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What Works for Anger Management

A Literature Review

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Introduction

It should be noted that, in general, there is surprisingly little known about the treatment of anger disorders. In the mental health field, anger and its related behaviours and problems have not been empirically researched to the extent of (for example) anxiety and depression, about which much more is known. This trend appears to be changing and, in the near future, we may expect a great deal more attention being paid to anger and potentially effective treatment programs.

The following articles are in chronological order (where dates are known):

Biaggio, M.K. (1987). Therapeutic management of anger. *Clinical Psychology Review. 7*, 663-675.

The author discusses the artificiality and potential lack of generalizability of most laboratory experiments involving the assessment of anger. The author suggests that, due to the nature of anger and its subsequent negative behaviours, there are several techniques that may be beneficial to anger reduction (in no particular order of importance):

1. Assertiveness Training
2. Social Skills Training
3. Cognitive-behavioural approaches (which are more effective when combined with relaxation training).

Relaxation training alone has not shown to be particularly useful in decreasing anger.

Dangel, R. F., Deschner, J. P., & Rasp, R.R. (1989). Anger control training for adolescents in residential treatment. *Behavior Modification, 13*(4), 447-458.

Subjects consisted of 12 youth (girls and boys) between the ages of 11 and 17. There were two groups, each exposed to 5 weeks of training at staggered starts with 6 sessions falling in those 5 weeks. Each session was one hour in length (there is a brief outline of each session in the article from page 449-450), and consisted mostly of relaxation training and changing self-talk.

Overall, there was a slow erratic decrease in the subjects' aggressive behaviours during treatment. Reductions in aggression were seen at follow-up (10 days later) as well.

Deffenbacher, J.L. & Stark, R.S. (1992). Relaxation and cognitive-relaxation treatments of general anger. *Journal of Counseling Psychology, 39*(2), 158-167.

Subjects were 55 (27 male and 28 female) intro psychology students who met the criteria for high anger. Students were put into one of two groups. Two types of treatments were used: relaxation coping skills (RCS) and cognitive-relaxation coping skills (CRCS), with each group receiving only ONE of these two treatments. Both treatments lead to decreases in general anger, specific anger, anger suppression, physiological arousal, state anger, and dysfunctional coping skills. Reductions were maintained at 1-year follow-up. RCS subjects reported significantly lower outward expressions of anger, and CRCS subjects reported significantly less anxiety. Although there were not major significant differences between the two types of therapy, the authors suggest that CRCS may be more useful in a group setting.

Beck, R. & Fernandez, E. (1998). Cognitive-behavioural therapy in the treatment of anger: A meta-analysis. *Cognitive Therapy and Research, 22*(1), 63-74.

This review article is based on 50 studies of 1640 subjects. Overall, clients who underwent cognitive behavioural therapy (CBT) were better off than 76% of untreated clients in terms of anger reduction. The studies were mostly clinical clients including prison inmates, abusive parents, abusive spouses, juvenile delinquents, adolescents in residential settings, aggressive children, and developmentally delayed individuals. The varied client population shows that CBT is effective across a wide range of client types.

Ambrose, T.K. & Mayne, T.J. (1999). Research review on anger in psychotherapy. *Psychotherapy in Practice, 55*(3), 353-363.

As mentioned in previous articles, 'venting' anger (in a cathartic 'explosive' sense) has been proven to be counterproductive to reducing anger. "Cathartic venting of anger can generate and reinforce negative thinking and behaviour both in individuals and in couples" (pg. 4). Also mentioned in previous articles, the vast majority of studies in the field have been on cognitive-behavioural

therapies and its variations. On average, clients who score high on anger can be expected to decrease to normal levels and sustain that decrease for at least a year. Cognitive therapy alone, however, seems to be the least effective of any combination of cognitive-behavioural therapies. Relaxtion therapy alone appears to be as effective as all other anger treatments. "It would seem logical that a therapy that addresses the physiological, cognitive, behavioural, and social components of anger should be more effective than therapy that addresses only the physiological component. As it turns out, the hormones released when the body becomes aroused with anger and fear (epinephrine and norepinephrine) facilitate learning and performance, directly influencing cognition and behaviour. When the body relaxes, the energy and motivation to act out decrease, and the associations and thoughts about other angry episodes are blunted. Thus relaxation may be highly efficacious because it directly affects the other components of anger" (pg7).

Four populations have been studies most in the literature:

1. *Violent Adults*: Clear evidence that 4 to 20 week group sessions are an effective and economical way to treat violent, angry men. Initial weeks may show an increase in anger, but overall therapists can expect a 50% decrease in violent behaviours.

2. *Aggressive Children*: cognitive-behavioural group anger management for kids is also an effective and economical way to reduce anger and aggression and generally includes social skills training, anger monitoring/self awareness, relaxation, and cognitive restructuring. A portion of angry children also have a diagnosis of ADHD, so medication may also be helpful in curbing anger in this sub-population.

3. *Individuals with Post Traumatic Stress Disorder*: group cognitive-behavioural therapy appears to be very effective, with 50% reductions in expressions of anger, although it is unclear whether reductions in aggression follow.

4. *Individuals with Cardiovascular Disease*: stress-management (with CBT components such as affect monitoring, cognitive restructuring and behaviour changed) and relaxation appear to be highly effective in decreasing blood pressure in 60% clients and subsequently decreasing angry episodes. Cognitive-behavioural interventions without relaxation also decrease blood pressure in 60% of clients, but the decreases are not as great.

Fetsch, R.J., Schultz, C.J., & Wahler, J.J. (1999). A preliminary evaluation of the Colorado Rethink parenting and anger management program. *Child Abuse & Neglect, 23*(4), 353-360.

The RETHINK program is aimed at parents who have anger problems. 75 parents participated in the 6-week program in Colorado in the mid 1990's (a description of the RETHINK program can be read in the article).

- 100% of parents reported an increase in knowledge on parenting and anger management.
- 97.3% reported improved attitudes.
- 94.7% reported positive behavioural changes
- The group as a whole significantly increased their levels of anger control
- 2/3rds of participants had more age-appropriate and realistic expectations of their children

In addition, family conflict levels fell, verbal aggression levels fell and physical aggression levels fell in parents attending the treatment sessions. These results "suggest that professional preventive education specialists may now have an effective research-based program to address the problem of how to assist parents with parenting and anger management" (pg. 358). RETHINK seems to be effective for white men and women living in urban centres who have anger measured within the normal range.

Gerzina, M.A. & Drummond, P.D. (2000). A multimodal cognitive-behavioural approach to anger reduction in an occupational sample. Journal *of Occupational and Organizational Psychology, 73*, 181-194.

This article is one of very few articles dealing with anger management in a non-research setting. Clients consisted of 26 self-referred police officers (25 males, 1 female) from the Western Australia Police Service. Thirteen were given the treatment while the other half was used as a control group. Treatment included 6 weekly sessions of 90-minutes each. The subtypes of cognitive behavioural therapy that were used were: relaxation, cognitive reappraisal, response disruption, and problem solving. Homework was assigned each week and was designed to help the officers practically apply their new skills. The treatment was done on their own time, so it was important that the program be interesting and effective enough to ensure the officers did not drop out. (The article has a detailed explanation of what each session entailed, starting on page 184 and continuing to page 185).

Treatment was effective in reducing irrational beliefs and in teaching participants how to relax. Also, anger control increased and self-reported anger decreased and was maintained at the 8-week follow-up. Self- and peer-rated anger arousal did not show significant improvements, but they did show a shift in the right direction. Overall, treatment reduced the frequency, intensity, and duration of anger in the officers.

DiGuiseppe, R. & Tafrate, R.C. (2001). A comprehensive treatment model for anger disorders. *Psychotherapy. 38*(3), 262–271.

Anger is a little researched problem. For every 1 article on anger published in the literature there are 10 on depression and 7 on anxiety. From a review of the anger literature it appears that anger treatment works for all age groups, all types of populations, and both sexes. It should be noted, however, that most studies use volunteer participants who may be more willing to change than involuntary clients. The authors argue that matching treatment to symptoms (for example – cognitive approaches to treat cognitive distortions) has proven to have little effect. No data exist supporting the idea that treatment modalities should be matched to symptoms. In fact, cognitive interventions have proven to have a blanket effect, with larger changes shown on physiological measures than relaxation therapy. 80% of all published studies have group-oriented programs. It appears that both individual and group therapy are equally effective in reducing anger. However, individual therapy appears to be more effective in increasing positive behaviours and decreasing aggressive behaviours. Protocols that require the use of treatment manuals and integrity checks showed greater improvements in client anger reduction than those that did not use these two criteria.

The authors propose several core components of a comprehensive treatment model:

1. Cultivate a therapeutic alliance.
2. Address motivation for change
3. Manage physiological arousal
4. Foster cognitive change
5. Implement behaviour change
6. Teach relapse prevention

The following may be tailored into a treatment program if necessary, depending on the client's needs:

7. Manage impulsive behaviours
8. Incorporate forgiveness
9. Consider systemic (social-systems) interventions
10. Focus on rebuilding relationships
11. Provide environmental supports
12. Develop an individual therapy format

Seay, H.A., Fee, V.E., Hollowy, K.S., & Giesen, J.M. (2003). A multicomponent treatment package to increase anger control in teacher-referred boys. *Child & Family Behaviour Therapy, 25*(1), 1-18.

There were 16 boys in this study – 8 in the treatment group and 8 in the control group between the ages of 7 and 10. Treatment consisted of an after-school program twice a week for three weeks. Each session lasted an hour and took place in a classroom after school. Treatment focused on praise (both from therapists and from other group members), increasing positive target behaviours (problem-solving), self-instruction, and practical activities designed to practice target behaviours.

Marked improvement was seen in anger control in treated boys over the control group. General aggression measures appeared not to decrease at post-test, however the control group's scores increased significantly in the same amount of time. The treatment group also showed increased restraint and pro-social behaviour outside the treatment setting. There was no follow-up measure completed for either group.

Holloway, J.D. (2003). Advances in anger management: Researchers and practitioners are examining what works best for managing problem anger. *Monitor, 34*(3), 54.

Jerry Deffenbacher, an expert in anger and its management, argues that there are three strategies with the most empirical support: relaxation, cognitive therapy, and skill development.

Relaxtion works as follows: "Clinicians trains patients in progressive relaxation until they can quickly use personal cues…to relax in an anger-inducing situation" (pg. 2)

Cognitive therapy works by helping patients find alternative ways of thinking and reacting to anger.

Skills development focuses on teaching compatible and appropriate behaviours to clients (ex. parenting skills to abusive parents; driving skills to angry drivers).

Four stages of change have been suggested for intervention models:

1. Preparing for change
2. Changing
3. Accepting and adjusting
4. Maintaining change

In addition, cathartic treatments ('letting it all out') have been shown to be counterproductive in most situations. As well, group intervention may also be counterproductive for some individuals as the members may tend to reinforce eachothers' negative thinking and behaviours.

Howells, K. & Day, A. (2003). Readiness for anger management: Clinical and theoretical issues. *Clinical Psychology Review, 23*, 319-337.

The authors argue that the readiness of the client to accept the treatment and change is major factor that could have a significant impact on the outcome of anger treatment. "Low readiness refers…to the presence of characteristics…within either the client or the therapeutic situation, which are likely to impede engagement in therapy and which, thereby, are likely to diminish therapeutic change" (pg 320).

It is important to note that, despite popular opinion, men and women differ very little in their anger and anger expression. Women may be higher in 'readiness' to accept treatment, however this issue requires further investigation. Program drop-out is a major issue for all anger management programs (with figures of 30-50% quoted). The authors argue that better methods of assessing 'readiness' to accept and complete treatment would most likely help decrease this drop-out rate.

Readiness variables can fall into three areas: the client, the setting, and the therapist. Readiness can be increased by modifying one or all three of these criteria (the modification of these areas is discussed in detail in the article from page331 to 333). By increasing 'readiness' for treatment, one can increase the possibility of a positive outcome.

DiGuiseppe, R. & Tafrate, R. (2003). Anger treatment for adults: A meta-analytic review. *Clinical Psychology: Science and Practice, 10*, 70-84.

This paper is a review of published and unpublished literature in the field of Anger Management from 1970 to 1998. It analyzes 50 'between-group' studies (those studies where a treatment group is compared to a control group) and 7 "within-group" studies (those studies where all subjects receive the treatment condition). There were 81 interventions and 11 interventions respectively in each group design. Only 18 studies had follow-up data and 32 total interventions were noted in these. There were 1841 subjects in total.

Little difference was found between the different types of treatments and their outcomes. This is probably due to the fact that most studies used cognitive, behavioural, or cognitive-behavioural therapy techniques, creating little variability in treatment approaches.

The number of anger management sessions and client's gender had no effect on treatment outcome. Use of a treatment manual and regular integrity checks, however, revealed greater improvement scores on measures of aggression. Aggression, overall, showed the greatest improvement of any other measure, with interpersonal relationships and self-esteem showing no improvement after treatment.

Individual intervention (as opposed to group intervention) significantly improved treatment outcomes, especially increased positive behaviours.

Overall, treated clients did much better than non-treated clients (in any type of treatment technique) initially and at follow-up, doing better than 76% of non-treated clients. In addition, 83% of clients who had treatment improved compared to their pre-treatment scores.

The authors note that the lack of guidelines and diagnostic criteria for anger disorders is detrimental to the field as anger programs would be most beneficial if they targeted specific problem behaviours and related anger symptoms instead of using broad, generalized programming for all 'anger problems'.

Subjects were varied in each study and included middle-aged men, prison inmates, abusive parents, college students, veterans, older adults, cardiac patients, forensic patients, university faculty, etc.

Sukhodolsky, D. G., Kassinove, H., & Gorman, B.S. (2004). Cognitive-behavioural therapy for anger in children and adolescents: A meta-analysis. *Aggression and Violent Behaviour, 9*, 247-269.

Cognitive-behavioural therapy (CBT) is defined in this article as 'a class of child-focused treatments that target covert and overt behaviors to accomplish improvement in symptoms and functioning' (pg.249) This review paper included 21 published and 19 unpublished papers with 1953 children participants written between 1974 and 1997.

The effects of CBT with angry children were found to be similar to the effects of other psychotherapies done with children – it has an overall moderate effect. Four subtypes of CBT were tested: skills development, affective education, problem solving, and eclectic treatments. Skills development and eclectic treatments were significantly more effective than affective education, with problem solving being not significantly different from any of the other three. Behavioural treatments (ie. eclectic and skills development) are therefore more effective than those that attempt to modify internal constructs. Also, positive treatment outcomes increase as the amount of modeling and feedback increase in treatment programs. Modeling is used 'to demonstrate the adaptive changes expected of a client, and feedback provides the guidelines and reinforcement for the acquisition of new skills' (pg. 263). Length of treatment appears to have little effect on outcome measures, although little is known about treatment length with angry youth. In addition, both individual and group therapy formats appear to be equally effective in treating youth. Effect sizes were greater for older children (15-17 as opposed to 7-10 year olds) which indicates that CBT may be more effective for older children with anger problems. Also, children with moderate anger problems (as opposed to mild or severe) and with no history of violent behaviour benefit more from CBT.

Del Vecchio, T., O'Leary, K.D. (2004). Effectiveness of anger treatments for specific anger problems: A meta-analytic review. *Clinical Psychology Review, 24*, 15-34.

This review article included a meta-analysis of 23 articles on anger treatment, and focuses solely on adult outpatients. Articles used were published between 1980 and 2002. 87% of the treatments were conducted in a group format and 61% were composed of 8 1-hour sessions. Four types of treatment conditions were explored: cognitive-behavioural, cognitive, relaxation, and 'other'. The overall success rates for each condition were 66%, 69%, 70%, and 65% respectively, with medium to large effect sizes.

Driving anger seemed to respond best to treatment. The 'other' treatments (including social skills training, process group counseling) were most effective in treating individuals with difficulties in controlling their anger. CBT seemed to be most effective in treating anger expression problems (ie. angry outbursts). Current states of anger were best treated with relaxation therapies. Cognitive therapies were most effective in treating problems of anger suppression.

Glancy, G. & Saini, M. (2005). An evidenced-based review of psychological treatments of anger and aggression. *Brief Treatment and Crisis Intervention, 5*(2), 229-248.

Historically - Treatment in the 1960s focused on venting anger, however this method has been shown not to be very useful and even counterproductive as it has a tendency to increase angry feelings.

Currently – 80% of all research studies on anger treatment have focused on group therapy, although it is suggested that individual therapy may be better for clients who are avoiding change and may gravitate towards other clients in the group who reinforce their anger. In general, most studies have focused on cognitive, cognitive behavioural, behavioral skills training and relaxation therapies. There has been no direct empirical (published) support for alternative methods of treatment, however the authors attempt to assess several alternative methods in terms of how they may assist in anger reduction.

Cognitive – cost-effective; can be delivered in a group format.

Cognitive-Behavioural – most studied. It is aimed at modulating cognitive, behavioural, and physiological responses through various techniques. Treatment goal is the "regulation of anger through the understanding and monitoring of personal anger patterns and the acquisition of skills involving more adaptive alternatives to provocation" (pg 238). It is effective in reducing general anger, specific anger, physiological arousal due to anger, and dysfunctional coping skills in frequency, intensity, and duration. CB has been shown to be effective with forensic patients and angry drivers.

Cognitive-Relaxation – "involves training in progressive relaxation and relaxation coping skills, including deep-breathing cued relaxation…relaxation without tension…cue-controlled relaxation…and relaxation imagery" (pg 239). This treatment shows positive results compared with no treatment and other treatments, and has also been shown to be effective in reducing aggressive behaviours in angry drivers. Cognitive relaxation adds little cost to a cognitive

behavioural scheme, as only 1 to 3 more sessions need to be added to combine the two conditions.

Stress Inoculation Approach – based on cognitive-behavioural approach and consists of three phases: cognitive preparation, skills acquisition, and application training. It has been shown to be effective in increasing anger control and decreasing inappropriate expressions of anger. Youth have been shown to benefit from this approach.

Relaxation Coping Skills – has been shown to be as effective as cognitive-relaxation therapy when developed well as an intervention strategy, however neither intervention increases general coping skills.

Social Skills Training – 8-session, group format therapy. Social skills are explained, modeled and role-played by clients in pairs. Includes assertiveness training, communication and listening skills development, and homework assignments. Has shown long term effectiveness in reducing general anger, situational anger, physiological arousal due to anger, and general anxiety. This outcome has been replicated in several studies, however some studies have failed to show similar gains.

Psychoeducational – group programs that general contain components of psychotherapy and cognitive-behavioural therapies. The main goal is to educate batterers about their violence and the effect it has on interpersonal relationships. Psychoeducational programs have been shown to lead to reductions in anger, hostility, and depression and increases in self-management of problem behaviours.

Psychotherapy – goal is to "change behaviours by expanding the client's capacity for feelings and how he/she responds to these feelings" (pg 242). This approach has been shown to be equally as effective as cognitive-behavioural approaches, however little research has been done in this regard. It is also more costly and longer in duration. The group aspect of this intervention has also been shown to lead to high drop-out rates among men.

Substance Abuse – research has shown not only a relationship between substance abuse and aggression, but also that successful completion of a substance abuse program decreases incidents of domestic abuse (both in voluntary and involuntary clients).

Multi-component – generally include cognitive behavioural, biological, and psychological interventions. Few studies have been done in this area, although it appears promising for abusive parents, college students, and inmates, especially cognitive-behaviour therapy with a mutli-component treatment approach.

Cognitive based approaches (cognitive, cognitive-behavioural, cognitive-relaxation, stress inoculation, relaxation coping, and social skills training) can be completed with positive results in an average of eight sessions. Brief interventions are the best at providing cost-effective, time-limited results as drop-out tends to increase after eight sessions.

Suinn, R.M. & Deffenbacher, J.L. *Anxiety/Anger Management Training (AMT)*.

AMT is a brief, structured intervention that has proven successful in treating anger problems. AMT started off as an Anxiety Management Training intervention in the 1970s that proved to be effective with generalized anxiety disorder, phobias, post-traumatic stress disorder and other disorders where anxiety is the primary diagnosis. AMT started being used with angry patients in 1986 and has shown to be an effective cognitive-behavioural approach to anger management. AMT has been shown to be significantly more effective than no treatment, simple relaxation, and placebo controls, and effects remain stable or improve over the short- and long-term.

AMT is based on the idea that individuals can learn behaviours that eliminate anger as a 'drive state'. Clients can be taught to identify personal signs that signal the onset of anger and then to react appropriately to them using cognitive-behavioural coping strategies.

AMT is composed of 6 to 8 sessions of exposure-relaxation therapy. Each session requires the client to assume more responsibility in personally deescalating negative arousal leading to anger.

Overall, AMT has been shown to be as effective as stress inoculation training, cognitive restructuring, cognitive therapy, cognitive relaxation, and social skills interventions, and may be more effective than psychodynamic therapies. It can be conducted in groups or with individual clients, although group setting require several adaptations to the procedure. It can also be easily integrated into other treatment programs for clients with multiple mental health problems. Because AMT is based on exposure therapy, practitioners should be cautious with clients

who may react more negatively to being exposed to anger-producing scenarios. Some may not respond well to this type of treatment.

Early identification and intervention: Anger management. What works in preventing school violence. *Safe & Responsive Schools.*

There are several basic steps followed in effective anger management programs with youth:

1. Youth must develop the ability to take another person's perspective
2. They are taught to become aware of their emotional and physical states when angry (relaxation techniques may be used here to deactivate stressful physiological activation)
3. Techniques are taught to self-moderate their behaviours during stressful events

The program is usually 10-20 sessions in length with each session lasting 45 minutes to an hour, all of which can last between six to eighteen weeks and is usually done in small groups. Group anger therapy has shown to be effective in reducing disruptive and aggressive behaviours in junior high school delinquents in the short-term. Long-term results, however, have been inconsistent.

There are several factors that affect the outcome of treatment with youth:

- Length of treatment
- Framing the training in terms of youth understanding
- Supplemental interventions (ex. aggression replacement training).

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