- the high complexity of the program content,
- low program integrity and
- limited opportunities to practice the skills learned.

It is also clear from Watt and Howells’ account that the participants were not subjected to a pre-treatment assessment to establish whether their violent offending was actually anger-mediated (this is discussed in more detail below).

An additional consideration in the Australian context is the over-representation of Indigenous people in offender populations. Issues about adapting anger programs to make them relevant to Indigenous participants have received little attention in the published literature (Mals et al. 2000).

In brief, although anger management and violence-reduction programs have developed and proliferated with violent offenders, the empirical and controlled evaluation of the effectiveness of such programs is at a very early stage. Large-scale outcome studies are needed in which high-risk, seriously violent offenders are exposed to anger management and similar programs, and comparisons made with no treatment and other conditions. Comprehensive outcome measures are needed, which would include self-reports, psychometric measures, behavioural observations and recidivist rates.

### The Present Study

The findings in this paper are based on an assessment of approximately 200 male offenders (mainly prisoners) in South Australia and Western Australia before and after they participated in an anger management intervention. The project was conducted from February 1999 to January 2001. The aim was to
determine what changes had occurred and then compare these with a control group of offenders who had been selected for intervention but had not yet received the program (“waiting list controls”). The offenders (the vast majority of whom had convictions for violent offences) were assessed on a wide range of tests of various aspects of the experience and expression of anger.

The core question for this research was:

What is the impact of anger program participation on offenders?

With some consistency, the results demonstrate that the overall impact of the anger management interventions was small. Although the treated group consistently made changes in the expected direction, the changes were not large enough to be of real clinical significance. It was also the case that similar small changes in the direction of improvement were observed for the control group on many measures. This would suggest that the act of completing anger assessments, the passage of time or other factors might have a small beneficial effect in themselves, even when treatment is not provided. The tendency for problem behaviours to be reactive to the assessment process itself (that is, for problems to decrease following testing) is a well-known phenomenon for psychological and psychiatric treatment interventions. This finding does highlight the need for a control group in any future evaluations of anger management (or any other) programs in correctional environments. Without a control group, it is possible to make an incorrect inference that a pre-test/post-test improvement in a program evaluation is attributable to the particular program implemented.

The critical issue is whether the improvements that occurred in the treated group were significantly greater than those that occurred in the controls. The results of the present study show that there were very few statistically significant differences between the treatment and control groups. There were only two exceptions to this pessimistic conclusion: the findings for “anger knowledge” and, to a less clear extent, for “readiness to change”. The treated group improved their anger knowledge more than the controls did, although, again, the difference was very small in absolute terms.

No significant differences were observed for community versus prison participants, however, the number of community participants was very small. Future research should re-examine community versus prison differences in a more substantial way, given the general view that rehabilitation programs in the community are more effective than in institutions. Andrews, Bonta and Hoge (1990) have suggested that appropriate treatments delivered in community settings produce two to three times greater reductions in recidivism than prison-based programs. It has also been suggested both that the social climate of prisons works against the effective delivery of programs, and that recidivism is related more to what happens in the community than what subsequently happens in institutions (Clarke 1985).

The question of whether treatment gains brought about by intervention (for example, anger reduction) endured over the subsequent months after the program ended is a very important one for any psychological intervention. It is equally important for anger management in correctional settings. In the present study, selected participants in the treatment group were followed up for two months and six months respectively. Given that the changes brought about by the program were modest, it is not easy to determine whether improvements were maintained in the follow-up period, and some caution is required in interpreting trend analyses. The analyses conducted suggested that different follow-up trends occurred for different measures. It is encouraging that the improvements in anger knowledge were maintained and even increased over the six-month follow-up. Linear trends were also found for general measures of anger, angry cognitions and other aspects of angry behaviour. This

### Table 1: Outline of the South Australian Anger Management Program and the Western Australian Skills Training for Aggression Control

<table>
<thead>
<tr>
<th>Session</th>
<th>South Australia</th>
<th>Western Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understanding what anger is</td>
<td>Understanding anger</td>
</tr>
<tr>
<td>2</td>
<td>Recognising anger and change</td>
<td>Recognising our anger / monitoring our anger</td>
</tr>
<tr>
<td>3</td>
<td>Staying in control by using timeout and relaxation</td>
<td>Staying in control of our anger / using timeout and relaxation</td>
</tr>
<tr>
<td>4</td>
<td>Socialisation identifying early patterns</td>
<td>Identifying early patterns / increasing awareness of our thoughts / beliefs: changing negative thoughts to positive thoughts</td>
</tr>
<tr>
<td>5</td>
<td>How thoughts and beliefs affect anger</td>
<td>Becoming friends with ourselves / coping with provocation using self-talk</td>
</tr>
<tr>
<td>6</td>
<td>Communication</td>
<td>Enhancing the way we communicate</td>
</tr>
<tr>
<td>7</td>
<td>Styles of communication</td>
<td>Expressing anger assertively</td>
</tr>
<tr>
<td>8</td>
<td>Stopping the violence in relationships</td>
<td>Managing our anger in close relationships / developing positive relationships</td>
</tr>
<tr>
<td>9</td>
<td>Managing our anger in close relationships</td>
<td>Conflict resolution</td>
</tr>
<tr>
<td>10</td>
<td>Making a commitment to relapse prevention</td>
<td>Review / relapse prevention</td>
</tr>
</tbody>
</table>

Source: Adapted from Howells et al. (2001), Appendix A.
suggests that the positive changes brought about by the program were further improved upon at the two-month follow-up. Some other anger measures also showed a tendency to improve further at the six-month follow-up.

**Who Does Anger Management Work Best For?**

The second major question addressed in the study was:

What participant characteristics are associated with making treatment gains in the anger management programs?

This is an important question for a number of reasons. It is widely acknowledged that violent offenders are a heterogeneous group with a multiplicity of criminogenic needs. Howells et al. (1997) have previously argued that some offenders who are referred to anger management programs in correctional systems worldwide may not actually have high anger problems—the “instrumental”, the “psychopathic” and the “over-controlled” violent offender are all possible examples of this phenomenon. If this were true, then it would be expected that the measured impact of anger management programs (for example, in pre- and post-treatment comparisons) would be significantly diminished because the treatment would only be relevant to some participants. Thus, understanding the effect of individual differences among offenders is crucial.

The results of the study support the notion of individual differences being important. The extent of change (improvement) of an individual undertaking the programs was shown to be predictable from a number of pre-treatment measures. Across a range of anger measures, those high in anger and low in anger control at the pre-treatment assessment showed the greatest change at the post-program re-test. In everyday terms, the worse you were, the more you benefited.

The readiness/motivation scale also proved to be a consistent predictor of improvement in treatment. Offenders who were motivated and ready to work on their anger problems showed greater improvements on a wide range of anger measures. Conversely, those who were poorly motivated to do so showed less or no change.

Another influential principle in correctional rehabilitation has been program integrity. Programs high in integrity typically have greater impact than those low in integrity (Day & Howells 2002; Hollin 1999). Integrity, here, refers to the extent to which the program is delivered in practice in the way in which it was designed and planned in principle. The present study suggested that various aspects of integrity were high in both the Western Australian and South Australian programs. Nevertheless, it is inevitable that some variation occurred in practice, with some facilitators introducing variations from the program manual more than others.

In this study some differences in outcome were shown to relate to program integrity. Although differences were not apparent on all measures, low-integrity programs were associated with less positive outcomes, particularly in the areas of anger control and anger following provocation. More detailed analysis will be possible at a later stage into the various components of the integrity measure that was developed, to see if any particular aspect of integrity is particularly important.

There were no differences in outcomes for Indigenous and non-Indigenous offenders in this study.

**Explaining the Low Impact of Offender Programs**

In previous work, Watt and Howells (1999) put forward several possible explanations for the modest effectiveness of the programs they studied, including:

- poor motivation of participants;
- the content of programs being too complex for the limited program time available;
- low program integrity; and
- limited opportunity to practice the skills learned in the program.

The results from the present study rule out explanation c because program integrity was relatively high. Explanations a, b and d still stand as potentially applicable. It could be argued that explanation a is given increased credibility by the present study in that motivational-type factors were shown to predict whether improvement occurred. Explanations b and d amount, arguably, to the suggestion that the programs are too short for the amount of work that needs to be done (low intensiveness).

Both the motivational and low intensiveness explanations are credible and are not mutually exclusive. To these two explanations can be added a possible third—multiple problems in offender populations. Again, this explanation does not exclude the other two. Indeed all three factors may interact to diminish program effectiveness.

Motivational problems on the part of program participants are readily identified by most correctional staff as a major factor determining progress in program sessions. Motivational issues have been curiously neglected in the anger management literature. Howells (1998) has argued that anger management needs to be preceded by an analysis of the “goal structure” of the offender and has suggested that considerable variation in goal structures occurs within offender populations. Serin’s work (1998) in Canada has also begun to unravel some of the important dimensions of motivation.

Renwick et al. (1997) have described the problems at a clinical level. They point to the therapeutic pessimism felt by both clients and therapists in correctional and high-security settings, and to enduring problems of low motivation, treatment resistance and avoidance. These authors note the resentful, distrustful and even combative style of some offender participants in therapeutic groups. Additionally, the clients...
had realistic concerns about the effects of disclosure of their emotions and past behaviour on release or parole plans. Similarly, Novaco (1997) highlights the long histories of failure, institutionalisation and social rejection that characterise such clients and which entrench their anger and aggression. The prison environment itself may contaminate treatment effects by modelling inappropriate strategies for managing anger and through skills attrition—skills are acquired initially but are then lost through lack of practice in the remainder of the sentence. The issue of multiple problems in offenders is also a self-evident one for many correctional staff but, again, it has been neglected, until recently, in the anger management field. It is a truism that offenders, particularly high-risk offenders, have multiple psychological and social problems. It is a very different task conducting anger management with someone who has no other serious problems apart from anger control than it is conducting the same program with an offender who has, for example, an antisocial personality disorder, severe substance abuse problems, limited verbal skills and absence of family support. Establishing a working therapeutic alliance with such a person may itself be a time-consuming but necessary task before the specifics of anger control can be addressed (Howells 1998).

Given these two factors (low motivation and multiple problems), it would not be surprising if anger management with offenders had far less impact than it does with non-offenders. The remedy would be to make offender programs (or at least those for offenders with high risks or high needs) intensive enough to allow for offender problems to be addressed in a significant way. It is noteworthy that the Canadian program described by Dowden, Blanchette and Serin (1999) lasted for 50 hours and that, internationally, rehabilitation programs of 100 hours or more are typically recommended for offenders with high levels of need. The programs studied in the present research were of 20 hours duration (10 two-hour sessions; see Table 1).

### Recommendations for Improving Anger Management Outcomes

In considering some implications of the findings and of the previous literature for correctional policy and for the future development of anger management programs, the following are recommended.

- **Maintain Anger Programs**
  Given the high scores of offenders on a range of anger measures, and the fact that some offenders improve, anger management interventions should be maintained as an important component of any portfolio of “core programs”. The links between anger and violence are increasingly recognised in the research and rehabilitation literatures. Virtually all well-developed correctional systems internationally deliver programs of this sort. Many jurisdictions, like South Australia and Western Australia, have well-developed and managed systems for the delivery of anger management programs and for staff training which will be of enormous benefit in future development of the programs.

- **Needs-based Programming**
  There should be a move away from the strategy of “blanket” delivery of programs to all offenders who are referred due to violent histories or because they have been informally deemed to be suitable. The results of the present study show this approach to be ineffective. Anger management should be offered to offenders on the basis of the likelihood that they will benefit. Thus, all referrals should receive a pre-treatment assessment to determine suitability.

- **Assessment-based Program Allocation**
  Suitability assessments should be based on research findings and should comprise, as a minimum, formal psychometric measures of anger proneness and of readiness/motivation for treatment. Cut-off points would need to be developed for the various anger and motivational scales.

### Sufficient Intensity and Length of Program to Accommodate Individual Needs

Given the modest impact of current programs, they should be developed further and made more intensive. Intensiveness can be addressed in two (inter-related) ways—by extending the length of the programs, and by revising the content to ensure they have a stronger “therapeutic” and less of an “educational” focus. It is recommended that programs should be at least 50 hours in length. If “high-risk” or “high-needs” offenders are targeted in the future, then even longer programs (100 hours plus) are likely to be required for such groups. The costs of increasing intensiveness are likely to be offset by the savings derived from a more targeted and less general approach to service delivery.

### Need for Ongoing Evaluation

Evaluation measures of the sort used in the present study should be “built-in” to anger programs so that effectiveness can be monitored in an ongoing way. The continuum of information gathering should range from routine collection of case management information (for example, completion rates and recidivism data) to applying psychometric and behavioural tests pre- and post-program. Evaluation of this sort is not an expensive “add-on” but a low-cost exercise, provided program delivery and record-keeping are well organised.

### Maintain Integrity

Program integrity monitoring needs to be developed as a routine practice. Few correctional systems internationally have developed integrity assessment methodologies, although the Home Office in England and Wales has made significant
progress in recent years. The integrity assessments developed for the present study offer only one approach to this difficult task.

**Conclusion**

Despite the renewal of interest in offender rehabilitation and the increased optimism about programs attempting to prevent re-offending, violent offenders are rarely the focus for intervention in the published literature. The present study has partly filled this gap by evaluating the effectiveness of anger management programs for violent offenders in two Australian jurisdictions. The study has confirmed that high levels of anger exist in the prison population. Thus, effective anger management programs are required. It was also found, however, that anger management programs have only a very modest impact in general. As some offenders do benefit more than others, future targeting of treatment on suitable participants appears to be the way forward.

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**References**


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