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Chapter 4

CRIME TREATMENT IN EUROPE: A REVIEW OF OUTCOME STUDIES

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PHILOSOPHICAL AND LEGAL ASPECTS OF REHABILITATION

All penal systems have as their main purpose, explicit or implicit, the punishment of those who break the law. To achieve this aim different penalties are used. By and large, the most frequently used are fines and the most severe, sentences of imprisonment. The latter is also the most traditional or long-standing measure. Other approaches, directed towards compensating the victim or the community for the damage caused by crime, are of much more recent origin.

One of the implicit aims of most penalties is to “correct” or change the offender’s behaviour: in the case of high-risk, repetitive offenders, to help them avoid relapse into crime. This reformatory aspiration emerged in nineteenth-century penal thought and nowadays it is sometimes known in criminology as the “rehabilitative ideal”.

Across the board, it is hoped that all penalties applied to an offender (reprimand, fine, community work, probation, prison and parole) will be effective, and that they will dissuade the individual from committing new offences. However, in practice, the recidivism rates for crime in general, after many of the above-mentioned penalties have been imposed, are high. On average, about 50% of all convicted criminals re-offend.

The growing pessimism regarding the rehabilitative ability of the penal system has led, in the last few decades, to the development and application of other strategies—not strictly penal ones—for the prevention of crime and treatment of offenders. A century of scientific criminology has shown that criminal behaviour

depends not only on volitional elements and rational decisions that could be suppressed through the threat of penalties, but also on other factors. These other factors can be social: ineffective child-rearing, school failure, unemployment, drug-trafficking, strains between social groups, criminal subcultures; or they may be individual factors: low educational level, aggressive tendencies, lack of occupational skills, drug addiction, frustration, beliefs and criminal values, egocentrism, impulsiveness and the lack of a social perspective. By developing a model of tertiary crime prevention that incorporates these factors, it becomes possible to devise strategies directly designed to neutralise the roots of delinquency and criminal behaviour. These strategies are collectively known as "treatment" or "intervention" programmes. In theory, they can be conducted either in the community or in closed institutions.

At present, the "ideal of rehabilitation", in the context of the penal system, is achieved by applying educational strategies and giving social support. The aims of this are to address problems theoretically linked to an individual's illicit conduct (i.e. criminogenic needs). Some of the methods used for this purpose consist of: literacy and other basic skills training, developing negotiation skills as an alternative to violent behaviour, treatment of substance abuse, improving tolerance to frustration, developing pro-social values and attitudes, or learning to control impulsiveness. Associated interventions encompass a wide and heterogeneous range of possibilities.

International organisations such as the United Nations and the Council of Europe have issued principles, procedures and recommendations for different nations in the field of offender treatment, so that they may serve as the basis for laws and practices in this matter. They include principles regarding treatment in prison. For example, the Council of Europe has issued the following recommendations (Recommendation NR (87) 3):

- The principal objectives of treatment are to safeguard prisoners' health and dignity, as well as to develop their sense of responsibility and to provide them with those competencies that will help them to return to society, not to offend again and to provide for their own needs.
- It is an important goal, also, to reduce the stigma that follows from the experience of detention.

With this aim, the Council Recommendation proposes that all possible means be used to provide individualised treatment for convicted prisoners. This should include the use of the following strategies:

- The development of a specific occupational activity.
- The application of information and management systems that improve the relationships between staff and prisoners, in order to make prison regimes and treatments more effective.
- The establishment of open prison regimes.
- The design of treatment programmes that take account of individual differences.
- The establishment of specific systems to promote prisoners' cooperation and participation in their treatment process.

- The establishment of educational and recreational programmes and promoting the use of prison libraries.
- The use of progressive and conditional release systems, with community-based services cooperating in this task.

To date, not all European countries have included these recommendations in their own legislative frameworks. The penitentiary laws of Belgium, Germany, Italy, Netherlands, Spain and Sweden explicitly link the application of prison sentences and the provision of treatment services. By contrast, the French and the English/Welsh prison laws do not explicitly mention the ideal of the rehabilitation.

Many factors influence the extent to which different states are prepared to act on these recommendations. For example, the application of treatment programmes depends on the type of criminological philosophy prevailing in any given country. Specifically, it is important that crime prevention and the rehabilitation of offenders are considered—in the academic arena and by politicians and the public—as having a contribution to make to the struggle against criminality. A second factor is the level of development reached by the social-science disciplines devoted to designing, applying and evaluating intervention programmes focused on delinquency and crime. These disciplines include psychology, criminology, education and social work. The maturity and level of establishment that these sciences, and their respective professional memberships, may have achieved in the correctional field will be especially relevant for the development of rehabilitation programmes. The assistance given by such practitioners in prisons, juvenile institutions and other facilities for offenders, does not guarantee the development of correctional programmes, but does make it more probable. Finally, to facilitate the evaluation and diffusion of applied treatment programmes, it is usually necessary that at least some of the professionals in charge of the programmes have a proper methodological training and motivation to pursue rehabilitation as an objective.

The regrettable fact is that despite lengthy debates concerning rehabilitation held over the last few years, in some countries very few changes have occurred. Governments and penal systems throughout the world invariably respond to offenders through punishment, especially the use of imprisonment; but only very few states have established educational and treatment facilities for offenders. Furthermore, only some of those penal systems within which educational measures are statutorily available actually deliver them. Even where this happens, the number of offenders included in them is very small, sometimes for practical reasons: lack of resources or training; organisational disinterestedness; lack of motivation on the part of the potential participants, and so on.

RECIDIVISM AND TREATMENT PROGRAMMES

Reducing recidivism is not an easy aim that can be achieved exclusively through deterrence. Often, preparing offenders to avoid committing new crimes entails restoring an endless number of positive social ties that have been broken: to improve their family situation, education, job opportunities, social skills and self-control; or to reduce the use of alcohol or other drugs. Furthermore, social action is necessary to

offer offenders new social and economic opportunities: social relationships and alternatives to crime; stable employment; access to housing; and other social services.

During recent years various types of treatment programmes have been developed. Some of them have offered educational facilities, others vocational training; some have treated drug addiction, others have trained hygiene habits or communication skills. Often perhaps, excessive confidence has been placed in these methods, and it has been hoped that they would categorically eliminate criminal recidivism. However, after participation some offenders still commit new offences. Then, the conclusion sometimes drawn—as simplistic and disproportionate as was the initial excessive expectation—is that since these treatment initiatives has been not fully effective, they must be completely useless. From such a perspective, the ideal of rehabilitation has apparently failed.

Placing this on a more realistic perspective, however, it would be completely unreasonable to hope that the limited changes in partial aspects of an offender's life that are promoted through intervention programmes will always produce a final interruption of their criminal careers. It would be more sensible to expect that if treatment programmes are applied, *some* offenders will change sufficiently to avoid breaking the law again. This prudent expectation is confirmed by correctional research. Some programmes (mainly cognitive-behavioural or family oriented), when applied appropriately, moderately reduce the recidivism rates of treated groups of offenders. On average, this level of reduction has a magnitude between 10% and 15%.

Compare the expectations of "treatment success" with what is expected of students graduating from university and seeking employment. The outcome of this is influenced by innumerable factors. Some of them are distant, such as the education that the individual has received in his/her family and at school and relationships with friends. Personality characteristics, social skills, friendliness, motivation and other factors also play a part. University education linked to vocational skills is superimposed on these factors and cumulatively they combine to influence the individual's overall competence. Yet cumulatively, none of this guarantees that someone will secure a good job. The latter depends also on external factors, such as supply and demand in the occupational sector of interest (connected in turn with a wide spectrum of factors, such as the state of the domestic economy). Situational factors, such as the degree of the access that the individual has to the information about the job market and the competition among candidates interested in the same job, also affect the outcome. Even though a proportion of graduates do not obtain employment consistent with university training, that does not imply that university education has completely failed in a country and should therefore be abolished. University training is a requirement for some jobs, but it is not a guarantee. In a similar way then, the application of programmes for offenders does not ensure their social reintegration. That depends on very heterogeneous factors, both personal and social.

The foregoing discussion is designed to provide a context of social and philosophical issues that arise when considering what is possible and feasible in attempting to act upon the "rehabilitative ideal". Treatment programmes can play an important, but not exclusive, part in recidivism reduction and we should be realistic about their outcomes. In what follows, we will review European research on offender

treatment, before focusing on a new meta-analytic study of the impact of treatment on recidivism that we have recently carried out.

CRIMINOLOGICAL MODELS AND TREATMENT STRATEGIES IN EUROPE

In criminology, different theoretical conceptions on criminal behaviour co-exist, and from them different applications for offender treatment are derived. In Europe, according to our own reviews on this field, the principal theoretical models used as a rationale for treatment are the following (Redondo, 1994; Redondo, Garrido & Sánchez-Meca, 1997; Redondo, Sánchez-Meca & Garrido, 1999; Garrido, Stangeland & Redondo, 1999):

Theoretical Conceptions

Emotional Distress and Non-behavioural Psychological Therapies

The belief that offenders experience a series of deep emotional distresses and that criminal conduct is an external statement or symptom of these distresses has a long tradition in corrections. According to this conception, treatment of offenders would have to be directed towards their underlying psychological problems. As a result of the success obtained in psychological therapy, criminal behaviour would be reduced, or even disappear. In this model, a heterogeneous set of techniques is included: those founded on the psychodynamic model, on a medical or pathological model of crime, or on client-centred counselling.

Educational Attainments and Compensatory Intervention

Many adjudicated offenders did not complete their secondary or high school education and consequently may have a large educational or skills deficit. The conclusion drawn from this is that if we want to help this group of offenders, one main task is to increase their educational level through intensive schooling programmes. These programmes consist of basic skills training, or other school-like learning, focused on literacy, numeracy or similar remedial activities. In programmes of this type, basic education is given more emphasis than the training of practical skills.

The Learning of Criminal Behaviour and Behavioural Intervention

Learning theories (such as social learning or differential association models) consider that criminal conduct, like any other complex human behaviour, is learned. The objective of behavioural programmes is to employ learning mechanisms to reverse the learning process, so that participants can learn to inhibit criminal conduct and can put new, socially acceptable, behaviour into practice. Two paradigmatic applications of these models are token economy programmes and contingency management programmes. The former are have been particularly widely used in

corrections (Morris & Braukmann, 1987). To apply such programmes effectively, all the staff of an institution must be involved and led by a group of specialists who are in charge of the design, supervision and evaluation of the programme (Redondo, 1993).

Social Interaction Skills and Cognitive-Behavioural Intervention

This approach is based on the cognitive-behavioural model, which emphasizes the need to teach offenders abilities that will facilitate interaction with others in family, job, or other social contexts. Perhaps the most comprehensive cognitive-behavioural programme is that which follows the model of "Reasoning and Rehabilitation" (Ross & Fabiano, 1985; see also McGuire & Priestley, 1989). It involves initial assessment of the offenders' deficits in cognitive and interaction skills. Following this, for those identified as requiring the programme, treatment is applied in a group setting for a series of weekly sessions.

The strategies within the programme itself are the following: *interpersonal cognitive problem-solving, social skills*, for successful interaction in social encounters; *emotional control of explosive anger; critical reasoning*, to teach participants to think in a more reflective and critical way about their own and other people's behaviour; *values enhancement*, to develop empathy and role taking; *negotiation abilities*, in which negotiation is taught as an alternative strategy to confrontation and violence; and *creative thinking*, to enable the individual to develop alternative ideas instead of the more habitual anti-social solutions that many offenders tend to use. Currently, cognitive-behavioural programmes are the most widely used in work on most types of offence behaviour (see Ross & Ross, 1995).

Deterrence Theory and the Hardening of Prison Regime

Toughening a prisoner's life conditions can scarcely be considered a therapeutic technique. However, during the last years in some countries there has been a trend towards designing stricter regimes with tough, military-style discipline. Prisoners, young and adult, are offered a choice between serving their sentences entirely in a standard prison or serving a reduced sentence in these "special" institutions.

Use of these methods is based on the classical doctrine of deterrence. According to this, the application of penal sanctions to offenders will remove or reduce their future criminal tendencies. The stricter and more severe the punishment, the greater will be its deterrence effects. The basic elements of this model therefore are: (1) rigid daily discipline and supervision; (2) fixed activities including work (not always of a useful character), gymnastics, parades and, sometimes, group sessions; and (3) application of an inflexible sanctions system. The pioneer country in this "new" operation is the United States of America. Fortunately, this restrictive direction has not been fully imitated in any European countries.

Healthy Institutional Environments and Therapeutic Communities

Therapeutic communities try to encompass all of a prisoner's daily life in an institution. Relationships between imprisoned people and institutional staff are defined

similarly to those of patient/nurses in a therapeutic context. The main theoretical assumption is that healthy and participatory environments in custodial institutions will bring about greater psychological balance in prisoners and will reduce their anti-social behaviour, both during the individual's stay in the custodial institution and afterwards. In therapeutic communities, the kind of rigid controls and sanction systems that are common in closed institutions are suppressed. Thus, the control of prisoners' behaviour depends on the community, composed of prisoners and staff. Periodic community assemblies are held to discuss the daily problems that arise. The correct operation of a therapeutic community requires all staff to participate and to have appropriate training. This treatment modality has been very widely used with drug addiction as well as in units for violent offenders serving long-term sentences.

Avoiding Labelling Through Diversion Programmes

Labelling theory states that one of the factors that maintains criminal conduct is the subject's sense of stigmatisation through criminal justice processing. This (especially if it has involved imprisonment) will produce negative effects on the person's sense of identity and be likely to promote persistence in a criminal career. To avoid it, action should be taken to divert young offenders from the justice system, and especially from institutionalisation. This can be accomplished through alternative programmes such as mediation and reparation, or sometimes through social work intervention and supervision in the community.

THE EFFECTIVENESS OF EUROPEAN CORRECTIONAL PROGRAMMES

During the last few decades, extensive research has been conducted on the practical effectiveness of different strategies applied to groups of offenders (Lösel, 2001; McGuire, 2001). More than 20 meta-analyses have been carried out on the effectiveness of correctional treatment (e.g. Andrews et al., 1990; Dowden & Andrews, 1999, 2000; Gallagher et al., 1999; Garrett, 1985; Lipsey, 1999a, 1999b; Polizzi, McKenzie & Hickman, 1999; Wilson, Gallagher & McKenzie, 2000; Wilson & Lipsey, 2000). While most of these reviews were based on research conducted in North America, several have focused on European studies. One of them was the Lösel, Köferl and Weber (1987) meta-analysis on the effectiveness of socio-therapeutic prisons in West Germany, which used recidivism as one of its outcome measures. The other two were conducted by Redondo, Garrido and Sánchez-Meca (1997; see also Redondo, 1994) and Redondo, Sánchez-Meca and Garrido (1999), both of which related to treatment programmes applied in different European countries.

The Review of German Programmes of Lösel, Köferl and Weber

In 1987, Lösel, Köferl and Weber published the first European meta-analysis on treatment programmes (see Lösel, Köferl & Weber, 1987; Lösel & Köferl, 1989). It

evaluated, from different studies published in the Federal Republic of Germany between 1977 and 1985, socio-therapeutic programmes applied in 16 German prisons.

The so-called socio-therapeutic prisons did not have a unitary conception of treatment. Their broad concept of social therapy included different elements such as the following: changes in the prisoners' life conditions, group processes, organisational factors, training in everyday skills, contact between prisoners and the community, external jobs, furloughs and programmes to prepare for release from prison.

Outcome studies were divided into two groups, according to the measure used as the success criterion: recidivism or personality features. Recidivism has been evaluated by means of different criteria, using follow-up periods from 3 to 5 years. Personality constructs have been evaluated through questionnaires, attitude scales and self-reports.

As is usual in meta-analysis Lösel and his collaborators coded the prison, participant, treatment, research design features, and the results as separate variables in the studies. Where necessary, they asked the original authors for complementary information in order to improve data validity and reliability.

The *effect size* indexes of personality variables were calculated by Cohen's *d* coefficient, and recidivism (in dichotomous terms) by means of Freedman's *r_m* coefficient. With the objective of evaluating the success of treatment regimes, they obtained five graduated estimations of *effect sizes*, from a conservative one to an optimistic one.

In all recidivism analyses reported, the effects found were positive (meaning there was a reduction of recidivism), with one exception. The studies that used personality outcomes exhibited some problems of manipulation.

According to the results obtained in the different estimations of success, the effects were generally moderate but consistent (ranging between $r_m = 0.309$ and 0.000). The average *effect size* of the five evaluative models ranged between 0.075 and 0.136, and that of separate studies, belonging to all kind of models, between 0.017 and 0.255. The confidence interval of 95% was between 0.077 and 0.181 for the most optimistic effect estimation, and between 0.038 and 0.112 for the most conservative. The most frequently obtained effect was $r_m = 0.110$.

Unfortunately, the small number of studies analysed and the deficiencies of information limited the possibilities for analysing relationships between the *effect sizes* and independent variables within treatment, participants, or context.

The main conclusion obtained by Lösel and his colleagues, related to the effectiveness of the socio-therapeutic prison regimes, was that the desired effect—non recidivism—could be anticipated for 10% more inmates in socio-therapeutic prisons than for those incarcerated in normal prisons.

Previous Meta-analyses of Redondo, Sánchez-Meca and Garrido

Recently, Redondo, Sánchez-Meca and Garrido (Redondo, Garrido & Sánchez-Meca, 1997; Redondo, Sánchez-Meca & Garrido, 1999) have published two meta-analyses on treatment programmes applied in European countries.

Treatment Effectiveness on Different Variables

The first meta-analysis by Redondo, Garrido and Sánchez-Meca (1997) analysed the effectiveness of 57 treatment programmes developed in six different countries (five European countries—Germany, Netherlands, Spain, Sweden and the United Kingdom—and Israel).

In coding the meta-analytic variables, the features of four kinds of antecedent factors (treatment, participants, context of intervention and methodology) were analysed. These features were related to six outcome measures (treatment implementation level, institutional adjustment, psychological adjustment, educational adjustment, vocational adjustment, interaction skills adjustment and recidivism).

Eight categories of theoretical models were established, underpinning the treatments used (similar to those described earlier):

1. Non-behavioural therapy, such as individual or group psychotherapy (a category to which 9 studies were assigned).
2. Educational-informational interventions, such as school or delivery of educational material (6 studies).
3. Behavioural therapy, exclusively founded on classical or operant conditioning models as in the case of token economies or environmental outlines based on contingencies (11 studies).
4. Cognitive-behavioural therapy, such as social skills training or psycho-social competence programmes (19 studies).
5. Classical penal theory based on retribution, such as models of "shock incarceration" or increasing levels of institutional control (1 study).
6. Therapeutic community where prisoner-staff relationships were conceived as similar to patient-nurse relationships, or with decreasing levels of institutional control (5 studies).
7. Diversion programmes or community treatment (5 studies).
8. Others, for instance psychiatric institutions (1 study).

A standardised mean difference (*d*) was used in order to calculate the effect size (ES) of each programme. For the studies comparing two groups (experimental-control), *d* was defined as the difference between the means of both groups divided by the within-group standard deviation; for one group pre-test/post-test studies *d* was the difference between the means of the pre-test and post-test divided by the within-group standard deviation. When a programme was effective, *d* had a positive value, and a negative value in the contrary case. Finally, all *d* indexes were transformed (using the procedure of Rosenthal, 1991) into Pearson's correlation coefficients (*r*), permitting a direct interpretation in terms of percentages of experimental and comparison sample recidivating.^{1*}

The main characteristics of the European programmes were as follows. The *intervention magnitude*, defined as the total number of treatment hours per offender, had a low intensity (median = 22.5 hours). The *total sample* included 7728

*Notes are presented at the end of the chapter.

participants: the vast majority was male with a median age of 19 years, sentenced for property offences. Of this sample, 4284 were in treatment groups and 3444 in control groups. The median duration of programmes was 2.5 months, with 3.75 treatment hours per week. Behavioural and cognitive-behavioural models of treatment were the most frequently employed. Programmes were more often delivered in juvenile prisons, adult prisons and in the community. The median length of the follow-up periods was 12 months, while the mean was 19.7 months. The most commonly employed design was quasi-experimental.

The following were the most important results of this evaluation:

- The vast majority of programmes—50 (87%) from the 57 analysed—obtained positive effects.
- The average Pearson correlation coefficient was $r = 0.15$ ($d = 0.3039$, statistically significant with $p < 0.0001$). This means that treated groups surpassed controls by 15 points.
- In terms of crime typology, the greatest effectiveness was obtained with offenders against persons ($r = 0.419$), and the least with sexual offenders ($r = 0.085$).
- The greatest effectiveness was achieved in juvenile centres ($r = 0.257$) and in juvenile prisons ($r = 0.193$), and the smallest in adult prisons ($r = 0.119$).
- Behavioural ($r = 0.279$) and cognitive-behavioural programmes ($r = 0.273$) produced the greatest levels of effectiveness, and retribution programmes ($r = 0.039$) the least.
- Concerning recidivism, the mean ES had a value of $r = 0.12$ ($p < 0.001$). Cognitive-behavioural ($r = 0.265$) and behavioural programmes ($r = 0.232$) produced a reduction of recidivism rates that was double the mean for the programmes as a whole.

Treatment Effectiveness on Recidivism

In a second study, Redondo, Sánchez-Meca and Garrido (1999) analysed the specific influence of 32 European treatment programmes (applied during the 1980s) on recidivism. As we have said previously, recidivism is a final product of the failure of different social agents, such as family, school, employment, and public safety measures, in the task of community integration. From a criminological perspective, recidivism is necessarily the "bottom line" criterion when evaluating treatment effectiveness.

The same process as outlined above was used to code the studies. Standardised mean difference (d) was the effect size index selected to summarise the results of each empirical study. Meta-analytical procedures developed by Hedges (1994) and Hedges and Olkin (1985) were applied, weighting each effect size by its inverse-variance.

Recidivism was defined broadly, as any measure of new delinquent or criminal behaviour: contacts with the police, arrests, parole and probation revocation, vandalism, self-reported offences, new sentences, return to juvenile institutions or prisons, and so on.

The effectiveness of the European treatment programmes on recidivism was of $d = 0.242$ (95% confidence interval: 0.196 and 0.287). This corresponds to an average

correlation coefficient of $r = 0.120$. That means that recidivism was reduced by 12% in treated groups. This result is very similar to the value of recidivism reduction obtained in other meta-analyses.

The effectiveness of European programmes in reducing recidivism rates was characterised by the following factors:

- Behavioural and cognitive-behavioural programmes were the most effective.
- Treatments were more successful with juvenile offenders. However, the reason for this greater efficacy with juveniles was probably due to the fact that they were treated with the most successful techniques (behavioural and cognitive-behavioural).
- As in our previous meta-analysis concerning crime typology, the greatest effectiveness was achieved with violent offenders (not sex offenders), which seems to confirm the *risk principle* (Andrews et al., 1990). This principle holds that larger effects can be expected from programmes applied to high-risk offenders, who usually receive the most intensive and highest quality correctional services.

A NEW META-ANALYSIS ON THE EFFECTIVENESS OF EUROPEAN TREATMENT PROGRAMMES ON RECIDIVISM REDUCTION (1980–1998)

Purpose of the Meta-analysis

Both the meta-analysis conducted by Redondo, Sánchez-Meca and Garrido (1999) and the one now presented in this chapter, were exclusively focused on evaluation studies that used some kind of recidivism measure. However, there are several differences between them. First, the previous meta-analysis covered the years 1980 to 1991, whereas the present one covers 1980 to 1998. Second, the prior meta-analysis included different research designs, mixing one-group pre-test/post-test design with two-group designs. The current meta-analysis, in order to achieve more homogeneity among the studies, was restricted to studies with two or more groups, one of which was the control group. Third, the previous meta-analysis included different measures of recidivism, such as prevalence indexes (i.e. dichotomous measures, such as recidivism versus no recidivism) and incidence indexes (i.e. the average number of offences committed by the sample of offenders). In this new analysis, only dichotomous measures of re-offending were included, again in order to achieve more homogeneity. Fourth, because of the homogeneity produced by the studies' methodological characteristics, it was possible in the present meta-analysis to apply more adequate effect size indexes, such as the odds ratio, in preference to the *phi* coefficient and the standardised mean difference. In spite of the popularity of the latter measures, they cannot be considered the most advisable indexes to summarise dichotomous data (Haddock, Rindskopf & Shadish, 1998). Finally, our prior meta-analysis on recidivism did not distinguish between different methods of operationalising recidivism, whereas in the current study, three recidivism definitions were adopted, as explained below.

Our present research focuses on testing the effectiveness of correctional programmes implemented in Europe to reduce recidivism, with the following main

objectives: (a) to determine the global effectiveness of correctional treatment compared to control groups; (b) to explain the variability in effect sizes by detecting the characteristics that moderate the results in the empirical studies, such as treatment type, the type of offenders, the age of offenders and so on; and (c) to compare the effectiveness of European programmes with those obtained in previous American meta-analyses.

Method

Literature Search

The target population of studies was defined by selection criteria, and to be retained a study had to: (a) include offenders under the control of the criminal justice system (young or adult offenders); (b) use a treatment strategy for some time; (c) apply a controlled group design; (d) include some dichotomous measure of recidivism; and (e) have been implemented in Europe. The search covered the period 1980 to 1998. Several information sources were used to identify the literature. First, computer databases such as *Criminal Justice Periodical Index*, *Pascal*, and *PsycLIT* were consulted. Second, a manual search of 55 (mostly European) specialised journals was carried out. Third, letters requesting studies on the topic were sent to 118 key researchers and 82 European institutions linked to the field. Finally, all references cited in the selected studies were also reviewed. The literature search enabled us to select a total of 23 research papers that produced 26 studies meeting the inclusion criteria. The total sample in these studies was of 5764 subjects, 2570 belonging to the treatment groups and the remaining 3194 assigned to the control groups.

Coding Moderator Variables

The characteristics of the studies that might moderate the results were classified in five clusters: treatment, subject, setting, methodological and extrinsic variables (Lipsey, 1994; Sánchez-Meca, 1997). The *treatment* cluster included: (a) the theoretical treatment model (non-behavioural psychological treatments, educational/informational programmes, behavioural therapy, cognitive-behavioural therapy, deterrence theory, therapeutic community, diversion programmes and other), (b) the length of the programme (in months), and (c) the intensity of the programme (in hours per person per week). The cluster of *subject* variables was composed of: (a) the age of the members of the sample (adolescents, juveniles, mixed and adults), (b) the most common offence type in the sample (property, people, sex, drug traffic, alcohol and mixed), and (c) the sample gender (percent male). The cluster of *setting* variables included: (a) the setting in which the programme was applied (juvenile reform centre, juvenile prison, adult prison, in the community and other), (b) the regime of the participants (closed, semi-open, open and other), and (c) the country. Regarding the variables related to the *methodology*, the following were included: (a) the procedure for assignment of subjects to the

groups (random versus non-random), (b) the attrition rate of treated group, and (c) the follow-up period (in months). Finally, the following *extrinsic variables* were included: (a) the year in which the paper was published, and (b) the literature source (published versus unpublished).

Recidivism Measures

The literature on correctional treatment evaluation shows the great diversity of definitions that researchers have applied to recidivism as an outcome. The most commonly used measure of recidivism is based on a dichotomous record (recidivist versus non-recidivist) of each individual's behaviour during a given follow-up period after his or her release, regardless of the number of offences committed. Thus, the proportion of the sample re-offending size constitutes a *prevalence index* of sample recidivism, as compared to *incidence indexes* which consists of dividing the number of offences by the sample size. We focused on prevalence rates of recidivism because they are the most commonly used.

Another problem in homogenising the definition of recidivism is the great diversity of terms used in empirical studies (Lipsey, 1992). It is easy to find very different definitions of recidivism, such as "new police contacts", "new arrests or detentions", "new sentences", "commission of new offences", "imprisonment", "revocation of probation" and so on. Following a previous study (Sánchez-Meca, Marín-Martínez & Redondo, 1996), we proposed three prevalence rates of recidivism, two of them based on official records of the juvenile criminal justice services or the police, and the third based on informal data. The two official indices of recidivism were the "General recidivism rate" and the "Serious recidivism rate". The former is a broad definition of re-offending and includes any terms related to the commission of new offences, new sentences, rearrests, reconvictions, new police contacts, or new confinement. On the other hand, "serious recidivism" refers only to the commission of new offences that give rise to the loss of freedom (return to prison or revocation of probation). Thus, "serious recidivism" will be dominated by the gravest offences, whereas "general recidivism" represents less serious offences. The third index employed is "Self-reported recidivism", which is obtained by means of interviews or questionnaires applied to the offenders. Although used less frequently, self-reported recidivism can complement the other two official indexes, especially when the offences are not serious (e.g. driving under the influence of alcohol, vandalism).

Effect Size Indexes

The result of each empirical study included in our meta-analysis can be summarised as a 2×2 contingency table, group membership being one of the variables (treated versus control groups) and the dichotomous measure of recidivism being the other variable (recidivism versus non-recidivism). The *phi* coefficient and the standardised mean difference (*d*) have been the effect size indexes usually applied in meta-analysis to measure the effectiveness of correctional treatment. However,

recent research has shown that ϕ and d indexes applied to a set of 2×2 tables underestimate the true effect size (Fleiss, 1994; Haddock, Rindskopf & Shadish, 1998; Sánchez-Meca, Redondo & Marín-Martínez, 1998). Instead, other indexes, such as the "odds ratio", have been recommended that more accurately estimate the population effect size. The "odds ratio" can be translated to d and r indexes, enabling its comparison with the results of other related meta-analyses (Hasselblad & Hedges, 1995). Therefore, in this meta-analysis the odds ratio was the effect size index used, but our results are presented as correlation coefficients (r) in order to compare the results with those of other meta-analyses.

Statistical Analysis

The statistical model used in our meta-analysis is based on the approach proposed by Hedges and Olkin (1985) adapted to the integration of a set of 2×2 tables. It consists of weighting the effect size of each study by the inverse of its variance, in order to give more weight to the studies with the larger sample sizes. Thus, the following statistical analyses were applied: (a) a weighted mean of the r index, (b) a 95% confidence interval around the mean, and (c) a homogeneity test of the set of indexes around the mean. Finally, (d) if the effect sizes showed more heterogeneity around the mean than expected from sampling error, then a search for moderator variables was carried out.

Results

Descriptive Characteristics of the Studies

Most of the studies (61.5%) included samples of adult offenders with an average age of 25.5 years, with most samples consisting of males. The offence types in the samples were: mixed offences (28%), alcohol-related offences (24%), property offences (20%), sex offences (12%), drug-traffic offences (12%), and person offences (4%).

The theoretical treatment models found in the studies were: non-behavioural psychological therapies (26.9%), educational programmes (19.2%), diversion programmes (19.2%), cognitive-behavioural programmes (15.4%) and therapeutic community programmes (15.4%). The programmes presented a median duration of 4.5 months with 4 hours of treatment per week.

The programmes were most frequently applied in the community (50%) and in adult prisons (20.8%). Among the latter, the samples of offenders usually received the programmes in open regimes (39.1%) and in closed regimes (30.4%). The most frequently represented country was the UK (11 studies, 42.3%) followed by Germany (5 studies, 19.2%), Sweden (5 studies, 19.2%), Netherlands (4 studies, 15.4%) and Israel (1 study, 3.9%).

Only two studies (7.7%) randomly assigned the subjects to the groups and the average attrition rate in treated groups was 36.8%. Follow-up periods ranged from 6 to 120 months and had a median of 24 months. Most of the studies were published in journals or books (22 studies, 84.6%). Finally, more than the half of the studies were published between 1988 and 1991 (14 studies, 53.9%).

The Average Effect Size

Table 4.1 shows the summary statistics of the correlation coefficients (r) obtained for each recidivism measure (general, serious and self-reported recidivism). The 23 studies that presented data about general recidivism achieved a mean effect size of $r_+ = 0.21$; this magnitude is statistically significant ($z = 15.22, p < 0.001$). Therefore, in general, the groups of treated offenders showed a lower re-offending rate than the control groups. In particular, applying the Binomial Effect Size Display (BESD) of Rosenthal (1991) the treated groups had a recidivism rate of 39.5% as compared to 60.5% of the control groups—that is, a differential recidivism rate of 21%.

The measure of serious recidivism was reported in only eight studies, presenting a mean effect size of $r_+ = 0.22$, also in favour of the treated groups and statistically significant ($z = 6.63, p < 0.001$). This result implies a 22% differential rate of re-offending or, applying the BESD, a recidivism rate of 39% in treated groups, as opposed to a rate of 61% in control groups. Thus, the general effectiveness of programmes in terms of serious recidivism was very similar to that for general recidivism. Regarding self-reported re-offending, it was possible to report this type of measure only in three studies, achieving an average effect size of $r_+ = 0.31$ and being statistically significant in favour of the treated groups ($z = 9.32, p < 0.001$). The three studies applied programmes to reduce the recidivism of offences related to vandalism (Kruissink, 1989) and drunk driving (Bovens, 1987; Van Dalen, 1989).

Owing to the scarcity of studies that included measures of serious and self-reported recidivism, these results cannot be accepted in any general sense. However, the results obtained with respect to general recidivism can be compared to those of other meta-analyses already carried out on the effectiveness of correctional treatment. It is worth noting that the average effect size achieved in our meta-analysis was clearly higher than that obtained in previous reviews. The present mean value of $r_+ = 0.21$ can be compared to effect sizes of $r_+ = 0.12$ (Lösel & Kofler, 1989; Redondo, Sánchez-Meca & Garrido, 1999; Whitehead & Lab,

Table 4.1 Summary statistics of correlation coefficients for each recidivism measure

Statistics	Recidivism		
	General	Serious	Self-reported
No. of studies	23	8	3
No. of treated subjects	2102	375	468
No. of control subjects	2813	413	381
Proport. of positive ES's	18/23 = 0.78	8/8 = 1.0	3/3 = 1.0
Minimum	-0.55	0.06	0.14
Maximum	0.75	0.66	0.71
Weighted mean	0.21	0.22	0.31
95% Confidence Interval	0.20/0.22	0.16/0.28	0.25/0.37
Significance test, z	15.22*	6.63*	9.32*
Homogeneity test, Q_T	146.53*	39.97*	78.32*

* $p < 0.05$.

1989), $r_+ = 0.16$ (Pearson et al., 1995), $r_+ = 0.10$ (Andrews et al., 1990), $r_+ = 0.065$ (Garrett, 1985) or $r_+ = 0.05$ (Lipsey, 1992).

The reason for these differences is the procedure for estimating the effect size from the 2×2 contingency tables. The ϕ and d indexes usually applied in previous meta-analyses are negatively biased estimates of the true effect size (Haddock et al., 1998); in fact, the average ϕ coefficient obtained in our meta-analysis was $\phi_+ = 0.12$, very similar to that of previous meta-analyses. By contrast, the correlation coefficient calculated through the odds ratio provides a more accurate estimate of the true programme effect size. This evidence casts doubt on the apparently low efficacy of programmes exhibited in previous meta-analyses. As a consequence, our results offer a less pessimistic picture of the global effectiveness of correctional treatment. Use of the odds ratio as an effect size index in meta-analyses of 2×2 tables should be more frequently considered in future review work.

Searching for Moderator Variables

The three indexes of re-offending showed a very high heterogeneity in effect sizes (Table 4.1)—even in the case of serious and self-reported recidivism—in spite of the low number of studies (serious recidivism: $Q_T[7] = 39.97$, $p < 0.001$; self-reported recidivism: $Q_T[2] = 78.32$, $p < 0.001$). Thus, attempts were made to find moderator variables that could explain such heterogeneity. Because general recidivism was the most commonly reported index in the studies reviewed ($k = 23$) and with the highest variability ($Q_T[22] = 146.53$, $p < 0.001$), the search for moderator variables focused on this index.

Tables 4.2 and 4.3 present the results of the analyses of variance and regression, all of them weighting by the inverse of the variance of each effect size, applied to different moderator variables. One of the more important characteristics of the studies was the theoretical model of the programmes applied. Our results (Table 4.2) show that the theoretical model is statistically related to the effectiveness ($Q_B[5] = 30.98$, $p < 0.001$), with 21.1% of explained variance. Although all of the theoretical models exhibited a statistically significant effectiveness, the largest effect sizes were achieved with educational programmes ($r_+ = 0.49$) and cognitive-behavioural therapy ($r_+ = 0.30$), with therapeutic community ($r_+ = 0.13$) and diversion programmes ($r_+ = 0.14$) the least effective. The duration and intensity of the programmes did not seem to be related to effectiveness (Table 4.3).

Programme setting was related to effect size ($Q_B[3] = 17.94$, $p < 0.001$), with 12.8% of explained variance (Table 4.2). With the exception of programmes implemented in juvenile prisons ($r_+ = 0.05$) the remaining settings showed statistically significant effect sizes, with community being the setting in which the programmes demonstrated the largest effect sizes ($r_+ = 0.26$), together with "other settings" ($r_+ = 0.28$) such as psychiatric centres. On the other hand, the regime of the participants in the programmes was also related to effectiveness ($Q_B[3] = 28.67$, $p < 0.001$), with 19.8% of explained variance (Table 4.2). The best results were obtained when the offenders received the treatments in open regimes ($r_+ = 0.28$).

With the exception of the only study from Israel (Cohen et al., 1991), the different countries represented in the meta-analysis showed statistically significant effect

Table 4.2 Results of the analyses of variance for the qualitative variables on general recidivism

Cluster/moderator variables	k_j	r_+	Q_B	R^2
I. TREATMENT CLUSTER				
• <i>Theoretical model</i> ($k = 23$)				
Nonbehavioural psychological therapies	7	0.24*	30.98*	0.211
Educational programmes	3	0.49*		
Cognitive-behavioural therapy	4	0.30*		
Therapeutic community	4	0.13*		
Diversion programmes	4	0.14*		
Other	1	0.25*		
II. SUBJECT CLUSTER				
• <i>Sample age</i> ($k = 23$)				
Adolescents (<16)	2	0.35*	13.86*	0.095
Juveniles (16–21)	6	0.16*		
Mixed	1	0.14*		
Adults (>21)	14	0.24*		
• <i>Main offence type</i> ($k = 22$)				
Property offences	5	0.23*	15.95*	0.112
People offences	1	0.25*		
Sex offences	3	0.30*		
Drug traffic offences	3	0.12*		
Alcohol related offences	4	0.25*		
Mixed	6	0.24*		
III. SETTING CLUSTER				
• <i>Programme setting</i> ($k = 21$)				
Juvenile prison	4	0.05	17.94*	0.128
Adult prison	4	0.18*		
In the community	10	0.26*		
Other	3	0.28*		
• <i>Regime of participants</i> ($k = 23$)				
Closed	6	0.18*	28.67*	0.198
Semi-open	1	-0.18		
Open	8	0.28*		
Other	6	0.26*		
• <i>Country</i> ($k = 23$)				
Germany	5	0.23*	13.43*	0.092
Great Britain	11	0.24*		
Israel	1	0.05		
Netherlands	2	0.35*		
Sweden	4	0.18*		
IV. METHOD CLUSTER				
• <i>Random assignment</i> ($k = 23$)				
Random	2	0.10	0.98	0.007
Nonrandom	21	0.21*		
V. EXTRINSIC CLUSTER				
• <i>Publication source</i> ($k = 23$)				
Published	20	0.23*	5.29*	0.036
Unpublished	3	0.16*		

* $p < 0.05$. k_j = No. of studies. Q_B = Between groups significance test. R^2 = Proportion of explained variance.

Table 4.3 Results of the weighted simple regression analyses for the quantitative variables on general recidivism

Cluster/moderator variable	<i>k</i>	<i>B_j</i>	<i>Q_R</i>	<i>R</i> ²
I. TREATMENT CLUSTER				
Programme duration (months)	15	0.004	2.049	0.022
Programme intensity (hours week)	12	-0.001	0.624	0.011
II. SUBJECT CLUSTER				
Sample gender (% of men)	20	-0.001	0.516	0.004
III. METHOD CLUSTER				
Attrition (% in treated group)	17	-0.001	0.503	0.005
Follow-up (months)	22	-0.002	8.994*	0.061
IV. EXTRINSIC CLUSTER				
Publication year	23	-0.001	0.047	0.000

* $p < 0.05$. *k* = Number of studies. *B_j* = Unstandardised regression coefficient. *Q_R* = Significance test of the regression coefficient. *R*² = Proportion of explained variance.

sizes. The two studies from Netherlands exhibited the largest mean effect size ($r_+ = 0.35$), followed by the UK ($r_+ = 0.24$), Germany ($r_+ = 0.23$) and Sweden ($r_+ = 0.18$). The differences between the countries were statistically significant ($Q_B[4] = 13.43$, $p < 0.01$).

With respect to the characteristics of the offenders, our results showed differential effectiveness as a function of the type of offences committed ($Q_B[5] = 15.95$, $p < 0.01$), with 11.2% of explained variance. Although all the mean effect sizes were statistically significant, the largest effect size was achieved with sex offences ($r_+ = 0.30$) and the lowest for drug-trafficking-related offences ($r_+ = 0.12$). On the other hand, the age of the offenders was also related to effect size ($Q_B[3] = 13.86$, $p < 0.01$), with 9.5% of explained variance. The largest effect sizes were obtained with adolescents ($r_+ = 0.35$), although all the age categories achieved significant positive results.

Methodological variables, such as the attrition in the treated group and assignment type of the subjects to the groups, did not reach statistical significance (Tables 4.2 and 4.3). Nonetheless, it is worth noting that the two studies that applied random assignment to the groups did not show a significant effect size ($r_+ = 0.10$), as opposed to the studies with non-random assignment ($r_+ = 0.21$). As expected, the follow-up period was negatively related to effect size ($Q_B[1] = 8.99$, $p < 0.05$), with 6.1% of explained variance; that is, as the follow-up period increases, the effectiveness decreases (Table 4.3). Finally, the three unpublished studies showed a lower mean effect size ($r_+ = 0.16$) than the published ones ($r_+ = 0.23$), the difference reaching statistical significance ($Q_B[1] = 5.29$, $p < 0.05$); but in both cases the mean effect sizes exhibited a significant positive direction.

AN AGENDA FOR THE FUTURE

Rehabilitation, it seems, works. However, some issues that have arisen from treatment effectiveness research remain as important challenges for the future. In the

remainder of this chapter, we would like to propose some key areas requiring further investigation.

Improving the Effectiveness of Treatment Practitioners

Lipsey and Wilson (1993) conducted the most extensive meta-analyses of the effectiveness of psychological interventions. These analyses show at least modest positive effect sizes for interventions of almost all types for almost all problems. In fact, psychological treatments are generally helpful as opposed to harmful or ineffective. The other issue is to describe how the effect is produced, because at this level of analysis the type of treatment administered appears to be irrelevant. These findings are compatible with the repeated finding that the level of practitioner training and experience is unrelated to treatment effectiveness (see Quinsey et al., 1998).

However, a more detailed analysis indicates that particular approaches to intervention yield much larger treatment effect sizes. In the area of child and adolescent psychotherapy, behavioural treatments have been shown to produce larger treatment effect sizes than non-behavioural treatment (Weisz et al., 1995). Further, in relationship to correctional treatment, research clearly points out that behavioural and cognitive-behavioural treatments directed towards relevant problems (criminological needs) of moderately high-risk offenders have been shown to reduce criminal recidivism more than other treatment approaches (Andrews et al., 1990; McGuire, 1992).

These examples of particularly effective treatments share common elements, the most important of which for our argument is that the treatment methods be sufficiently well-specified so that they can be taught to intelligent lay people.

The general conclusion seems to be that clinical intuition, experience and training at least as traditionally conceived are not helpful in either prediction or treatment delivery. Although discouraging, this conclusion is not nihilistic. Training, in the sense of knowing the empirical literature and relevant scientific and statistical techniques, must improve the selection of appropriate treatments, treatment programme planning, and evaluation. (Quinsey et al., 1998, p. 72)

On Dissemination and Adoption of Innovative Psychosocial Interventions

Why does correctional evaluation have so little impact on the policy field? Backer, Liberman and Kuchnel (1986) studied the dissemination and adoption of innovative psychosocial interventions. After reviewing the literature, they concluded the reason was that clinicians read little of this literature because it is written primarily for researchers as opposed to practitioners. Professional meetings and workshops similarly have limited effectiveness because they are primarily didactic and do not involve the active-directive training known to be more effective with adult learners. Gendreau et al. (Chapter 14 of the present volume) discuss other factors influencing the slow take-up of research findings.

Backer, Liberman and Kuchnel (1986) documented the characteristics of three successful programme dissemination efforts. The common characteristics of these efforts were: personal contact between developers and potential adopters; external consultation on the adoption process; organised support for the innovation; consistent advocacy by agency staff; adaptability of the innovation to new circumstances; credible evidence of the innovation's effectiveness; and complete descriptions of how to conduct the treatment. However, it is clear that a great gap remains between what research has shown to be possible or effective and what happens in practice. "This paradoxical situation arguably ought to be a central issue in criminal justice policy. Yet, in the face of recurrent widespread concern over crime, there are continuing difficulties in including the issue of effective intervention on the public policy agenda" (McGuire, 1996, pp. 85-86).

Offenders with Mental Disorders

Although most insanity acquittees are sent to secure hospitals and most convicted persons are sent to prison, the differences between secure hospitals and prisons are often slight. Although the presumption is that insanity acquittees require treatment for their mental disorder, sometimes no effective treatments are available. In addition, when treatments are available, many patients refuse them. Moreover, even when effective treatments are known and patients are willing to participate, programmes are sometimes not available (Quinsey et al., 1998).

Some data suggest that there is considerable overlap between the offender populations of criminal justice systems and the mentally disordered populations of ordinary psychiatric hospitals. After studying prison and mental hospital populations in several European countries, Penrose (1939) noted a strong negative correlation between them. He proposed "Penrose's Law": as the size of the prison population goes up, the size of the mental hospital population goes down proportionately, and vice versa. In North America, evidence for this hydraulic model has been mixed (Teplin, 1991).

Thus, mentally disordered offenders overlap heavily with both offender and mentally disordered populations. Mentally disordered offenders, like other offenders, have committed a wide range of offences, from fraud, shoplifting or vagrancy to multiple murder. The disorders from which they suffer also cover a broad range, including all those listed on axes I and II of the DSM-IV (APA, 1994), although not all would be sufficient in themselves to earn them the label "mentally disordered offender". "Little is known about effective intervention for mentally disordered offenders specifically, and almost nothing about how different demographic and status variables moderate any intervention effects" (Quinsey et al., 1998, p. 79).

Rice et al. (1990) examined the long-term recidivism rates of a large group ($n = 280$) of insanity acquittees and compared them with of a group of convicted men ($n = 238$). Overall, the predictors of violent recidivism in this study were consistent with those that have been found to predict re-offending in other studies of criminal recidivism. They included arrest at an early age, criminal history, alcohol abuse, aggression, impulsiveness, school maladjustment, parental separation,

parental crime, employment, marital status, a diagnosis of personality disorder and score of the Level of Supervision Inventory (LSI). In addition, the pattern of results revealed remarkable similarity between the two groups in the ways recidivism was related to each study variable. These findings are important because they lend strong support to the argument that the same variables that predict criminal recidivism among offenders in general, also predict criminal recidivism among mentally disordered offenders (Bonta, Law & Hanson, 1998). Since the antisocial behaviour of mentally disordered offenders is related to the same factors associated with crime in non-mentally disordered offenders, basing the release of insanity acquittees solely on psychopathological symptoms and recovery would be a serious mistake. The results of the studies carried out by Rice et al. (1990) suggest that treatment programmes for mentally disordered offenders must include programmes designed to attend to their "criminogenic needs" such as substance abuse, antisocial attitudes and values, and criminal associates. The evaluation of correctional programmes focused on these targets has produced the most promising results (Andrews, Bonta & Hoge, 1990).

Psychopathy

Offenders classifiable as being "psychopathic" occupy many beds in both criminal justice and forensic mental health facilities. Wong (1984) found that as many as 30% of Canadian federal prisoners could be categorised as psychopaths; the percentage increasing with institutional security level. The treatability of psychopaths has long concerned criminologists and mental health experts. Early reports indicated positive effects of psychotherapy (Corsini, 1958; Thorne, 1959), but other researchers have critically evaluated the evidence and have argued that treatment for adult psychopaths is ineffective (e.g. McCord, 1982; Woody et al., 1985). We will not discuss the issue extensively here; however, it is interesting to underscore that new developments are coming, albeit slowly.

Some relatively consistent patterns of results appear: small to medium efficacy can be demonstrated for cognitive-behavioural programmes, multi-modal treatment, structured therapeutic community programmes and social therapy for serious and personality-disordered offenders. (Lösel, 1998, p. 330)

Clearly the need to improve the quality of research noted in the general offender literature is even more markedly felt in the case of psychopaths. In particular, empirically based criminological need assessments are yet to be conducted, because assessment is driven mainly by clinical practice, theory and speculation (Polaschek & Reynolds, 2001).

So, we need to work hard. As McMurrin (2001, p. 476) wrote:

Researchers and clinicians working in the field of personality disordered offenders... are searching for answers to the fundamental question: "What works best with whom under which conditions?" There will never be a simple, one-line answer to this important and socially relevant question.

Sex Offenders

The results of our meta-analysis are positive in relation to the treatment of sex offenders, but the small number of studies analysed (3) is not sufficient for the drawing of firm conclusions. This is an area in which findings to date have been somewhat mixed. In a meta-analysis by Hanson and Bussière (1998), focused primarily on prediction of sexual re-offending, treatment did not appear to reduce sexual recidivism. In another meta-analysis, this time involving treatment studies, Hall (1995) found that hormonal and cognitive-behavioural approaches produced medium effect sizes (whereas behaviourally oriented intervention failed to reach significance). Overall, the meta-analysis yielded a small effect size for treatment of sex offenders. However the effect size closely approximated zero in the case of studies that used a matching or randomised design (Rice & Harris, 1997).

Whereas some specialists in this field have remained pessimistic regarding treatment outcomes with sex offenders, others have drawn more positive conclusions. Quinsey, Khana and Malcom (1998, pp. 642–643) concluded that “we are much better at measuring risk than we are at modifying it . . . much stronger treatment effects will have to be shown than those demonstrated in the present study or heretofore in the literature”. By contrast, Marshall, Anderson and Fernandez (1999) have been critical of this dismissal of treatment efforts and have adduced findings of a more positive nature. More research is required in order to resolve these disputes. (See Mann & Beech, Chapter 10 of the present volume, for a review of recent work in this field.)

Alongside this, there is a considerable need for research on adolescent sexual offenders (Hudson & Ward, 2001). Optimism concerning the amount of change that is possible among adolescents in general has to be yet supported in the case of sex offenders, due to the important gaps in the knowledge of the sexual criminal career development. Anyway, it is a priority to realise that continuing with treatment is the only way we will develop better techniques and, consequently, be able to save money and the pain of innocent people (Marshall, 2001).

Supervision in the Community

The literature on the effects of supervision among offenders in general, suggests that although intensive supervision programmes run the risk of “widening the net” by including low-risk offenders, supervision that is limited to offenders of moderate to high risk and that includes rehabilitation components, can reduce the risk of recidivism (Gendreau, Cullen & Bonta, 1994). Such supervision might include the use of technology, such as electronic monitoring and drug testing. However, no data are available on the effectiveness of such measures for sex offenders or sexually violent predators in particular (Quinsey et al., 1998).

One obvious factor that should be considered is the effectiveness of supervision upon early release. The early literature on the effectiveness of parole contains few studies and is methodologically weak (Nietzel & Himelein, 1987). Gottfredson, Mitchell-Herzfeld and Flanagan (1982) concluded that supervision had but small

effects on recidivism. In the light of recent reviews, it is possible to conclude that an important cause of these early results was the inadequate knowledge of the specific antecedents of recidivism; that is, of the dynamic (changing) conditions of the offender or identifiable environmental events that cause recidivism. Today this knowledge has improved, and rehabilitative efforts in community corrections are able to address specific events (criminological needs) related to recidivism.

The results of a study by Gendreau (1999) stress this point. He assessed the effectiveness of “intermediate sanctions”, a form of sentencing which includes intensive supervision and other intrusive-punitive measures such as boot camps, “scared straight” and so on, as compared with regular probation and parole. The database encompassed a total sample in the region of 50 000. The results indicated no effect at all on recidivism. However, there was an important moderate variable: the inclusion of “treatment” in the programme:

Those few intermediate sanctions that made an attempt at providing some treatment, although it was not their primary goal (but they provided more treatment than did the regular probation control group) reduced recidivism by 10%. The ones that did not include treatment, increased recidivism by the same amount . . . More important, when those programmes that followed the “principles of effective intervention” (e.g. programmes that target criminogenic needs, higher risk cases and are cognitive-behaviourally oriented) were examined, the average effect size was a 29% reduction in recidivism. There were, regrettably, just 45 such instances in the literature. (Gendreau, 1999, p. 18)

Public Support for Rehabilitative Policies

Opponents to rehabilitation often say that the public do not support rehabilitative policies. Gendreau (1999) mentions that there is still strong support for rehabilitative practices, even in traditionally conservative areas of United States. Considering that Europe has a long history in advocating progressive measures of penal reform, the following conclusions derived from Gendreau regarding the USA could apply even more to most European countries. First, opinion polls have presented a misleading picture of public crime by assessing only surface views; public opinion is quite complex, and favours a balanced approach to crime. High-risk offenders are thought to merit punishment, yet it is also important to rehabilitate most offenders. Second, community treatment is considered worth while if constructive tasks are provided. Third, rehabilitation for juveniles is advocated as well as early intervention, even favouring the use of taxes for these programmes rather than building more prisons.

Understanding and Overcoming Offender Resistance to Change

The possible reasons for offender resistance are profuse (Elliot & Walters, 1991). Perhaps the main reason is the fact that incarcerated offenders frequently see nothing wrong with their offences, have no desire for change, and seriously question the motives and intentions of those offering treatment. A related matter is the absence of

tangible rewards and incentives for changing behaviour. Another important obstacle is offender resistance in its various forms (denials and rationalisations), which enables the individual to avoid facing the self-defeating and socially destructive nature of his or her acts. Finally, it is likely that some offenders re-enact long-standing patterns of interpersonal manipulation and coercion with practitioners, which eventually serve to impede the rehabilitation process.

In the same way, failure to complete treatment successfully is a serious problem facing juvenile residential treatment providers. Non-completers do not appear to be as successful later in life as those who complete residential treatment, and they also appear to be more psychologically maladjusted, as evidenced by elevated profiles on a variety of personality measures (Kraemer, Salisbury & Spielman, 1998). Despite the importance of research for successful intervention in this area, few studies identify pre-treatment factors associated with non-completion.

CONCLUSIONS

This chapter has dealt with three areas of main relevance for the present situation in offender rehabilitation. First, we have discussed which expectations about treatment seem reasonable in a criminal policy agenda. It is now time to put effectiveness in the place where it belongs: that of helping some offenders desist from criminal behaviour, through supporting innovation in correctional services.

Second, we have updated a previous review of offender rehabilitation in Europe. Our results support the efficacy of correctional treatment, offering estimates of effectiveness even higher than those of previous meta-analyses. Positive effects have been reached for the three recidivism measures—general, serious, and self-reported re-offending—though the results should be interpreted cautiously because of the low number of studies that recorded serious and self-reported recidivism. The heterogeneity of effect sizes can be explained by the influence of such factors as the theoretical model of treatment, the programme setting, the regime of the offenders, or the type of offences committed. The best results are obtained when programmes are implemented in the community and the treatment model is educational or based on cognitive-behavioural methods. Finally, we recommend using the odds ratio in meta-analysis as the more suitable effect size index when the results of each empirical study are given in a 2 × 2 table (Fleiss, 1994; Haddock, Rindskopf & Shadish, 1998; Sánchez-Meca, Redondo & Marín-Martínez, 1998).

Finally, the results of European studies, as well as those from North America, help to develop some lines of inquiry for future research. Sexual and psychopathic offenders and offenders with learning disabilities deserve closer scrutiny in terms of programme effectiveness. Community-based services, public support for rehabilitative policies, and the inclusion of these innovations in the political agenda, are other important points on which to work.

NOTE

1. The reader has to take into account that the Pearson correlation coefficient, r , coincides with the ϕ coefficient when it is applied in a 2 × 2 contingency table.

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