

The effectiveness of psychotherapeutic interventions for people with learning disabilities: a critical overview

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Abstract

Historically, people with learning disabilities have had little or no access to psychotherapeutic interventions, although there are signs that, over the past decade, this situation has seen some gradual improvement. This paper provides an overview of the evidence for the effectiveness of psychodynamic, cognitive-behavioural and cognitive therapies in this client group. The available data support the position that all three approaches can be effective in people with mild learning disabilities and in a proportion of people with more severe conditions. However, the literature reporting outcomes of psychotherapeutic interventions in people with learning disabilities is extremely limited, and there is a conspicuous and unjustified poverty of randomized controlled trials. There is also very little evidence regarding either the importance of specific components of therapeutic packages, or the optimal manner of delivering these interventions to people with learning disabilities.

Keywords cognitive therapy; cognitive-behavioural therapy; effectiveness; learning disability; psychotherapy; randomized controlled trials

Introduction

Psychologists working within the field of intellectual disability were slow to adopt psychotherapeutic approaches that are widely used in able populations (Reiss *et al.* 1982; Sinason 1992; Bender 1993). However, following the publication of an eclectic edited volume recording the experience of a number of therapists who were unwilling to accept that psychotherapy and learning disability were incompatible (Waitman & Conboy-Hill 1992), this situation began to change. Over the past 10 years, psychotherapy for people with learning disabilities has been increasingly advocated (e.g. Linington 2002), and a recent survey of the interventions used by clinical psychologists working within learning disability services in the UK (Nagel & Leiper 1999) suggests that psychotherapeutic interventions are now in widespread use. Behavioural interventions through staff remain the most common intervention, with 81% of respondents reporting using these methods 'frequently' or 'very frequently'. High proportions of respondents also reported 'frequently' or 'very frequently' using organizational interventions (42%) or undertaking direct behavioural work with clients (34%). However, high proportions of respondents also reported 'frequently' or 'very frequently' using cognitive-behavioural (35%), humanistic/person-centred (31%) and psychodynamic (17%) methods (Nagel & Leiper 1999),

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which, for the purposes of this paper, will be referred to collectively as 'psychotherapeutic approaches'.

Different criteria could be used to evaluate this re-orientation of clinical practice: 'In relation to people with intellectual disabilities, the long applied criterion "Is it relevant?" began to be challenged in the 1980s. New arguments emerged from the application of another criterion "Is it equitable?" . . . Now the criterion being applied is "Is it effective?" ' (Beail & Warden 1996). The increased availability of psychotherapy to people with learning disabilities can only be welcomed, in respect of its extension of rights to treatment to an excluded group of disadvantaged clients (Bender 1993). The question addressed in this paper is the extent to which this re-orientation is based on evidence that these methods are useful and effective in people with learning disabilities.

The nature of the evidence

The evidence base for the interventions used by clinical psychologists ranges from expert opinion, through uncontrolled and controlled single-subject designs, all the way to randomized controlled trials (RCTs). The UK National Health Service (NHS) Executive has stated that 'in the absence of well-designed randomized trials, clinicians may legitimately draw upon analysis of expert opinion and past experience' (NHS Executive 1996). However, while the NHS Executive is prepared to accept various types of evidence, they will do so only in the absence of what they regard to be the highest level of evidence: RCTs. The superiority of this design arises from the fact that, while weaker designs can demonstrate that an intervention has been effective, and some weaker designs (e.g. A-B-A) can demonstrate that an intervention is more effective than no intervention, only RCTs can isolate the elements of an intervention responsible for therapeutic change; in particular, the contribution of specific elements of the intervention over and above the nonspecific benefits of therapy.

Sadly, in the field of learning disability, RCTs of psychological treatments are extremely sparse. In particular, a Psychlit search conducted early in 2002 failed to uncover any RCTs of the efficacy of psychotherapeutic approaches in people with learning disabilities. (Two more recent RCTs, both concerned with the efficacy of anger management, are described

below.) Therefore, the present discussion must rely largely on inferior sources of evidence. However, even within the existing evidence base of suboptimal research designs, the literature is astonishingly small (Hatton 2002), and evaluations of psychotherapeutic approaches are conspicuous by their absence. As recently as 10 years ago, it was possible to write an article on psychotherapy with people with learning disabilities without including a single reference to the literature (Bates 1992). This does not reflect negligence or ignorance on the part of the author. A 1991 review covered 403 studies of interventions for problem behaviours: all involved single cases, of which 398 employed behavioural treatments and the other five used medication; none used psychotherapeutic techniques (Scotti *et al.* 1991). A more recent meta-analysis of the effectiveness of treatments for problem behaviours covered over 1400 evaluations, but included only one nonbehavioural technique (self-management), representing only 1% of the data (16 patients) (Didden *et al.* 1997).

Psychodynamic approaches

A handful of publications has described the process, and sometimes the outcome, of psychoanalytic and psychodynamic psychotherapy with people with learning disabilities (e.g. O'Connor 2001). Beail (1995) reviewed reports concerning a total of 23 patients. In only nine of these cases, however, were outcome data provided. These outcomes appeared encouraging, but in almost all cases, the evaluation was descriptive or anecdotal. More recently, Beail has published two studies using more objective assessment methods. The first involved 10 clients presenting with a range of problem behaviours (aggressive, sexually inappropriate, psychotic/bizarre), who attended for weekly 50-min sessions. The intervention was described as follows: 'The transference situation and counter-transference is used in therapy to understand the internal world of the client. Intervention mainly involves interpretation but in some cases containment issues are more significant . . .'. Outcomes were assessed independently using modifications of standard questionnaires. Significant decreases in psychological symptoms and increases in self-esteem were reported at termination of treatment and at a 3-month follow-up (Beail & Warden 1996). The second study evaluated outcomes by means of

interview-derived measures of the frequency of problem behaviours, in 12 patients referred for problem behaviours and eight sex offenders. The intervention, which was described in more detail in this paper, was based on free association and therapist interpretation; key features included dealing with issues at the time they arose, the use of appropriate language, and avoidance of memory overload. Following treatment for a median duration of 6 months, it was reported that behaviour problems were eliminated or almost eliminated in all 12 referred patients, and offending was abolished in all eight offenders; these gains were maintained at 6-month follow-up (Beail 1998). The study involved no control group, but problem behaviour remained stable in a follow-up evaluation of four patients who did not complete treatment. This accords with earlier findings that spontaneous remission of behaviour problems in people with intellectual difficulties is uncommon (Eyman *et al.* 1981).

Beail (1998) recognizes that the processes underlying these successful treatment outcomes are uncertain, and that success cannot be attributed to the specific method used: 'At a minimum, someone sat down with the participants each week and gave them individual attention, listened to them and focused on their feelings as well as their behaviour'. This evaluation implies that the improvements could as easily be attributed to humanistic/person-centred counselling as to the specifically psychodynamic approach adopted. Nevertheless, the outcomes, particularly at 6-month follow-up, appear impressive, and attest to the potential value of psychotherapeutic approaches with this client group.

Cognitive-behavioural approaches: the cognitive deficit model

Cognitive and cognitive-behavioural therapies (CBT) probably now represent the dominant modality of psychological treatment in adult mental health services, where they have been shown to be effective in a wide range of psychological disorders (Hawton *et al.* 1989). However, as noted by Bender (1993), 'therapeutic disdain' has until recently limited the availability of these techniques to clients with learning disabilities. While the limitations of cognitive work in a learning-disabled population are all too apparent, given the limited intellectual abilities of

people with learning disabilities, studies of CBT in children demonstrate clearly that it is not necessary to possess a mature adult cognitive apparatus to benefit from CBT (Dush *et al.* 1989; Durlak *et al.* 1991).

Kendall (1985) distinguished between two types of cognitive dysfunctions, deficits and distortions. The cognitive distortion model is the basis for approaches such as cognitive therapy (Beck 1976) and rational-emotive therapy (Ellis 1973), which aim to identify and correct distortions in the contents of thoughts, assumptions and beliefs. The application of these approaches to the treatment of people with learning disabilities is considered in the following section. The cognitive deficit model, by contrast, focuses on deficiencies in the processes by which information is acquired and processed. The latter approach gives rise to one of the most prominent cognitive-behavioural techniques used with people with learning disabilities, self-management. This is the one nonbehavioural technique to be included in the recent meta-analysis of the effectiveness of treatments for problem behaviours in people with learning disabilities, where it was rated as 'fairly effective', comparable to response-contingent behavioural procedures, and superior to other types of behavioural procedure or to pharmacological treatment (Didden *et al.* 1997).

Smith (1990) has defined self-management as 'obtaining the skills involved to change one's own behaviour, and providing intervention for oneself'. While this has traditionally been viewed as beyond the capabilities of people with learning disabilities, the evidence suggests that self-management may actually be one of the more effective treatments, falling in the upper third of the range of efficacies reviewed by Didden *et al.* (1997). Self-management can involve a number of processes, including self-monitoring, self-evaluation and self-reinforcement. Whitaker (2002) reviewed four studies, involving a total of nine patients in whom self-monitoring alone was shown, using robust within-subject designs, to bring about large decreases in the frequency of inappropriate or stereotyped behaviours, which were maintained over follow-up periods of up to 6 months. In other cases, self-monitoring produced smaller reductions in target behaviours, but these were greatly enhanced when the clients were taught to evaluate their behaviour as 'good' or 'bad'. Similar benefits have been described when clients were

taught to reinforce themselves appropriately, either verbally or using pictures or coins (Williams & Jones 1997).

Self-instructional training

Potentially the most versatile self-management technique is self-instructional training (SIT), which has been widely used in CBT with children (Meichenbaum 1977; Dush *et al.* 1989). Self-instructional training has been described as 'developing internal dialogues to help overcome performance difficulties and social anxieties and to supplant self-criticism or self-doubt with self-reinforcement' (Lindsay 1999). The method is based on Vygotsky's (1962) cognitive-developmental model of the manner in which language comes to exert control over behaviour: first, adults control the child's behaviour through speech; next, the child exercises self-control through speech; finally, the child's speech becomes internalized. Following this scheme, the therapist first models the statements to be used, then the patient is encouraged to make overt self-statements, and finally, the patient is encouraged gradually to make the statement covert. Self-statements could include self-monitoring, self-evaluation or self-reinforcement statements, as well as a range of other types of statement, such as coping statements ('I can . . .'), statements about potential consequences, or statements describing the next in a sequence of actions. Several studies have successfully used SIT to improve sequencing abilities (e.g. Lancioni *et al.* 1997, 2001) or social interaction skills (e.g. Embregts 2000, 2002) in individuals with mild to moderate learning disabilities. The technique requires an adequate level of verbal ability, so may fail with severely learning-disabled clients, but even in this group, successful outcomes have been described if the instructions are kept sufficiently simple (Williams & Jones 1997) or if verbal self-instruction is supplemented by picture prompts (e.g. Wacker *et al.* 1985; Steed & Lutzker 1997; Lancioni *et al.* 1998).

Self-instructional training has been criticized for its failure to generalize to situations or skills other than those taught, although improvements in generalization can be achieved by attention to the training procedure and the specificity of the training task (Gow & Ward 1985). In some circumstances, specificity of learning may be a desirable objective. For example, the present author has trained a sex

offender with a moderate learning disability to say 'Think about prison; walk away' when aroused by a young girl, and this has (so far) proved an adequate solution to a very specific problem. In general, however, a failure to transfer training would be viewed as a shortcoming.

It has been suggested that failure of transfer, following SIT, may be related to features of the SIT procedure, rather than to an inherent inability of people with learning disabilities to generalize what they have learned. Specifically, it has been argued that people with learning disabilities have difficulties with self-regulation because they have learned to be overly dependent on external cues and have acquired an external locus of control, and that nothing in the SIT procedure encourages them to unlearn these superordinate habits. They therefore fail to access their new-found skills in other situations because they lack meta-cognition: they are unaware that they have learned a new skill (Williams & Jones 1997).

In order to examine this hypothesis, Williams *et al.* (1996, reported in Williams & Jones 1997) compared three groups of learning-disabled participants, who received three sessions of training on a map-reading task. The three groups included a verbal SIT group, a control group who were told didactically what to do with the map, and a third group who were trained using Socratic dialogue, intended to encourage them to ask self-questions about the task in hand. Both experimental groups performed better than the controls on tasks similar to those used in training; however, the meta-cognitive group outperformed the SIT group on dissimilar tasks. The authors also examined the outcomes of training in relation to the participants' cognitive and linguistic abilities. In the SIT group, the greatest gains were made by those with the best language comprehension and short-term memory, while performance in the meta-cognitive group was related, in addition, to abstract reasoning ability. The authors suggested that 'training on meta-cognitive activity is fundamentally important for encouraging transfer of learning, while engaging participants in active verbal rehearsal may well consolidate learning'. These data indicate that careful assessment of cognitive abilities, combined with an equally careful analysis of the cognitive demands of different therapeutic approaches, can in principle guide the choice of technique that will best benefit the individual client.

Other self-management techniques

A number of studies have reported that relaxation training can be effective in decreasing anxiety, anger and aggression, in individuals with mild or moderate learning disabilities (Morrison & Lindsay 1997; To & Chan 2000; Whitaker 2002). These studies have used a variety of designs, and include one study that compared anxiety reduction in treated and untreated groups (although the participants in this study were not selected for the presence of clinically significant anxiety: Morrison & Lindsay 1997). It is far from clear that the beneficial effects of relaxation training are always correctly characterized as self-management, but this is sometimes an explicit aspect of treatment. For example, Lindsay *et al.* (1998) described a man with a severe learning disability who, following relaxation training, was successfully taught to use the words 'be calm' to induce relaxation: his aggression decreased and remained low at 22-week follow-up. Evidence of a different kind to support the importance of self-instruction in mediating the therapeutic effects of relaxation training comes from a recent study by Willner *et al.* (2004). Participants in a cognitive-behavioural anger management group showed large decreases in anger, in comparison to an untreated control group. However, examination of the specific anger-coping skills that they were using showed that they made very little use of relaxation, notwithstanding that relaxation had been a prominent component of the treatment package, and all participants had become skilled in using relaxation within the group. With hindsight, the most likely reason for their failure to use relaxation in anger-provoking situations is that an oversight in the design of the treatment package resulted in a deficit of meta-cognition: participants had not been explicitly instructed to use relaxation outside the group, unlike some other coping skills, which they had been instructed to use in real-life situations and which, as a result, were used to good effect. In other words, relaxation training *per se* is insufficient: for effective anger management, the client must also remember to use this skill appropriately.

Another self-management technique is social problem solving, in which clients are trained to discover an effective course of action to deal with everyday problems, by generating and evaluating potential solutions (D'Zurilla & Goldfried 1971). Problem

solving therapy is used for many purposes in able people, including the treatment of a wide range of pathological conditions (Marx 1988), but in people with learning disabilities this approach has been used primarily in the treatment of anger and challenging behaviour. Social problem solving is often one component of a cognitive-behavioural treatment package, but has also, in some studies, been evaluated in its own right. For example, Benson *et al.* (1986) found equal reductions in anger in groups treated with self-instruction, relaxation, problem solving, or a package of all three. Participants in another study received 15 h of training in a curriculum of problem-solving skills. Relative to an untreated group, the treated group showed improvements in some, though not all, of the problem-solving skills they had been taught, and also showed improvements in adaptive behaviour outside the group (Loumidis & Hill 1997).

All self-management techniques are heavily reliant on language, and therefore the difficulty of implementing them is likely to increase as verbal abilities decrease (Rose 2002; Willner *et al.* 2002). Some particular issues dependent on verbal ability are the recall of self-instructions, recognition of the appropriate time and place to deploy learned skills, assessment of situations, and problem solving; and these difficulties are compounded by the need to undertake these activities in a state of actual or potential psychological distress (Whitaker 2002). However, a number of adjustments to treatment programmes can make them more accessible to people with learning disabilities: these include the use of simplified language, the use of visual aids such as traffic lights or anger thermometers, extended training programmes, and ongoing support and prompting from staff (Whitaker 2002).

Cognitive-behavioural approaches: the cognitive distortion model

The cognitive distortions model for CBT has received even less attention, despite the evidence that the emotional disturbances to which CBT has been applied most successfully are more prevalent in people with learning disabilities than among the general population (Reiss *et al.* 1982; Prosser 1999). In this case, the assumption that people with learning disabilities are incapable of engaging in appropriate cog-

nitive activities is accompanied by some deeply ingrained practices that violate the basic assumptions of CBT. Stenfert Kroese (1997) has described the two common aspects of the different variants of CBT as a search for personal meaning and an assumption of personal self-determination. She points out that carers and professionals working with learning-disabled people typically focus on their clients' behaviour, rather than the emotions and motives driving the behaviour, and there is little attempt to enter the mental world of clients in order to understand how they construe and experience events. Equally, it is unusual to engage clients in a collaborative partnership to construct care plans or to negotiate therapeutic goals. Both of these obstacles must be overcome before even contemplating CBT with a person with a learning disability.

Problems also arise from the need to overcome or circumvent cognitive deficits, before cognitive distortions can be addressed. Cognitive deficits that undermine the validity of clients' self-reports include social desirability, acquiescence, memory problems, recency effects, anxiety and incomprehension (Stenfert Kroese 1997). Once recognized, it is possible to address some of these issues, for example, by using pictorial materials and supplementary questions to aid and assess comprehension, and open-ended questions to decrease acquiescence. However, some people with learning disabilities may misunderstand fundamental concepts such as the irreversibility of death or the purpose of therapeutic encounters, and there is evidence that people with learning disabilities tend to have particular difficulties in emotional awareness, which are disproportionate to the degree of intellectual impairment, even at the level of simple tasks such as recognizing happy and sad faces (Reed 1997).

Assessment

These problems have implications for assessment, in relation to both suitability for cognitive therapy and evaluation of outcome. In order to engage in cognitive therapy, certain basic cognitive skills are needed: an ability to distinguish between antecedent events and associated cognitions and emotions; an ability to recognize that cognitions mediate the effect of events on emotions; and a willingness to engage in 'collaborative empiricism' to question the accuracy of cog-

nitions. Dagnan & Chadwick (1997) found that a substantial proportion of people with mild to moderate learning disabilities were able to distinguish between antecedent events, cognitions and emotions; that most were able to provide mediating cognitions to explain their emotional response to an imagined scenario, although some found this quite difficult; and that some people with learning disabilities are readily responsive to reasoning aimed at altering cognitions. These data demonstrate that assessment of the skills necessary for cognitive therapy can be straightforward, and that some people with learning disabilities possess these necessary skills.

The second assessment issue concerns the reliability of self-reports of thoughts and feelings by persons with learning disabilities, which is an essential prerequisite for measuring changes in beliefs and emotions during therapy. Hatton (2002) has reviewed some of the instruments available for assessment of mental health problems in people with learning disabilities. Although the reliability and validity of standard instruments is low in people with learning disabilities, reliability improves dramatically when language, concepts and response choices are simplified (Lindsay & Michie 1988), and high convergent validity has been demonstrated when various assessments were completed by the same individuals under these optimized conditions (Lindsay *et al.* 1994). Pictorial materials (Lindsay *et al.* 1997) and gesture (Dagnan & Chadwick 1997) can also be used to good effect to improve the quality of self-reports. However, there has been relatively little research aimed at re-validating simplified versions of standard questionnaires. One approach to this question is the development of paired questionnaires, such as the Psychopathology Instrument for Mentally Retarded Adults (Senatore *et al.* 1985), that can be administered both to the client and to a carer (Reed 1997).

Cognitive therapy

Lindsay (1999) has recently reviewed the cognitive therapy of people with learning disabilities referred for anxiety (15 clients), depression (5 clients), anger (13 clients) and sex offences (24 clients). In the anxious group, who were treated using a simplified version of Beck's (1976) procedure there were large and significant decreases in scores on simplified versions of standard instruments, and in the inten-

sity and duration of maladaptive cognitions, which were maintained at 6-month follow-up. Comparable outcomes were observed in the depressed group, who were also treated with a simplified version of Beck's (1976) procedure. Anger management was based on cognitive reframing of anger-provoking situations, arousal reduction through relaxation, and acquisition of coping skills, again, using simplified versions of standard procedures (Black *et al.* 1997); and again, successful outcomes were reported. Finally cognitive treatment of three categories of sex offenders, who had been convicted of offences against women, exhibitionism and offences against children, resulted in significant decreases in attitudes permissive of offending (e.g. 'women who wear short skirts want to have sex'), in all three groups.

The methods used in these cognitive treatment programmes have been summarized as follows: 'While the procedures of cognitive therapy were simplified and adapted, all of the main elements were retained. Therefore, therapist and client continued to set an agenda for the session, review homework, elicit negative automatic thoughts, challenge these negative automatic thoughts, identify themes in automatic thoughts related to dysfunctional beliefs, review the evidence for and against these dysfunctional beliefs, role-play more positive ways of thinking, and encourage the client to use these more positive ways of thinking in their life. We also set homework and monitored feelings during the week. Thus, the basic principles of cognitive therapy were adhered to closely, and the evidence of improvement supports the use of these techniques with this client group' (Lindsay *et al.* 1997, p. 137).

While these outcomes are extremely encouraging, the total absence of any control groups or procedures limits the conclusions that can be drawn. The observation that behaviour problems in people with learning difficulties rarely remit spontaneously (Eyman *et al.* 1981) probably applies also in the case of sex offenders. In this group therefore the observation that attitudes consistent with offending fell by more than 60%, during the course of cognitive therapy (Lindsay 1999), is probably a reliable indicator of treatment success. This would be consistent with the known superiority of CBT in the treatment of able sex offenders (Hall 1995). However, while behaviour problems may be stable over time in people with

learning difficulties, it has not been demonstrated that there is a similar temporal stability of emotional problems. The major factor driving the cognitive movement in learning disability is a recognition that, compared to people without learning disabilities, people with learning disabilities are more similar than they are different. In people without learning disabilities, high rates of spontaneous improvement from depression and significant levels of spontaneous recovery from anxiety are commonly observed (e.g. Yonkers *et al.* 1996; Posternak & Miller 2001; Barbee *et al.* 2003), and there is little reason to assume that mood states do not undergo similar spontaneous fluctuations in people with learning disabilities. This means that properly controlled studies of CBT of emotional disorders in people with learning disabilities are essential, before the effectiveness of this approach can be considered proven. Controlled studies of CBT of depression and anxiety are routine in adults without learning disabilities, and have been successfully conducted in children (Southam-Gerow *et al.* 1997).

Randomized controlled trials and process–outcome relationships in people with learning disabilities

Randomized controlled trials

A recent report by Oliver *et al.* (2002) documents some of the obstacles to conducting RCTs in the learning disability field. They describe three sets of objections raised by individuals within services approached to participate in a trial. The first of these consists of some ethical dilemmas, relating in particular to randomization. These criticisms appear to reflect a lack of acceptance, among the individuals approached, of the need for interventions to be evidence-based. However, the extent to which this attitude is typical in learning disability services is questionable, as these concerns apply equally to controlled trials of drug treatments, and there have been several such trials among people with learning disabilities (e.g. Brylewski & Duggan 2001). Oliver *et al.* (2002) also encountered a number of methodological barriers to their research. Some of these are generic to the learning disabilities field, such as the need to involve carers in decision making, or the relatively limited client base of most learning disability services,

which means that group comparisons, whether RCTs or not, are likely either to be very small, with problems of generalization and statistical power, or to be multicentre, with problems of standardization and logistics (although multicentre trials are routine in mental health settings, where standardization is achieved through training and the use of treatment manuals). However, other issues arise from the particular nature of the intervention that Oliver *et al.* (2002) were attempting to evaluate, and this is true also of the third set of obstacles described in their paper, which concern resourcing issues. The intervention was 'assertive community treatment' of mental health problems, which was defined as frequent multiprofessional inputs, as compared to infrequent contacts with a single professional. This differs from most interventions researched by clinical psychologists in two important respects: the intervention is relatively unfamiliar, and its implementation requires extensive input from other services. Therefore, it cannot be assumed that the objections to research documented by Oliver *et al.* (2002) would be routinely encountered. It should also be noted that despite the many obstacles, their project was successfully established, although on a smaller scale than originally envisaged.

The feasibility of conducting RCTs of more conventional psychological interventions has been demonstrated by two recent RCTs of anger management, conducted among people with learning disabilities living in secure settings (Taylor *et al.* 2002) or in the community (Willner *et al.* 2002). These studies both used randomized allocation either to a waiting list control group or to a group treated over 12 or 9 weeks, respectively, with a package, based on the methods introduced by Novaco (1975, 1979) and Black *et al.* (1997), that included both self-management and cognitive techniques. The offenders study (Taylor *et al.* 2002) reported significant improvements in anger control in the treated group, as assessed by participants' self-reports. Staff ratings of participants' anger tended in a similar direction, but the effect was not statistically significant; however, staff rated participants' behaviour on the ward as significantly improved post-treatment and at 1-month follow-up. In the community study (Willner *et al.* 2002), the treated group improved significantly, relative to the control group and to their own pre-treatment

scores, as assessed by participants' self-ratings and by carer ratings, and these gains were maintained at 3-month follow-up.

Process–outcome relationships

While these studies demonstrate the effectiveness of the anger management package, their interpretation is not entirely straightforward. Simple relaxation is effective in decreasing anger in people with learning disabilities (To & Chan 2000; Whitaker 2002), and comparative studies have reported that anger interventions that included cognitive elements were no more effective (Benson *et al.* 1986) than purely self-management interventions, or if anything, somewhat less effective (Rose 1996; Rose *et al.* 2000). Thus, while the recent RCTs serve to demonstrate that RCTs are feasible in people with learning disabilities, they are less compelling as evidence for the effectiveness of cognitive therapy in this population.

Similar problems will need to be addressed in relation to the cognitive-behavioural treatment of sex offenders with learning disabilities. There is good evidence from uncontrolled studies that CBT, based on well-established relapse-prevention principles developed in the field of substance misuse, can be used effectively to prevent re-offending by sex offenders with learning disabilities (Nezu *et al.* 1998; Lindsay 1999, 2002). However, properly controlled trials will be needed to tease out the relative contributions of the cognitive and behavioural components of these programmes.

Problems of establishing the relationships between components of therapy and outcomes have been extensively discussed in the general psychotherapy literature. It is reasonably well established that patients benefit from psychotherapy, with the degree of improvement increasing, up to a point, with the number of sessions (Howard *et al.* 1986), that some specific psychotherapeutic procedures are effective in particular disorders (Roth & Fonagy 1996), and that certain features of therapy are particularly important, notably, the strength of the therapeutic bond and the skilfulness of the therapist (Orlinsky & Howard 1986). However, it has been far more difficult to establish the value of specific ingredients of therapeutic programmes (Orlinsky & Howard 1986), and some have argued that the critical feature of successful therapy is the extent to which therapists are able

to respond to an individual patient's needs (Silberschatz 1994; Stiles & Shapiro 1994). While these issues may one day be addressed within the field of intellectual disabilities, at present, the research is at a much earlier stage. Within the general psychotherapy literature, the process–outcome research agenda relates to the relative importance of different components of talking therapies. However, research in learning disabilities is still in the throes of emerging from a state of widespread scepticism about the feasibility of using talking therapies at all.

The research reviewed in this paper suggests strongly that psychotherapeutic approaches developed in able populations can be applied to the treatment of some clients with learning disabilities. However, far more evidence, including controlled trials, is needed to confirm that reported improvements are directly attributable to therapeutic input, and to facilitate the identification of those clients with learning disabilities who are likely to benefit from psychotherapeutic interventions. It will also be necessary to determine the extent to which standard protocols developed for use with able clients need to be modified to improve their accessibility to people with learning disabilities. This raises a further issue that therapist expertise 'may become particularly important when therapists deviate from technical recommendations encoded in manuals of psychotherapy' (Roth & Fonagy 1996). Given that deviation from standard treatment manuals is almost inevitable when psychotherapy is used with people with learning disabilities, two important priorities should be to assess whether standard treatment protocols can be designed and validated for people with learning disabilities, and to develop measures of therapist skilfulness (Schaffer 1982; Strupp 1978) suitable for use within this clinical environment.

In relation to cognitive-behavioural approaches specifically, it remains to be convincingly demonstrated that the cognitive components of the package are effective. RCTs, or failing RCTs, less powerful outcome studies, will be the major means of answering this question. However, an alternative approach could begin to focus on the micro-outcomes related to specific treatment components. It was noted earlier that if relaxation training was an effective element of anger management, then this should be reflected in an increased use of relaxation to manage anger: similarly, if cognitive manipulations are effective ele-

ments of therapy, then this should be reflected in the emergence of increasingly adaptive cognitions. There has as yet been little work on the assessment of cognitions in people with learning disabilities, and even less on the evaluation of changes in cognitions as a result of therapy, although, as noted earlier, there do exist studies that have reported improvements in dysfunctional cognitions following cognitive therapy, in depressed and anxious patients and in sex offenders (Lindsay 1999). Even within able client populations, the assessment of cognitions was slow to be introduced into the evaluation of cognitive-behavioural programmes, and global evaluations of outcome remain the norm.

Implications

People with learning disabilities frequently present to services with a display of problem behaviours that can pose a threat to themselves or others, and which staff find challenging. Staff have typically been trained in behavioural methods (Pilgrim & Treacher 1992), and such methods are relatively successful in controlling problem behaviours (Didden *et al.* 1997; Allen 2000). As discussed above, cognitive-behavioural methods are also effective in controlling problem behaviours, but they have not been shown to be superior to behavioural methods. Indeed, where clients have severe or profound learning disabilities, the applicability of nonbehavioural methods is questionable (Dagnan & Chadwick 1997), and the likelihood of demonstrating their superiority over behavioural methods seems remote. It follows that, in the context of the management of problem behaviours, the development of cognitive-behavioural methods broadens the choice of available therapies, but does little to improve the overall outcome.

However, there are other contexts in which behavioural methods are far less appropriate. Unlike violent offenders, sex offenders typically do not offend in situations where they are under the scrutiny of staff or carers, and when they do offend, their behaviour, if detected, is subject to legal sanctions rather than to therapeutic contingency management. The potential of behavioural therapies to decrease the risk of future offending, in the absence of present exemplars of the problem behaviour, is extremely limited. However, the evidence currently available supports the use of

cognitive-behavioural approaches in sex offenders with learning disabilities.

Similarly, behavioural methods have almost nothing to offer clients with learning disabilities in respect of their emotional problems, which are frequently unrecognized by behaviourally oriented therapists (Stenfert-Kroese 1997). However, many studies have reported that emotional problems are more prevalent in learning-disabled people than in the general population (Prosser 1999), which may to some extent reflect their upbringing in relatively protected environments that have not equipped them with appropriate coping skills or functionally adaptive attitudes (Lindsay *et al.* 1997). In these circumstances, there can be no justification for denying psychotherapy to those clients who have the necessary cognitive skills (Dagnan & Chadwick 1997). A further issue is that emotional disorders may have a different presentation in learning-disabled individuals. Glick & Zigler (1995) have suggested that 'developmentally younger' individuals may be more likely to externalize their emotional problems, which then manifest as challenging behaviour or outbursts of physical violence. These problem behaviours may be readily controllable, but reducing the visibility of the underlying distress does nothing to decrease its severity.

As psychotherapeutic techniques become more widely used, there will be an increasing need for research that identifies the conditions under which their effects are optimized for people with learning disabilities. Such studies are even sparser than research on the efficacy and effectiveness of psychological treatments. There are some clear candidates for inclusion in this research agenda. For example, the effectiveness of cognitive-behavioural interventions may well decrease with verbal IQ (Rose 2002; Willner *et al.* 2002), although perhaps this limitation can be overcome by the use of more ingenious and creative communication methods. Another important factor may be the extent to which the lessons learned in psychotherapy sessions are reinforced outside sessions by carers (Rossiter *et al.* 1998; Rose 2002; Willner *et al.* 2002). However, there are also other potential influences on treatment outcome that are less obvious and are likely to prove more recondite: for example, Stenfert-Kroese (1998) contends that 'cognitive-behavioural interventions are only possible if . . . self-regulation (and therefore generalization and maintenance of therapeutic gain) is encouraged

by ensuring that the client lives in a world where . . . self-determination is encouraged'.

People with learning disabilities suffer distress no less than those without: indeed, more so (Prosser, 1999), and they are equally entitled to relief. As Black *et al.* (1997) remarked, 'While the verbal responses of a person with a learning disability may not be sophisticated . . . negative automatic thoughts may be no less incapacitating for being linguistically simple'. The evidence reviewed in this paper demonstrates that many people with learning disabilities are capable of engaging with psychological therapies; that there is a wealth of evidence, although largely from methodologically inadequate studies, that such therapies can be beneficial; and that in some contexts, there is no alternative (see also Halton 2002) to their use, if people with learning disabilities are to be offered opportunities to relieve their distress.

References

- Allen D. (2000) Recent research on physical aggression in persons with intellectual disability: an overview. *Journal in Intellectual and Developmental Disabilities* **25**, 41–57.
- Barbee J. G., Billings C. K., Bologna N. B. & Townsend M. H. (2003) A follow-up study of DSM-III-R generalized anxiety disorder with syndromal and subsyndromal major depression. *Journal of Affective Disorders* **73**, 229–36.
- Bates R. (1992) Psychotherapy with people with learning disabilities. In: *Psychotherapy and Mental Handicap* (eds A. Waitman & S. Conboy-Hill), pp. 81–98. Sage, London.
- Beail N. (1995) Outcome of psychoanalysis, psychoanalytic and psychodynamic psychotherapy with people with intellectual disabilities: a review. *Changes* **13**, 186–91.
- Beail N. (1998) Psychoanalytic psychotherapy with men with intellectual disabilities: a preliminary outcome study. *British Journal of Medical Psychology* **71**, 1–11.
- Beail N. & Warden S. (1996) Evaluation of a psychodynamic psychotherapy service for adults with intellectual disabilities: rationale, design and preliminary outcome data. *Journal of Applied Research in Intellectual Disabilities* **9**, 223–8.
- Beck A. T. (1976) *Cognitive Therapy and the Emotional Disorders*. International Universities Press, New York.
- Bender M. (1993) The unoffered chair: the history of therapeutic disdain towards people with a learning disability. *Clinical Psychology Forum* **54**, 7–12.
- Benson B., Johnson-Rice C. & Miranti S. V. (1986) Effects of anger management training with mentally retarded adults in group treatment. *Journal of Consulting and Clinical Psychology* **54**, 728–9.
- Black L., Cullen C. & Novaco R. W. (1997) Anger assessment for people with mild learning disabilities in secure

- settings. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 33–52. Routledge, London.
- Brylewski J. & Duggan L. (2001) Antipsychotic medication for challenging behaviour in people with learning disability. *Cochrane Database of Systematic Reviews* **3**, CD000377.
- D’Zurilla T. J. & Goldfried M. R. (1971) Problem solving and behaviour modification. *Journal of Abnormal Psychology* **78**, 107–26.
- Dagnan D. & Chadwick P. (1997) Cognitive-behaviour therapy for people with learning disabilities: assessment and intervention. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 110–23. Routledge, London.
- Didden R., Duker P. C. & Korzilius H. (1997) Meta-analytic study on treatment effectiveness for problem behaviors with individuals who have mental retardation. *American Journal of Mental Retardation* **101**, 387–99.
- Durlak J., Fuhrman T. & Lampman C. (1991) Effectiveness of cognitive-behavior therapy for maladapting children: a meta-analysis. *Psychological Bulletin* **110**, 204–14.
- Dush D. M., Hirt M. L. & Schroeder H. E. (1989) Self-statement modification in the treatment of child behavior disorders: a meta-analysis. *Psychological Bulletin* **106**, 97–106.
- Ellis A. (1973) *Rational-Emotive Therapy*. Peacock, Itaska.
- Embregts P. J. C. M. (2000) Effectiveness of video feedback and self-management on inappropriate social behavior of youth with mild mental retardation. *Research in Developmental Disabilities* **21**, 409–23.
- Embregts P. J. C. M. (2002) Effects of video feedback on social behaviour of young people with mild intellectual disability and staff responses. *International Journal of Disability, Development and Education* **49**, 105–16.
- Eyman R., Borthwick S. & Miller C. (1981) Trends in maladaptive behavior of mentally retarded persons placed in community settings and institutional settings. *American Journal of Mental Deficiency* **85**, 473–7.
- Glick M. & Zigler E. (1995) Developmental differences in the symptomatology of psychiatric inpatients with and without mild mental retardation. *American Journal of Mental Retardation* **99**, 407–17.
- Gow L. & Ward J. (1985) The use of verbal self-instruction training for enhancing generalization outcomes with persons with an intellectual disability. *Australian and New Zealand Journal of Developmental Disabilities* **11**, 157–68.
- Hall G. C. N. (1995) Sexual offender recidivism revisited: a meta-analysis of recent treatment studies. *Journal of Consulting and Clinical Psychology* **63**, 802–9.
- Hatton C. (2002) Psychosocial interventions for adults with intellectual disabilities and mental health problems: A review. *Journal of Mental Health* **11**, 357–73.
- Hawton K., Salkovsis P. M., Kirk J. & Clark D. M. (1989) *Cognitive Behaviour Therapy for Psychiatric Problems: A Practical Guide*. Oxford University Press, Oxford.
- Howard K. I., Kopta S. M., Krause M. S. & Orlinsky D. E. (1986) The dose-effect relationship in psychotherapy. *American Psychologist* **41**, 159–64.
- Kendall P. C. (1985) Toward a cognitive-behavioral model of child psychopathology and a critique of related interventions. *Journal of Abnormal Child Psychology* **13**, 357–72.
- Lancioni G. E., O’Reilly M. F. & Oliva D. (2001) Self-operated verbal instructions for people with intellectual and visual disabilities: Using instruction clusters after task acquisition. *International Journal of Disability, Development and Education* **48**, 303–12.
- Lancioni G. E., O’Reilly M. F., Oliva D. & Pellegrino A. (1997) Persons with multiple disabilities acquiring independent task performance through a self-operated verbal instruction system. *Irish Journal of Psychology* **18**, 419–29.
- Lancioni G. E., Van den Hof E., Furniss F., Boelens H., Rocha N. & Seedhouse P. (1998) A computer-based system providing pictorial instructions and prompts to promote task performance in persons with severe developmental disabilities. *Behavioural Interventions* **13**, 111–22.
- Lindsay W. R. (1999) Cognitive therapy. *Psychologist* **12**, 238–41.
- Lindsay W. R. (2002) Integration of recent reviews on offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities* **15**, 111–9.
- Lindsay W. R. & Michie A. M. (1988) Adaptation of the Zung self-rating scale for people with a mental handicap. *Journal of Mental Deficiency* **32**, 485–90.
- Lindsay W. R., Michie A. M., Baty F. J., Smith A. H. W. & Miller S. (1994) The consistency of reports about feelings and emotions from people with intellectual disability. *Journal of Intellectual Disability Research* **38**, 61–6.
- Lindsay W. R., Nielson C. & Lawrenson H. (1997) Cognitive behaviour therapy for anxiety in people with learning disabilities. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 124–40. Routledge, London.
- Lindsay W. R., Overend H., Allan R., Williams C. & Black L. (1998) Using specific approaches for individual problems in the management of anger and aggression. *British Journal of Learning Disabilities* **26**, 44–50.
- Linington M. (2002) ‘Whose handicap?’ Psychotherapy with people with learning disabilities. *British Journal of Psychotherapy* **18**, 409–14.
- Loumidis K. & Hill A. (1997) Social problem solving groups for adults. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 86–100. Routledge, London.
- Marx E. (1988) Problem solving therapy. In: *New Developments in Clinical Psychology*, Vol. 2 (ed. F. N. Watts), pp. 35–52. British Psychological Society, Leicester.
- Meichenbaum D. (1977) *Cognitive Behavior Modification: An Integrative Account*. Plenum, New York.

- Morrison F. J. & Lindsay W. R. (1997) Reductions in self-assessed anxiety and concurrent improvement in cognitive performance in adults who have moderate intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities* **10**, 33–40.
- Nagel B. & Leiper R. (1999) A national survey of psychotherapy with people with learning disabilities. *Clinical Psychology Forum* **129**, 14–8.
- Nezu C. M., Nezu A. M. & Dudek J. A. (1998) A cognitive behavioral model of assessment and treatment for intellectually disabled sex offenders. *Cognitive Behavioral Practice* **1998**, 25–64.
- NHS Executive (1996) *Promoting Clinical Effectiveness 1996: A Framework for Action through the NHS*. NHS Executive, Leeds.
- Novaco R. W. (1975) *Anger Control: The Development and Evaluation of an Experimental Treatment*. D.C. Health, Lexington.
- Novaco R. W. (1979) The cognitive regulation of anger and stress. In: *Cognitive-Behavioral Interventions: Theory Research and Procedures* (eds P. Kendall & C. Hollon), pp. 203–6. Academic Press, New York.
- O'Connor H. (2001) Will we grow out of it? A psychotherapy group for people with learning disabilities. *Psychodynamic Counselling* **7**, 297–314.
- Oliver P. C., Piachaud J., Done J., Regan A., Cooray S. & Tyrer P. (2002) Difficulties in conducting a randomised controlled trial of health service interventions in intellectual disability: implications for evidence-based practice. *Journal of Intellectual Disability Research* **46**, 340–5.
- Orlinsky D. E. & Howard K. I. (1986) Process and outcome in psychotherapy. In: *Handbook of Psychotherapy and Behavior Change*, 2nd edn (eds S. L. Garfield & A. E. Bergin), pp. 311–81. Wiley, New York.
- Pilgrim D. & Treacher A. (1992) *Clinical Psychology Observed*. Routledge, London.
- Posternak M. A. & Miller I. (2001) Untreated short-term course of major depression: a meta-analysis of outcomes from studies using wait-list control groups. *Journal of Affective Disorders* **66**, 139–46.
- Prosser H. (1999) An invisible morbidity? *Psychologist* **12**, 234–7.
- Reed J. (1997) Understanding and assessing depression in people with learning disabilities: a cognitive-behavioural approach. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 53–66. Routledge, London.
- Reiss S., Levitan G. W. & McNally R. J. (1982) Emotionally disturbed mentally retarded people: an under-served population. *American Psychologist* **37**, 361–7.
- Rose J. (1996) Anger management: a group treatment program for people with learning disabilities. *Journal of Developmental and Physical Disabilities* **8**, 133–50.
- Rose J. (2002) *An investigation into factors associated with the efficacy of interventions for anger*. Paper Presented at 2nd Seattle Club Conference on Research in Intellectual Disabilities, Birmingham, UK, December 2002.
- Rose J., West C. & Clifford D. (2000) Group interventions for anger in people with intellectual disabilities. *Research in Developmental Disabilities* **21**, 171–81.
- Rossiter R., Hunnisett E. & Pulsford M. (1998) Anger management training and people with moderate to severe learning disabilities. *British Journal of Learning Disabilities* **26**, 67–74.
- Roth A. & Fonagy P. (1996) *What Works for Whom? A Critical Review of Psychotherapy Research*. Guilford Press, New York.
- Schaffer N. D. (1982) Multi-dimensional measures of therapist behavior as a predictor of outcome. *Psychological Bulletin* **92**, 670–81.
- Scotti J. R., Evans E. M., Meyer L. H. & Walker P. (1991) A meta-analysis of intervention research with problem behavior: treatment validity and standards of practice. *American Journal of Mental Retardation* **96**, 233–56.
- Senatore V., Matson J. L. & Kazdin A. E. (1985) An inventory to assess psychopathology in the mentally retarded. *American Journal of Mental Retardation* **89**, 459–66.
- Silberschatz G. (1994) Abuse and disabuse of the drug metaphor in psychotherapy research: hold on to the baby as you throw out the bath. *Journal of Consulting and Clinical Psychology* **62**, 949–51.
- Sinason V. (1992) *Mental handicap and the human condition: new approaches from the Tavistock*. Free Association Books, London.
- Smith M. D. (1990) *Autism and Life in the Community: Successful Interventions for Behavioral Challenges*. Brookes, Baltimore, MD.
- Southam-Gerow M. A., Henin A., Chu B., Marrs A. & Kendall P. C. (1997) Cognitive-behavioral therapy with children and adolescents. *Child and Adolescent Psychiatric Clinics of North America* **6**, 111–36.
- Steed S. E. & Lutzker J. R. (1997) Using picture prompts to teach an adult with developmental disabilities to independently complete vocational tasks. *Journal of Developmental and Physical Disabilities* **9**, 117–33.
- Stenfert-Kroese B. (1997) Cognitive-behaviour therapy for people with learning disabilities: conceptual and contextual issues. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 1–15. Routledge, London.
- Stenfert-Kroese B. (1998) Cognitive-behavioral therapy for people with learning disabilities. *Behavioral and Cognitive Psychotherapy* **26**, 315–22.
- Stiles W. B. & Shapiro D. A. (1994) Disabuse of the drug metaphor: psychotherapy process-outcome correlations. *Journal of Consulting and Clinical Psychology* **62**, 942–8.
- Strupp H. H. (1978) Psychotherapy research and practice – an overview. In: *Handbook of Psychotherapy and Behavior Change, an Empirical Analysis* (eds S. L. Garfield & A. E. Bergin), pp. 3–22. Wiley, New York.

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- Taylor J. L., Novaco R. W., Gillmer B. & Thorne I. (2002) Cognitive-behavioural treatment of anger intensity among offenders with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities* **15**, 151–65.
- To M. Y. C. & Chan S. (2000) Evaluating the effectiveness of progressive muscle relaxation in reducing the aggressive behaviours of mentally handicapped patients. *Archives of Psychiatric Nursing* **14**, 39–46.
- Vygotsky L. S. (1962) *Thought and Language*. Wiley, New York.
- Wacker D. P., Berg W. K., Berrie P. & Swatta P. (1985) Generalization and maintenance of complex skills by severely handicapped adolescents following picture prompt training. *Journal of Applied Behavioral Analysis* **18**, 329–36.
- Waitman A. & Conboy-Hill S. eds (1992) *Psychotherapy and Mental Handicap*. Sage, London.
- Whitaker S. (2002) Anger control for people with learning disabilities: a critical review. *Behavioral and Cognitive Psychotherapy* **29**, 277–93.
- Williams H. & Jones R. S. P. (1997) Teaching cognitive self-regulation of independence and emotional control skills. In: *Cognitive-Behaviour Therapy for People with Learning Disabilities* (eds B. Stenfert Kroese, D. Dagnan & K. Loumidis), pp. 66–85. Routledge, London.
- Willner P., Brace N. & Phillips J. (2005) Assessment of anger coping skills in individuals with intellectual disabilities. *Journal of Intellectual Disability Research* (in press).
- Willner P., Jones J., Tams R. & Green G. (2002) A randomised controlled trial of the efficacy of a cognitive-behavioural anger management group for adults with learning disabilities. *Journal of Applied Research in Intellectual Disabilities* **15**, 224–35.
- Yonkers K. A., Warshaw M. G., Massion A. O. & Keller M. B. (1996) Phenomenology and course of generalised anxiety disorder. *British Journal of Psychiatry* **168**, 308–13.

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