PART I
THEORY AND PRACTICE

Contemporary practitioners—whether they are psychotherapists, educators, social workers, or other professionals—find themselves governed more and more in their work by the fact that we are in an “era of accountability.” Government and private agencies are increasingly and rightly insisting that we—the treatment and intervention professionals—firmly and unequivocally demonstrate that our interventions work. In fact, an ever growing number of such agencies now require such efficacy information in advance, as a precondition to selecting and starting to use any given intervention. Nowhere has the accountability movement taken root more strongly than in the UK, where the Prison Service and the National Probation Service have responded to 20 years of evidence showing clearly that the most effective interventions for chronically aggressive persons are those that seek to both alter aggression-promoting thinking patterns and provide new behaviors to aid the person to deal prosocially with previously provocative events—that is, cognitive-behavior interventions. The national initiatives in the UK have been informed by the author of our first chapter, a person considered to be the UK’s premier forensic psychologist working in the field of offender rehabilitation, who has reviewed in detail the existing evaluation literature on cognitive-behavioral approaches and has recommended those he felt to be of value. Clive Hollin is Professor of Criminological Psychology at the University of Leicester. His opening chapter provides us with the cognitive-behavioral context from which ART grew.

The following three chapters bring together the three persons who were the originators of the three interventions that constitute ART. Arnold P. Goldstein and his colleagues at Syracuse University first constituted Skillstreaming; Anger Control Training was developed by Eva Feindler, Professor of Psychology and Director of the Psychological Services Center at Long Island University in New York; and ART’s Moral Reasoning Training—in the form of Social Problem Solving Intervention—was first formulated by John Gibbs, Professor of Developmental Psychology at Ohio State University.
Chapter 1

AGGRESSION REPLACEMENT TRAINING: THE COGNITIVE-BEHAVIORAL CONTEXT

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INTRODUCTION

Developed in the 1980s, the first complete publication of Aggression Replacement Training (ART) in 1987, by Arnold Goldstein and Barry Glick, saw the formulation of a multimodal approach to working with aggressive offenders. Utilized on an increasingly wide basis throughout the 1990s, the accumulated outcome evidence shows that ART is an effective method by which to reduce aggressive behavior (Goldstein & Glick, 1996). The latest text offering a revised edition of the program (Goldstein, Glick, & Gibbs, 1998) details and refines the three components that make up ART: these three components, delivered sequentially, are Skillstreaming, Anger Control Training, and Moral Reasoning Training.

**Skillstreaming** involves the teaching of skills that serve to displace the out-of-control destructive behaviors with constructive, prosocial behavior. The skills element of ART teaches constructive social skills in terms of step-by-step instructions to managing key social situations. In keeping with the principles of skills training, the skills are modeled by group leaders and then practiced by offenders. ART addresses a “core” set of social skills relevant to the target group in order to bring about change.

**Anger Control Training** follows the established sequence of establishing Antecedent–Behavior–Consequence (A–B–C) sequences to determine triggers for anger. ART then uses the standard anger management techniques of enhancing self-awareness of internal angry cues, teaching coping strategies, skills training, self-instruction, and social problem solving.

**Moral Reasoning Training** seeks to address issues concerned with a delay in maturing of moral reasoning and the associated egocentric bias. Thus, this part of the program seeks to enhance offenders’ moral reasoning skills and widen their social perspective taking. These aims are achieved through self-instruction training.

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social problem solving, skills training, and guided peer group social decision-making meetings.

The aim of this chapter is principally to describe the theoretical underpinnings for ART, then to consider the evidence that speaks to this theoretical base. In looking to theory, there are two dimensions to discuss: first, the broad theoretical position adopted by ART, and, second, the specific theoretical rationale for the three components.

ART: BROAD THEORY

This section develops the theme of cognitive-behavioral theory as the bedrock theory on which ART is built. To achieve this aim, an overview of the broad extent of cognitive-behavioral theory is presented. The theme will be developed by suggesting that a cognitive-behavioral approach is one that seeks to locate behavior within a social context, with an emphasis on the reciprocity between the social context and an individual’s functioning. The dovetailing of ART and these theoretical principles will then become clear.

There is no doubt that ART has its theoretical base in learning theory: “Aggression is primarily learned behavior, learned by observation, imitation, direct experience, and rehearsal” (Goldstein et al., 1998, p. 3). In its initial formulation as a theory of learning, traditional behavioral theory concentrated on the relationship between the environment and observable behavior (Skinner, 1974). The theoretical position articulated by Skinner was that given the right setting conditions or antecedents (A), then behavior (B) develops through the individual’s experience of the rewarding or punishing consequences (C) delivered by the environment following their actions. In an A–B–C model, the consequences may be rewarding, in which case they increase the frequency, or reinforce the behavior; or aversive, in which case they may decrease, or punish the frequency of the behavior. This deceptively simple model of behavior was applied to the explanation of criminal behavior in the form of Differential Reinforcement Theory (Jeffery, 1965). The use of A–B–C sequences to explain the development of extreme violence is seen in Gresswell and Hollin’s (1992) case study of attempted multiple murder.

The advent of social learning theory added to the picture by incorporating more explicitly the role of cognition and emotion into a theoretical account of human aggression specifically (Bandura, 1973) and human functioning generally (Bandura, 1977, 1986). Social learning theory departed from the traditional behavioral position in that, while continuing to acknowledge the role of external reinforcement, it suggests that learning can also take place purely at a cognitive level. Further, Bandura also advanced the concept of “motivation” to supersede reinforcement as the force that develops and maintains behavior. In social learning theory terms, motivation is held to take three forms: external reinforcement in the traditional sense that the term is used in behavioral theory; vicarious reinforcement, where an individual’s actions are based on observing what happens to other people who behave in a particular way; and actions that produce self-reinforcement, as in a sense of personal pride or achievement.
THE COGNITIVE-BEHAVIORAL CONTEXT 5

Distal antecedents Early indicators Developmental processes Maintenance variables

Biological precursors (e.g. brain dysfunction) Conduct disorder School failure Peers
Psychological factors (e.g. impulsiveness) Poor parenting Cognitive style (e.g. hostile attributions) Opportunities
Environmental factors (e.g. family functioning) Early aggression Substance abuse Socioeconomic deprivation

Figure 1.1 Possible developmental sequence in the etiology of violent behavior (after Nietzel et al., 1999)

While social learning theory retains some degree of overlap with behavior analysis, theorists have increasingly turned their attention to the study of cognition. As social learning theory precipitated interest in the role of cognition within an overarching behavioral framework, the term cognitive-behavioral entered popular usage. Thus, cognitive-behavioral theory increasingly became a focus for a range of researchers, and cognitive-behavioral interventions became a focus for practitioners.

With its mixed heritage, from the standpoint of both research and practice, it is difficult if not impossible to give a watertight definition of cognitive-behavioral theory or practice. Kendall and Bacon (1988) have previously noted the problems with attempts to define cognitive-behavioral therapy and to say precisely how it sits alongside traditional behavioral theory and practice. Indeed, Kendall and Bacon suggest that it is preferable to see a cognitive-behavioral approach to practice as a general perspective rather than a single unified theory. It is clear that models of human behavior based on learning have become increasingly complex.

This theoretical complexity is seen in the behavioral model of violent conduct developed by Nietzel, Hasemann, and Lynam (1999). This model is based on four sequential stages across the life span (Figure 1.1). At the first stage, there are distal antecedents to violence: Nietzel et al. suggest that these are biological precursors, including genetic transmission and ANS lability, psychological predispositions including impulsivity and deficient problem solving, and environmental factors, such as family functioning and the social fabric of the neighborhood. At the second stage, there are early indicators of violence as the child develops. These first signs include features of childhood such as conduct disorder and poor emotional regulation. Third, as the child matures the developmental processes associated with the intensification of violent behavior come into effect: these processes include school failure, association with delinquent peers, and substance abuse. Finally, as the adolescent moves into adulthood there is a stage at which maintenance variables come into force. These maintaining variables include continued reinforcement for violent conduct, association with criminal peers, and social conditions.

The type of model proposed by Nietzel et al. is an excellent example of the application of cognitive-behavioral principles. The model includes social factors,
environmental forces, and cognitive processes, and is dynamic in speaking to progression and change over the life span.

It is evident that ART has its theoretical base in similar territory. Goldstein (1994) described three levels of analysis in the physical ecology of aggression, all incorporating various levels of a person–environment interaction. The *macrolevel* refers to analysis of violence at a national or regional level; at the *mesolevel* the analysis of violence is at the level of the neighborhood; and *microlevel* analysis is at the level of the home, street, public house, and so on.

The fundamental point to take from these complex models is that a cognitive-behavioral approach neither has an exclusive focus on the individual, nor does it neglect the possibilities of preventing violence through social and environmental means. However, for those charged with the responsibility of working with offenders, the focus of their day-to-day work lies with the individual. Reviews of the literature show that the history of working with offenders, including violent offenders, is dominated by a single-target approach (Hollin, 1990a). In other words, practice is dominated by trying to change one aspect of the offender’s functioning, such as their social skills or educational achievement. In contrast and in keeping with the more complex models, contemporary practice is concerned with multimodal programs that seek to change several aspects of the offender’s functioning. To its credit, ART was one of the first programs to adopt a multimodal perspective, seeking to change the individual’s thinking, emotion, and action. As discussed in the following sections on each specific component of ART, the theoretical base for this tripartite approach is well established.

**SPECIFIC THEORY: SKILLSTREAMING**

The original social skills model (Argyle & Kendon, 1967) held that socially skilled behavior consists of three related components—social perception, social cognition, and social performance (Hollin & Trower, 1986c). Social perception refers to the ability to perceive and understand verbal and nonverbal social cues and signals; social cognition, in this sense, is analogous to social information processing; and social performance is, of course, observable social action. Thus, the socially competent individual will use all aspects of their social skills to function effectively in their interactions with others and so achieve their social goals.

The application of this way of thinking about social behavior with respect to offender populations raises two issues: first, is there any evidence to indicate that offenders have particular difficulties in any specific areas of social ability? Second, is an offender’s level of social skills related to his or her offending?

**Social Perception**

The ability to recognize, understand, and interpret interpersonal cues is central to all social behavior (Argyle, 1983). In a study of social perception in delinquents, McCown, Johnson, and Austin (1986) showed that young offenders had some difficulty in recognizing the emotion expressed in different facial expressions.
Similarly, a body of evidence has accumulated to suggest that young people who struggle socially, particularly with respect to aggressive behavior, have difficulties in both the selection and interpretation of social cues (e.g. Dodge, Murphy, & Buchsbaum, 1984; Dodge & Tomlin, 1987; Akhtar & Bradley, 1991). Further, a study by Lipton, McDonel, and McFall (1987) suggested that sexually aggressive men may misperceive social cues in male–female social interactions.

The misperception of social cues may in turn lead to misattribution of intent, so that the actions of other people are mistakenly seen as hostile or threatening (Slaby & Guerra, 1988; Lochman & Dodge, 1994; Crick & Dodge, 1996). The manner in which a social encounter is perceived will, in turn, influence the way in which the person deals with a given social encounter.

**Social Cognition**

Following their perception and understanding of other people’s behavior, the individual must decide on a suitable response. This type of decision making requires the ability to generate feasible courses of action, consider potential alternatives and their likely consequences, and make plans towards achieving the desired outcome (Spivack, Platt, & Shure, 1976). Several studies have suggested that some offenders, perhaps particularly younger offenders, may experience difficulties in solving social interaction problems. For example, studies using the Adolescent Problem Inventory have shown that male young offenders typically gave less socially competent responses than non-offenders to a series of social problems (Palmer & Hollin, 1996, 1999). Offenders typically use a more limited range of alternatives to solve interpersonal problems, and rely more on verbal and physical aggression. A similar pattern has been reported for female offenders using the Problem Inventory for Adolescent Girls (Gaffney & McFall, 1981; Ward & McFall, 1986).

It is clear that social cognition, including social problem solving, is related to offending behavior. There is a weight of research in the tradition illustrated above that strongly suggests that difficulties in setting social goals, solving social problems, and accurately perceiving social feedback on performance are critical factors in understanding antisocial, including aggressive, behavior (e.g. Ross & Fabiano, 1985; Hollin, 1990a, 1990b; Akhtar & Bradley, 1991; Demorest, 1992; Crick & Dodge, 1994).

**Social Performance**

In a typical study, Spence (1981a) compared the social performance skills of young male offenders with non-delinquent controls matched for age, academic performance, and social background. The delinquents showed significantly less eye contact and speech, but more “fiddling” and gross body movements, behaviors shown to relate to poor observer ratings of social skill (Spence, 1981b). On global ratings of social skill, social anxiety, and employability the delinquent group were rated less favorably than the non-delinquents.

In summary, the research suggests that some offenders do experience difficulties with social skills. However, it would be wrong to assume that this is a characteristic
of all offenders: clearly offenders are a heterogeneous population with a wide distribution of social ability (Veneziano & Veneziano, 1988). Nonetheless, there are offenders with social difficulties and the hypothesis has been formed that there is a link between social ability and offending (e.g. Howells, 1986). If this hypothesis is true, in some cases at least, then remediation of these social difficulties, typically through the use of Social Skills Training (SST), may contribute to a reduction in offending.

SPECIFIC THEORY: ANGER CONTROL

A second strand in ART is enabling participants to control their anger. Anger is the emotional state most frequently associated with violent behavior (Blackburn, 1993). Specifically, the concern here is with the experience and expression of dysfunctional anger. Anger is seen to be dysfunctional when the experience and expression of this emotion have a negative consequence for the individuals themselves (for example, dysfunctional anger is associated with poor physical and mental health) or for other people (Swaffer & Hollin, 2000, 2001). It is known that violent acts are committed by people in angry states (Zamble & Quinsey, 1997), and that levels of anger in violent offenders can be greater than those in nonviolent offenders (Hunter, 1993). However, it would be wrong to assume that anger is the main cause of violence or that all violent offenders must be angry. Indeed, some studies suggest that a propensity to anger, in and of itself, does not distinguish violent and nonviolent offenders (Loza & Loza-Fanous, 1999). The point is made that anger management should be seen as a component, rather than the main focus, of work with violent offenders.

As with the term “cognitive-behavioral,” there are difficulties in defining the term anger: while anger is said to be an emotion, as Dodge and Garber (1991) state, “Emotion is like pornography: The experts have great difficulty defining it, but we all know it when we see it” (p. 3). Currently, the most influential theory of anger is that proposed by Novaco (1975, 1994). Novaco’s position is close to cognitive-behavioral theory in that anger is understood as a subjective emotional state, involving both physiological and cognitive activity, but which is clearly related to environmental circumstances.

According to Novaco, for a person to become angry some environmental event triggers distinctive patterns of cognitive and physiological arousal. Most typically, this trigger lies in the individual’s perception of the words and actions of another person. The physiological processes associated with anger are increased autonomic nervous system activity, such as a rise in body temperature, perspiration, muscular tension, and increased cardiovascular activity. The cognitive processes are complex, beginning with the individual labeling their emotional state as “anger.”

Novaco and Welsh (1989) suggest that labeling of an emotional state is a function of the individual’s pre-existing system of beliefs and knowledge, or “schemas.” Schemas serve the useful purpose of speeding up information processing, but have the disadvantage that increased speed can lead to faulty or biased judgments. Novaco and Welsh (1989) identified five information-processing biases in individuals prone to anger: (1) attentional cueing, (2) perceptual matching, (3) attributional...
error, (4) false consensus, and (5) anchoring effects. These cognitive biases are all concerned with the encoding of external and internal cues and the interpretation and cognitive representation of those cues.

Attentional cueing refers to the tendency of people who are prone to anger to see hostility and provocation in the words and actions of other people (Dodge, Price, Bachorowski, & Newman, 1990). Perceptual matching is found when an individual, regardless of the situation, bases their current behavior on how they behaved previously. Thus, if a person has found that a display of anger and violent behavior solves a problem, then when faced with another problem in another context they will become angry and violent. An attribution error occurs when the individual perceives their own behavior as situationally determined, but the behavior of other people as explained by their personality. Thus, I see that my behavior is caused by circumstances (external attribution): so, I hit you because you challenged me in front of my friends and they made me respond. On the other hand, I see that your behavior occurs because you are that type of person (internal attribution): you hit me because you are a bad and violent person.

The notion of a false consensus is applied when individuals assume that more people agree with them than is actually the case. This, in turn, inhibits perception and appreciation of the other person’s point of view. Novaco and Welsh (1989) suggest that false consensus is found among those individuals who have problems with anger. Finally, there are anchoring effects so that once an individual has made an initial value judgment, they maintain this position even in the face of contrary evidence.

Thus, triggering events precipitate cognitive and physiological process which the individual labels as “anger”; the processing biases noted above may play a role at this stage. The progression from anger to violence depends in large part upon the disinhibition of internal control: disinhibition can come about through a range of factors, including person-specific factors such as high levels of physiological arousal, perception of a low possibility of punishment, and the use of drugs or alcohol. Novaco (1993) advises that anger should be understood in context: that is, situational factors, both physical and social, can influence a person’s experience and expression of anger.

SPECIFIC THEORY: MORAL REASONING

The third strand in ART lies in attending to the participant’s level of moral reasoning. The process of socialization is linked with moral development in the theories of both Piaget (1932) and Kohlberg (1964, 1978). In particular, Kohlberg has used his theory to develop an explanation for antisocial behavior and this is therefore of interest here.

Kohlberg, like Piaget, argues that moral reasoning develops in a sequential manner as the individual attains maturity. Kohlberg describes three levels of moral development, with two stages at each level. As shown in Table 1.1, at the lower stages moral reasoning is concrete in orientation, becoming more abstract at the higher stages and involving concepts such as “justice,” “rights,” and “principles.”
Table 1.1  Levels and stages of moral judgment in Kohlberg’s theory

Level 1: Pre-morality
- Stage 1. Punishment and obedience: moral behavior is concerned with deferring to authority and avoiding punishment.
- Stage 2. Hedonism: the concern is with one’s own needs irrespective of others’ concerns.

Level 2: Conventional conformity
- Stage 3. Interpersonal concordance: moral reasoning concerned with general conformity and gaining social approval.
- Stage 4. Law and order: commitment to social order for its own sake and hence deference to social and religious authorities.

Level 3: Autonomous principles
- Stage 5. Social contract: acknowledgment of individual rights and the role of the democratic process in deriving laws.
- Stage 6. Universal ethical principles: moral judgment determined by justice, respect, and trust and may transcend legal dictates.

Antisocial behavior, Kohlberg argues, is associated with a delay in the development of moral reasoning so that given the opportunity for offending, the individual does not have the internal processes to control and resist temptation. A number of recent reviews have examined this basic premise with respect to the empirical evidence (Blasi, 1980; Jurkovic, 1980; Jennings, Kilkenny, & Kohlberg, 1983; Nelson, Smith, & Dodd, 1990). The generally accepted position from the major reviews is that delinquents typically show lower levels of reasoning, i.e., Kohlberg’s Pre-morality Stages (1 and 2), than their non-delinquent peers.

Thus, from a Kohlbergian perspective antisocial behavior is associated, in part, with sociomoral developmental delay. This developmental delay is seen in immature and hedonistic, self-centered, moral judgments. However, as Gibbs (1993) points out, moral reasoning does not function in a vacuum: the individual’s level of moral reasoning should be considered alongside other aspects of their cognition. Specifically, Gibbs suggests that the overlap between theories of social information processing (see above) and moral development are useful in understanding the totality of the processes involved.

The bridge between moral reasoning and social information processing is argued to take the form of cognitive distortions (Gibbs, 1993; Goldstein et al., 1998). Cognitive distortions are taken to be “Nonveridical attitudes or beliefs pertaining to the self or one’s social behavior” (Gibbs, 1993, p. 165). These cognitive distortions can function both directly to support the attitudes consistent with sociomoral developmental delay and, in line with Sykes and Matza’s (1957) “techniques of neutralization,” to temper any resulting cognitive dissonance. An example of self-centered moral reasoning is “If I want it, I take it”: Gibbs calls this type of reasoning a primary distortion. The distorted secondary cognitions that flow from such primary distortions may serve to rationalize the behavior, or to mislabel the behavior. Thus, the reasoning (primary cognitive distortion) that “If I want it, I take it” might be rationalized (secondary cognitive distortion) by blaming others: for example, if owners leave their cars unlocked then they deserve to have them stolen. In aggressive individuals the actions of other people may be seen in a distorted
way, typically as having hostile intent, with the inevitable conclusion that “they were asking for it” (Dodge et al., 1990). Mislabeled (secondary cognitive distortion) refers to biased interpretations of one’s behavior: for example, car theft can be explained away as “just a laugh” or “nothing serious.” Aggressive individuals may say that their victims “could have had it worse,” “were not too badly hurt,” or that “no real damage was done” (Gibbs, 1996). These powerful types of distorted thinking are often socially supported and reinforced by the offender’s peer group.

The cognitive-behavioral theoretical basis of ART is seen in the techniques for behavior change that are used in the program.

COGNITIVE-BEHAVIORAL METHODS OF CHANGE

As with the broader theory, it is possible to see various levels at which to bring about changes in violent behavior. Initiatives that change one or more components of the interaction between the individual and the environment may bring about changes in the target behavior. Thus, prevention and reduction of violence might be achieved at any of the three levels—macro, meso, and micro—described above. However, at the level of working with the violent individual, the focus is on ways of bringing about behavior change through working with the violent person.

With its lineage in operant theory, behavior modification and behavior therapy (Martin & Pear, 1999), and skills training (Trower, Bryant, & Argyle, 1978; Hollin & Trower, 1986a, 1986b), so social learning theory (Bandura, 1977) and cognitive behavior modification (Meichenbaum, 1977) became what is now called cognitive-behavioral theory and cognitive-behavior therapy. A number of techniques have become associated with cognitive-behavioral practice: these techniques include modeling, skills training, self-instructional training, thought stopping, emotional control training, and problem-solving training (Sheldon, 1996). In practice, behavior change techniques are seldom used in isolation: it is more common to see amalgams of techniques in the form of multimodal programs (such as ART). Such multimodal programs might include elements such as problem-solving skills training, social skills training, and emotional control training.

Thus, the model of change with such an individualized, cognitive-behavioral approach is that by bringing about change in internal (psychological and/or physiological) states and process, this covert change will, in turn, mediate change at an overt behavioral level. Such overt behavioral change will, in turn, elicit new patterns of reinforcement from the environment, so leading to maintenance of behavior change. What is the evidence that these methods of behavior change can be used to any effect with violent behavior?

COGNITIVE-BEHAVIORAL METHODS AND VIOLENT BEHAVIOR

This section has two components: first, the applicability of cognitive-behavioral methods generally to violent populations; second, to consider specifically the three
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elements of ART—skills training, anger control, and moral development—with aggressive offenders.

General Applicability

The issue of the application of cognitive-behavioral methods to offending behavior is amply supported by the meta-analyses (Garrett, 1985; Gottschalk, Davidson, Gensheimer, & Mayer, 1987; Gottschalk, Davidson, Mayer, & Gensheimer, 1987; Lösel & Köferl, 1989; Whitehead & Lab, 1989; Andrews et al., 1990; Izzo & Ross, 1990; Lipsey, 1992; Antonowicz & Ross, 1994; Cleland, Pearson, Lipton, & Yee, 1997; Pearson, Lipton & Cleland, 1997; Redondo, Garrido, & Sanchez-Meca, 1999) and the syntheses of these meta-analyses (Gendreau & Andrews, 1990; Hollin, 1993, 1994, 1999; Lipsey, 1995; Lösel, 1995a, 1995b, 1996; McGuire & Priestley, 1995; Gendreau, 1996; Cooke & Philip, 2001).

Nietzel et al.’s (1999) behavioral model of violence discussed above drew on four sequential stages across the life span, encompassing a range of environmental and individual factors. This model is helpful at a conceptual level, although the developmental pathways themselves are less than fully understood (Loeber & Stouthamer-Loeber, 1998; Tolan & Gorman-Smith, 1998). Nietzel et al. conclude their piece with the comment that: “A major implication of this model is the need for preventative interventions that target multiple risk factors for violence” (p. 59). Similarly, Tate, Reppucci, and Mulvey (1995), in their review of treatment effectiveness for violent juveniles, comment that: “Social-cognitive interventions should be encouraged as a critical component of institutional and community-based programs” (p. 780). Tate et al. followed this comment with the note that “The empirical literature on interventions with seriously violent adolescents is rather limited” (p. 779). With reference to the state of the general literature, including juveniles and adults, Blackburn (1993) made the same point: “Investigations of the effects of behavioral methods on aggressive offending have been few” (p. 379).

Lipsey and Wilson (1998) report the findings from a meta-analysis of 200 studies concerned with effective intervention for violent juvenile offenders. The meta-analysis included a wide range of interventions, ranging from restitution programs to wilderness programs, considered according to whether the programs were delivered to institutionalized or noninstitutionalized offenders.

Lipsey and Wilson report that for noninstitutionalized offenders the types of intervention that consistently produced positive effects, in terms of a reduction in recidivism, were as follows. (The \( n \) is the number of studies included in the meta-analysis, with referenced examples as cited by Lipsey and Wilson: it will be seen that the research base is limited.) As indicated by the midpoint of estimated effect sizes, individual counseling produced a strong effect \( (n = 8: \text{e.g. Moore, 1987}; \text{Bean, 1988}; \text{Borduin, Henggeler, Blake, & Stein, 1990}) \), followed by interpersonal skills \( (n = 2: \text{Chandler, 1973}; \text{Delinquency Research Group, 1986}) \), and by behavioral programs \( (n = 7: \text{e.g. Jesness, Allison, McCormic, Wedge, & Young, 1975}; \text{Gordon, Graves, & Arbuthnot, 1987}) \).

For institutionalized offenders, interpersonal skills \( (n = 3: \text{Spence & Marzillier, 1981}; \text{Glick & Goldstein, 1987}) \) were followed by teaching family homes...
(community-based, family-style group homes) \((n = 6; \text{e.g. Wolf, Phillips, & Fixson, 1974; Kirigin, Braukmann, Atwater, & Worl, 1982}),\) and by behavioral programs \((n = 2; \text{Schlicter & Horan, 1981; Guerra & Slaby, 1990}).\)

In summary, it can be seen that there is support from the literature for the use generally of cognitive-behavioral methods with aggressive populations.

**Specific Applicability**

The methods used in ART are traditional cognitive-behavioral methods, based on anger control, problem-solving skills training, and social skills training. There is ample evidence that these methods have been used with good effect with violent offenders \((\text{Hollin & Courtney, 1983; Howells, 1986; Henderson, 1989; Marshall, Turner, & Barbaree, 1989; Guerra & Slaby, 1990; Bush, 1995; Hughes, 1996; Hollin & Palmer, 2001; Novaco, Ramm, & Black, 2001; Polaschek & Dixon, 2001; Polaschek & Reynolds, 2001}). The development of Moral Reasoning Training, in keeping with Gibbs’ theory of moral functioning, to enhance moral development in violent populations has been reported in the literature \((\text{Gibbs, 1993, 1996; Gibbs, Potter, & Goldstein, 1995; Goldstein, Glick, & Gibbs, 1998}).\)

The point can be repeated that ART has a research base that supports its effectiveness. Goldstein et al. \((1998)\) cover the range of centers in which ART has been applied, together with the positive outcome evidence from these centers of application \((\text{Goldstein & Glick, 1987; Goldstein, Glick, Irwin, & McCartney, 1989; Leeman, Gibbs, & Fuller, 1993; Goldstein, Glick, Carthen, & Blancero, 1994}).\)

It is clear that ART represents a major advance in work with violent offenders who have a history that includes a pattern of violence of an interpersonal nature. It can be said with confidence that it is possible to work with some violent offenders and reduce their rates of violent conduct. However, what we know now sets the future research agenda: how might ART develop over the next decade?

**RESEARCH AGENDA**

The literature suggests that ART is at its strongest when used with offenders who have committed acts of interpersonal violence, typically with and against their peers. Such offenders are likely to be of medium to medium-high risk of reoffending and will have reasonable levels of cognitive functioning. Where might we go from here?

Domestic violence continues to be an enduring problem and one to which the methods implicit in ART might gainfully be employed \((\text{Dobash, Dobash, Cavanagh, & Lewis, 2000}).\) The research that suggests similar predictors of violence in mentally disordered and mainstream offender groups \((\text{Bonta, Law, & Hanson, 1998})\) further suggests that ART, suitably adapted, might well be appropriate for mentally disordered violent offenders. The extension of the target groups and modification of ART might also be widened to those of low intellectual ability who behave in a violent manner \((\text{Day, 2001}).\) The configuration of programs for exceptionally high-risk violent offenders, such as those with psychopathic disorder,
continues to be a challenge to researchers and practitioners (Wong, 2000). The possibilities of utilizing ART in this particular arena have yet to be explored. Finally, as contemporary criminological research begins to address issues specific to the female offender, specialist offender programs for women are being developed (Andrews & Dowden, 1999). The evolution of programs such as ART with respect to the special needs of women would be a welcome step for many practitioners (Bloom, 1999). While a great deal has been achieved in a short period of time, it is clear that much, much more remains to be done.

REFERENCES


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