

**CARE STAFF EXPECTATIONS OF CLINICAL PSYCHOLOGY  
INTERVENTIONS FOR CHALLENGING BEHAVIOURS:  
THE INFLUENCE OF KNOWLEDGE AND EXPERIENCE  
& RESEARCH PORTFOLIO**

**PART ONE**

**Hilary E. Maddox (M.A. Hons.)**

Submitted in partial fulfilment towards the degree of Doctorate in Clinical Psychology,  
Department of Psychological Medicine, Faculty of Medicine, University of Glasgow.

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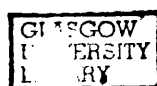
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## **PART ONE**

## **1. SMALL SCALE SERVICE EVALUATION PROJECT**

**Comparison of outcomes in the use of Cognitive Behaviour Therapy and Advice and Information Only: Treatment of Anxiety Disorders and Depression in a Primary Care Clinical Psychology department.**

Prepared in accordance with the submission requirements for Clinical Psychology Forum.  
(See Appendix 1.1: Notes for Contributors)



## **Introduction:**

In clinical psychology practice today, in adult primary care services, the main approach used in the treatment of depression and many anxiety disorders is likely to be cognitive behaviour therapy. This emphasis is reflected in current clinical psychology training, where this approach is given the majority of attention, with other treatment approaches taking a back seat. Pure cognitive therapy, without any behavioural aspect, is much less common than the combined cognitive behaviour therapy and behaviour therapy alone is also less likely to be encountered in adult primary care services.

A cognitive approach to depression was proposed by Beck (1967), although initial acceptance of this approach was slow, it is now widely accepted that thought processes play a central role in the development of depression. Beck (1976) extended the application of cognitive therapy to other psychiatric problems including anxiety disorders. Cognitive behaviour therapy acknowledges the central role of dysfunctional thought processes, but also assesses maladaptive behaviour.

There have been numerous studies over the past fifteen years which have assessed the efficacy of different treatment approaches for both depression and anxiety disorders. These studies have shown that cognitive behaviour therapy is equally efficacious or superior to behaviour therapy alone or less directive or structured forms of therapy such as social skills training and anxiety management techniques (Borkovec et al, 1987; Butler et al 1991; Shear et al, 1994; Taylor & Marshall, 1977; Wilson et al, 1983). In the treatment of depression cognitive behaviour therapy has also been shown to be at least as effective as tricyclic antidepressants in reducing depression (Beck et al, 1985; Blackburn et al, 1981) and it may also be more effective in preventing relapse (Kovacs et al, 1981; Simons et al, 1986).

While the results of these controlled treatment trials are extremely encouraging and indicate a real breakthrough in the treatment of a wide range of psychiatric problems, are these results being matched in clinical practice in primary care settings? It is likely that in the careful selection of patients for controlled treatment trials, complex cases or those with a mixed diagnosis will be excluded. It is exactly this type of case, however, which are frequently seen in out-patient clinical psychology departments, mixed anxiety and depression being the most obvious example.

Despite the possible difficulties in generalising results of controlled treatment trials to clinical psychology practice, cognitive behavioural approaches are favoured. The present study was designed to assess whether there were differences in the treatment outcome of patients treated using cognitive behaviour therapy and those whose main treatment approach was a less directive and less structured form of therapy. The discharge data of patients in a primary care adult clinical psychology department were analysed to assess possible differences in the outcomes of the two treatment approaches. The data were analysed for a two-year period for those patients with a primary diagnosis of depression or an anxiety disorder. A subsidiary question was concerned with possible differences between the two treatment approaches in relation to the type of disorder being treated, depression or an anxiety disorder.

### **Method:**

Discharge data of patients discharged from the clinical psychology department between 1st April 1995 and 31st March 1997 were analysed. Those patients whose primary diagnosis was either depression or an anxiety disorder, and whose main treatment approach had been either cognitive behaviour therapy or advice and information were included in the data set. The range of anxiety disorders included; panic disorder, generalised anxiety, post-traumatic stress disorder, phobias and severe prolonged stress reaction.

The operational definitions of the main treatment approaches were listed in the departmental handbook, for use in the completion of audit forms on discharge. Cognitive behaviour therapy was described as, " An active, structured, time-limited and directive form of therapy, based on the belief that the way a person perceives and structures the world determines his/her feelings and behaviour.". Advice and information was described as, " Opinion offered as to action, counsel. Counselling-guidance; a type of psychotherapy of the supportive or re-educative variety".

After the selection of patients from the discharge data on the categories of type of disorder and the main treatment approach, further information on these patients was analysed. At discharge, patients were given a rating of treatment outcome on a five point subjective therapist global rating scale. For the purpose of this study the categories were reduced to three ratings; poor (rating 1), moderate (rating 2 & 3) and good (rating 4 & 5).

Information was also recorded on the number of times the patient attended and the reason for discharge; that the patient stopped attending or that treatment had been completed.

Patients were not matched to a treatment approach prior to initial assessment, the type of therapy being selected by the clinical psychologist after the initial interview. There were three chartered clinical psychologists in the department, with further input from a trainee clinical psychologist and an assistant psychologist. Table 1 shows the raw data for patients with a primary diagnosis of anxiety, illustrating the number of time patients attended and the treatment outcome.

(Table1: Raw Data: Cognitive behaviour therapy and advice & information approaches in the treatment of Anxiety Disorders: approximately here.)

Table 2 shows the raw data for those patients whose primary diagnosis was depression, illustrating the number of time patients attended and the treatment outcome.

(TABLE 2: Raw Data: Cognitive behaviour therapy and advice & information approaches in the treatment of Depression: approximately here.)

### **Results:**

The outcome measures of the two treatment approaches were analysed statistically to assess whether there were significant differences in treatment outcomes between the two approaches. The data for the types of disorder; depression and anxiety, were analysed separately, as indicated in Tables1 and 2.

The mean number of attendances were compared for each of the two treatment approaches. This was done using a t-test for independent samples. For both the depressed group and the group of patients with anxiety disorders, there was no significant difference between the treatment approaches in terms of the mean number of appointments which patients attended.

The significance of the remaining outcome measures was assessed using Chi square analyses. The reasons for discharge were divide into two categories; those patients who stopped attending and those for whom treatment was completed. For those patients whose

primary diagnosis was depression, there was no significant difference between the two treatment approaches, when comparing the numbers who completed treatment and the numbers who did not complete treatment.

However, for those patients whose primary diagnosis was an anxiety disorder, there was a significant difference between cognitive behaviour therapy and advice and information. Using a 2 x 2 Chi square test, based on the prediction that a higher proportion of patients would complete treatment when cognitive behaviour therapy was the main approach used when compared with advice and information. The prediction was not supported by our result, though the significance was very slight. (Chi square = 3.88,  $p < 0.05$ ; critical value = 3.84). The results showed that, in fact, more patients completed treatment when advice and information was the main approach used.

The results from the therapist global outcome rating scale were divided into two categories, rather than the five original categories for analysis. This was done due to the small number in each category and again a Chi square analysis was used. The poor and moderate ratings were amalgamated and compared with the good ratings. There was no significant difference in the number of poor/moderate ratings and the number of good ratings for the two treatment approaches, for either the group of depressed patients or the group of anxiety patients.

### **Discussion:**

Before discussing the results of the study, it is necessary to highlight some of the limitations of the study and the methodology. First, the data was taken from the discharge information on a clinical population. It is possible that individual therapists varied in their interpretation of both the operational definitions of the treatment approaches and the global outcome scale. Second, it is possible that therapists would be uncomfortable in rating outcomes at the two extreme ends of the scale. Therapists might be cautious in giving a rating of 5, if they perceive this to mean a complete recovery and at the other end of the scale they might be unwilling to give a rating of 1, as it might then be assumed that they were unable to help the patient. A third problem with the data itself was that we only took into account the primary diagnosis. It is likely that many of the patients had at least one other secondary problem. Many out-patient clinical psychology clients with a primary diagnosis of depression also suffer from a degree of anxiety and vice versa. Related to

this is the fact that only the main treatment approach was taken into account. It is quite possible that more than one approach was used, the therapist may have switched approach during therapy as more information was revealed, or as one approach was found to be unsuccessful. All of these points highlight possible difficulties with the raw data.

The results of the study indicate that there were no differences between the cognitive behaviour therapy (C.B.T.) and advice and information approaches in the treatment of patients whose primary diagnosis was depression or an anxiety disorder, in terms of the number of times a patient attended, or in terms of the global outcome rating that patients received on discharge.

When comparing the number of patients who completed treatment with those who stopped attending, there was no difference between cognitive behaviour therapy and advice and information for the depressed patients. For the anxiety patients, a significantly higher proportion of the advice and information patients completed therapy, compared with those treated with C.B.T.

A possible reason for this is that anxiety referrals often relate to a circumscribed problem of a shorter duration, these may have been treated more successfully using advice and information, these patients may have been able to re-assess their difficulties in the light of the therapist's formulation of their problems, and required no further input. Those anxiety patients who were classified in the C.B.T. category may in fact indicate those patients who had more complex problems, which were more difficult to treat, with a higher chance of the patient dropping out before treatment was complete.

It is also possible that, without being consciously aware of their decision, therapists were matching patients to treatment at an early stage. The psychologist may decide that a patient is unlikely to cope with C.B.T., so embarks on treatment based on the advice and information principles, which the patient finds easier to grasp, and is therefore more able to achieve completion. Another possible reason for greater numbers of patients classified as dropping out of C.B.T, is that the goals are well defined, and it is clear to the psychologist when these have, or have not been achieved, whereas the goals in the advice and information approach are likely to be less well defined and treatment may be judged as complete more often.

As mentioned previously these results must be looked at with caution due to the methodological constraints discussed above. However, it does seem that there are few differences between the two treatment approaches in terms of the outcome measures addressed in this study. Of major concern is that the treatment approaches selected for analysis in this study are very closely related, and may in fact be indistinguishable from each other.

Those patients who dropped out of treatment after 2 or 3 sessions may have been coded in the advice and information category, as they had not yet progressed far enough in the treatment phase of therapy to have been given a coding for a more specific type of therapy. Given that C.B.T. is one of the most common treatment approaches used in this particular department it is likely that if they had continued in therapy, they would have been treated using C.B.T.

The majority of patients in the discharge data had at least one secondary diagnosis, and many of the cases were complex, requiring more than one treatment approach. This may also have complicated the picture, as far as coding the main approach used on discharge. It is possible that therapists coded the last approach used or coded the main approach as advice and information as a catch all category for those cases where multiple approaches were used.

### **Conclusions:**

In conclusion, few differences were found between the outcome measures of the two treatment approaches; cognitive behaviour therapy, (C.B.T.), and advice and information. It may be that they are as effective as each other in the treatment of depression and anxiety disorders, but it seems more likely that they are being used to describe very similar treatment methods, hence the similar outcomes.

The psychologist may not have felt that a treatment approach containing all of the elements of C.B.T. was indicated, and may have instead used the advice and information approach; however, due to their specialised training, it is likely that some elements of C.B.T. will have been incorporated. For example, the psychologist may have prepared a formulation based on the C.B.T. principles, but not completed treatment using C.B.T if the patient then dropped out, or improved after reconsidering their difficulties in light of

the formulation. The findings from this study suggest that some matching of patients to treatment approaches may be taking place early in the assessment phase, leading to fewer numbers of patient drop-outs, this requires further investigation.

This study highlights a number of issues for the clinical psychology department. First, it may be necessary to re-evaluate the operational definitions for the categories of main treatment approach used, in classifying patients on discharge. Second, it may also be helpful to discuss individual therapist's interpretations of these definitions and of the global rating scale, to ensure that they are being applied in a consistent manner. Third, it may be necessary to evaluate the type of treatment methods that are being applied to patients with different diagnoses. Are certain treatment approaches being used consistently to treat certain types of disorders, and are they leading to positive treatment outcomes for patients? It may be necessary to tighten the definitions of the different treatment approaches to ensure that different approaches to therapy are being evaluated realistically and effectively.

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TABLE I

**Raw Data: Cognitive Behaviour Therapy and Advice & Information approaches in the treatment of Anxiety Disorders.**

|   | Cognitive Behavioural Therapy | Advice and Information Only |
|---|-------------------------------|-----------------------------|
|   | n = 68                        | n = 22                      |
| Total number of patient attendances:          | 288                           | 89                          |
| Mean number of sessions attended by patients: | 4.23                          | 4.04                        |
| Range of number of sessions attended:         | 1 to 19                       | 1 to 17                     |
|   |                               |                             |
| Treatment outcome:                            |                               |                             |
| Poor  | 17                            | 3                           |
| Moderate                                      | 23                            | 8                           |
| Good  | 28                            | 11                          |
|   |                               |                             |
| Reason for discharge:                         |                               |                             |
| Number of patients who stopped attending:     | 37                            | 6                           |
| Number of patients who completed treatment:   | 31                            | 16                          |

TABLE II

Cognitive Behaviour Therapy and Advice & Information approaches in the treatment of Depressive Disorders.

|   | Cognitive Behavioural Therapy | Advice and Information Only |
|---|-------------------------------|-----------------------------|
|   | n = 11                        | n = 11                      |
| Total number of patient attendances:          | 56                            | 39                          |
| Mean number of sessions attended by patients: | 5.09                          | 3.54                        |
| Range of number of sessions attended:         | 1 to 12                       | 1 to 7                      |
|   |                               |                             |
| Treatment outcome:                            |                               |                             |
| Poor  | 1                             | 1                           |
| Moderate                                      | 7                             | 5                           |
| Good  | 3                             | 5                           |
|   |                               |                             |
| Reason for discharge:                         |                               |                             |
| Number of patients who stopped attending:     | 7                             | 4                           |
| Number of patients who completed treatment:   | 4                             | 7                           |

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## **2. MAJOR RESEARCH PROJECT LITERATURE REVIEW**

**Challenging Behaviour and Intellectual Disability: A review of the challenges to individuals, care staff and service providers and an examination of the barriers to the effective implementation of psychological interventions for challenging behaviour.**

Prepared in accordance with the submission requirements for the Journal of Intellectual Disability Research. (*See Appendix 2.1: Notes for Contributors*)

**Title:**

**Challenging Behaviour and Intellectual Disability: A review of the challenges to individuals, care staff and service providers and an examination of the barriers to the effective implementation of psychological interventions for challenging behaviour.**

**Short Running Title:**

**Challenging Behaviour and Intellectual Disability: A review of the challenges and barriers to psychological interventions.**

**Hilary E. Maddox**

**Department of Psychological Medicine**

**University of Glasgow**

Address for Correspondence:

Ms. Hilary Maddox

Department of Psychological Medicine

Gartnavel Royal Hospital

Great Western Road

Glasgow G12 0XH

**Abstract:**

Challenging behaviours, such as violence or aggression to others, self-injurious behaviour, destructive behaviour and repetitive stereotypical behaviours represent one of the biggest challenges facing services for people with intellectual disabilities. These behaviours represent significant challenges, not only for the individual exhibiting the behaviour, but also care staff and service providers. A literature review was undertaken to examine the difficulties posed by challenging behaviours with reference to their definition and treatment. Recent research has highlighted the importance of the role of care staff in the development and maintenance of challenging behaviours. In examining the efficacy of psychological treatments for challenging behaviours, and the possible barriers to the successful implementation of these interventions, we must therefore be aware of the impact of staff attitudes and beliefs, as care staff hold a pivotal role in the assessment, management and modification of challenging behaviours in individuals with an intellectual disability.

**Keywords:**

Barriers to Implementation, Care Staff, Challenging Behaviour, Psychological Interventions.

## **Introduction:**

Challenging behaviours, such as violence or aggression to others, self-injurious behaviour, destructive behaviour and repetitive stereotypical behaviours represent one of the biggest challenges facing services for people with intellectual disabilities. It is probably also the most researched issue in the field of intellectual disabilities. The term challenging behaviour is used to emphasise the fact that the issue is a challenge to those who provide services and to the rest of society, not merely a problem carried around by the individual (Blunden, 1990). Challenging behaviour is therefore defined, not only by the form it takes, but also the consequences which it produces for the individual, their family or carers, service providers and the wider community.

Emerson et al (1988) defined severely challenging behaviour as "behaviour of such intensity, frequency or duration that the physical safety of the person or others is likely to be placed in jeopardy, or behaviour which is likely to seriously limit or delay access to and use of ordinary community services". (Emerson et al., 1988, p. 16)

A wide range of behaviours can be categorised as “challenging” if we accept Emerson’s definition, and these behaviours vary considerably in their presentation and in the specific difficulties which they present for the individual and those around them. Two short case examples will be presented to illustrate this point:

A 25-year-old man with moderate intellectual disabilities becomes aggressive when anxious. He is physically able and kicks and punches with force. These aggressive outbursts occur approximately once a month usually in situations outside the group home where he lives. He is calm and amenable at other times, but there is a real risk of serious injury to care staff when they occur. This example clearly meets Emerson’s criteria, in that the behaviour is of such an intensity that the physical safety of others is likely to be placed in jeopardy and it is also likely to restrict the client’s access to ordinary community services.

An alternative case example involves self-injurious behaviour. An 18-year-old woman with profound intellectual disabilities and cerebral palsy, hits her face and head with her fists. The behaviour occurs on a daily basis and results in severe bruising. Staff have noted that the behaviour is worse whenever she is approached to engage her in an activity.



Although this example is very different from the first, it too meets Emerson's criteria. The woman's physical safety is clearly at risk due to the intensity and frequency of the behaviour, and as the behaviour increases when she is approached by staff, it seems likely that her access to ordinary community services will also be considerably reduced.

When attempting to plan services or to treat individuals with intellectual disabilities, who exhibit challenging behaviour, we must therefore be aware of the variation in the form that these behaviours can take. As illustrated above, the individual needs of a client with challenging behaviour may be very different in terms of service provision and treatment aims.

### **Prevalence:**

Although Emerson's definition has been widely accepted, the prevalence of challenging behaviour in populations of people with intellectual disabilities remains difficult to assess due to variations in the definition of challenging behaviour. (Emerson and Bromley, 1995; Qureshi and Alborz, 1992). Despite these variations it is clear that challenging behaviour occurs at a much higher rate in this population, than in the general population, with further variation across location, age groups and level of ability (Jacobsen 1982, Koller et al 1982).

It appears that some forms of challenging behaviour occur more frequently in individuals with more severe intellectual disabilities. Murphy (1985) found that in relation to self-injurious behaviour, 90% of the individuals who exhibited self-injurious behaviours had severe or profound intellectual disabilities. A 1971 White paper reported that 11% of severely handicapped individuals aged 15 or over required constant supervision because of behavioural difficulties.

Assessing challenging behaviours across the full range of intellectual disabilities, Koller et al (1983) found that less than one third of their cohort of young people with intellectual disabilities suffered from "severe behaviour disturbance". However, Emerson and Bromley (1995) found a high incidence of behavioural difficulties, in their sample 93% of the individuals had shown more than one form of problematic behaviour within a one-month period.

### **The challenge to services:**

Challenging behaviours are of major concern for those working with individuals with intellectual disabilities, having major consequences for the individual who exhibits the behaviour, their carers and service providers. The Mansell Report in 1993 highlighted the issues in relation to providing good quality services for individuals exhibiting challenging behaviours. Successful services demonstrated strengths in 5 key areas; commitment, individualisation, effective models of care, good management and investment in relationships. Effective services promoted shared values based on O'Brien's five accomplishments (O'Brien, 1985).

This challenge to services is particularly relevant currently due to the closure of long-stay hospitals and the move towards community based care. Felce and Parry (1995) found little evidence that moves to the community or the generally increased "quality of life" associated with this move made significant impact on severe behavioural problems. Nocon and Quereshi (1996) found similar results, that in the wake of de-institutionalisation in the majority of cases there was no change or even a worsening of challenging behaviours. As Lowe and Felce (1994) have highlighted, individuals with both an intellectual disability and challenging behaviour are particularly vulnerable to being excluded from the mainstream of society and are seen by many as a difficult group to maintain in the community. They are likely to be the last group to be relocated to community services and breakdowns in both day and residential placements are common (Schalock et al. 1981).

### **Effects of challenging behaviour on the client:**

The negative consequences of challenging behaviour for the individual exhibiting the behaviour are multiple, both direct, such as injury to self or indirect, such as exclusion from services and isolation, with the behaviour acting as a barrier to other people. Observational studies of staff working with people with challenging behaviours have found low levels of overall attention, with staff filling their time with administrative and house-keeping duties. (Felce et al, 1987; Cullen et al, 1983)

There is also evidence that those individuals exhibiting the most severely challenging behaviours, particularly aggressive acts, have the greatest number of interactions with staff, but that this attention is not necessarily positive. (Duker et al, 1989; Emerson et al,

1992) Rusch et al. (1986) found that these individuals were at greater risk of physical abuse from carers.

### **Effects of challenging behaviours on carers:**

Individuals who exhibit these behaviours also represent a major challenge to care staff. Jenkins et al. (1997) demonstrated that challenging behaviour is associated with high staff anxiety and led to reduced job satisfaction. Bromley and Emerson (1995) reported that the most significant sources of stress for carers of people with challenging behaviours, was the "daily grind" of caring, their difficulties in understanding the person's behaviour, the unpredictability of the behaviour and the apparent lack of an effective way forward.

There is also evidence to suggest that challenging behaviours produce a range of reactions from staff, shaping their emotional responses, beliefs and attributions. (Hastings & Remington, 1994a; Bromley & Emerson, 1995). Hastings (1993) reported that challenging behaviours may produce a number of emotional reactions among staff including fear, anger, irritation and disgust.

Staff beliefs about what constitutes challenging behaviour and beliefs about the cause(s) of the challenging behaviour i.e. their causal attributions, are likely to contribute to staff responses to such behaviours. (Hastings, 1997; Hastings et al, 1997). Staff making different attributions are likely to respond differently to the same incident of challenging behaviour. For example a staff member who believes that an individual's aggressive behaviour is due to anxiety is likely to respond in a different manner to a staff member who believes that the behaviour is malicious.

The role of staff in caring for individuals with intellectual disabilities and challenging behaviour is also important in relation to the development and maintenance of these behaviours. Functional analyses typically show that challenging behaviours may be maintained by socially mediated forms of reinforcement (Iwata et al, 1982). Derby (1992) reported that of 79 cases of brief analogue assessment, 72 % of the challenging behaviours were hypothesised to be maintained by socially mediated reinforcement.

Observational studies of staff behaviour confirm that staff responses are mostly social in nature and that their responses are likely to maintain the challenging behaviour (Repp et

al, 1987). Thus the nature of staff responses to challenging behaviours is critical (Hastings, 1996). In attempting to change or eliminate these behaviours we must therefore bear in mind the significant impact which care staff have in the development and maintenance of challenging behaviours.

### **Treatment & Interventions for Challenging Behaviours:**

Challenging behaviour, as highlighted above, has serious implications for the individuals exhibiting the behaviour, for staff caring for these individuals and for organisations attempting to provide quality services to meet the complex needs of this group.

A variety of interventions has been tried and is currently being used to reduce or extinguish challenging behaviours, including physical restraint, time-out procedures, psychotropic medication, and behaviour modification. Physical restraint can be detrimental if used inappropriately for example, as a form of punishment. It may interfere with opportunities for learning through interaction with the environment and through the individual relying on restraint when faced with difficult situations rather than learning adaptive coping mechanisms. Inappropriate use of restraints, such as arm splints, can also lead to injury of the individual, muscular atrophy, demineralisation of bones or shortening of tendons (Murphy, 1985). As in the case of restraint, the use of time-out procedures can also have harmful effects for an individual if used inappropriately.

Psychotropic medication continues to be used in the field of intellectual disabilities, to sedate individuals who exhibit challenging behaviours and control their behaviour, despite a lack of evidence regarding its efficacy with this client group (Gadow & Poling, 1988; Singh & Millichamp 1985). It appears to be quite common for an individual to be prescribed anti-epileptic medication which also has sedating properties and for staff to be unclear as to the purpose of the prescription; epilepsy or behavioural intervention. Psychotropic medication also has a number of serious side-effects, such as tardive dyskinesia, which must be taken into account when prescribing these potent drugs.

Behavioural interventions, such as applied behaviour analysis, provide a powerful tool which enables the individual to achieve identified goals. Such interventions are based on empirical research and sophisticated methodology, however, as in the case of the above interventions and treatments difficulties can arise. Detailed assessment of the individual's

behaviour, their history and current environment are crucial in planning appropriate interventions.

Behavioural interventions in the past have shown an undue reliance on punitive methods (Altmeyer et al, 1987; Griffin et al, 1987). However, La Vigna & Donnellan (1986) make the point that failure to use these techniques where their use is clearly warranted should be considered as abusive as the inappropriate use of these techniques.

### **Psychological Interventions for Challenging Behaviour:**

Research, over the past 15 years, has identified many factors which have a significant impact on the development and maintenance of challenging behaviours in individuals with intellectual disabilities, both at an individual and a service level (Carr & Durand, 1985; Iwata et al, 1982; Durand, 1990)

Increasingly the behaviour is being viewed not as a discrete problem within the individual, but within the wider context of the individual's environment and in relation to other people who have an impact on both the individual directly and in shaping their environment. Mansell et al (1994) emphasised that serious challenging behaviour is not easy to overcome, that it is important to look at the impact that the behaviour has on their lifestyle in order to help them to lead a more ordinary life.

### Assessment of Challenging Behaviour:

McGill et al (1997) have proposed a cognitive-behavioural approach which expands the traditional ABC model of behaviour, taking into account the thoughts and feelings of both the individual exhibiting the behaviour and of care staff. The model also includes information from both the personal and environmental contexts and adds a temporal component, defining factors as either temporary or persistent. This model is useful in helping to identify all possible or likely causes of the behaviour, within the individual and their environment.

Psychological approaches to challenging behaviours have become more sophisticated in aiding our understanding of the form and function of these behaviours. It is known from earlier research that interventions, such as functional communication training (Carr & Durand, 1985) and applied behaviour analysis, can be very successful in reducing

challenging behaviours (Bird et al, 1989; La Vigna & Donnellan, 1986). Despite these advances, in practice there remain many obstacles to the successful implementation of these interventions.

A complex formulation or functional analysis of a case is of little value if it has no practical use in reducing or eliminating the challenging behaviour. Due to the shortage of clinical psychologists, the implementation of psychological interventions inevitably falls to care staff, who often do not receive sufficient support or information to fulfil this task adequately.

#### Staff responses to interventions for Challenging Behaviour:

Care staff, as mentioned above, can effect changes in challenging behaviour and can also be affected by individuals who exhibit these behaviours. Using clinical vignettes, Hastings (1996) demonstrated that although staff descriptions of long-term interventions were largely consistent with the aims of psychological interventions, their short-term strategies were likely to be counter-habilitative. Hastings reported that these immediate interventions by staff were based on sensible short-term concerns but which would contribute to the long-term maintenance of the behaviour. This finding has serious implications for professionals, such as psychologists, concerned with long-term interventions, as it indicates that care staff may have a different agenda based on the practical necessities of the situation, which may be providing reinforcement for the challenging behaviour according to a low rate schedule (Felce et al., 1987).

However, the extent to which interventions are actually implemented in practice is seldom evaluated, despite a great deal of anecdotal evidence that treatment programmes are often not implemented in the manner in which they were intended by the clinical psychologist.

#### Barriers to Implementation:

Three main areas have been identified in the literature as presenting potential barriers to the implementation of psychological interventions; 1) a lack of understanding by care staff of the intervention, or of the underlying principles; 2) the beliefs and attitudes of care staff and 3) inadequate resources.

Emerson and Emerson, (1987), identified a lack of understanding among direct-care staff

of basic behavioural principles and methods as representing one of the key obstacles to implementation. Hastings, (1995), also identified a lack understanding of behavioural methods and theory amongst care staff as a serious barrier.

A lack of understanding or knowledge of the principles underlying an intervention may leave staff feeling that their knowledge of the situation has been ignored or an outside professional, such as the clinical psychologist may be perceived to be complicating things unnecessarily. Staff may be unable to match the short-term goals of the intervention with it's long-term aims. If this is the case, staff may fail to comprehend the utility of the intervention, and may therefore be less likely to implement the programme. Hastings, (1996), found that staff were unlikely to follow existing written programmes and suggested that staff might not receive information about these types of programme on a regular basis. This too suggests a lack of knowledge amongst care staff regarding the intervention.

As mentioned previously, care staff's beliefs and attitudes can have a significant impact on the development and maintenance of challenging behaviours. Many care staff have previous negative experience of behaviour change programmes being unsuccessful, which is likely to affect their expectations regarding the effectiveness of current interventions. Hastings, (1995), found that if the stated aims of the programme were incongruent with prevalent staff beliefs, then staff might view the intervention as inappropriate and fail to follow the programme through. Care staff may agree in principle to an intervention, but may not follow through with the programme in practice. Emerson and Emerson, (1987), found that a custodial orientation among a significant minority of staff members acted as a barrier to implementation. This suggests that staff did not regard interventions, which were intended to lead to positive change as a priority, regarding their role as purely custodial.

There is now a greater understanding of staff responses to challenging behaviours and of the ways staff beliefs and attitudes can affect these behaviours. However, there has been little research into the factors, which in practice may increase or decrease the likelihood of treatment programmes being followed appropriately.

A lack of resources, including the staff to client ratio and an unsuitable physical

environment are often cited as barriers to implementation by care staff. Emerson and Emerson, (1987), identified environmental constraints such as inadequate resources, lack of staff involvement in decision making and a lack of potential reinforcers such as constructive activities as being significant barriers.

However, Woods and Cullen, (1983), found that formal programmes were often abandoned by staff, especially after initial interest has subsided. Initially staff received a great deal of attention from outside professionals and received praise for their achievements. The fact that staff failed to follow through with these programmes may relate to a lack of resources in terms of skilled professionals, like clinical psychologists, who can advise and support care staff on a regular basis.

Oliver et al, (1978), in an epidemiological study, revealed that few individuals with challenging behaviour actually had written intervention programmes in place. This may also be related to the shortage of clinical psychologists working in this field, reflecting a lack of resources, rather than a negative attitude towards written interventions.

#### Methodological Issues and Implications for Future Research:

Research into the possible barriers to implementation have generally used interviews, observational techniques or clinical vignettes in order to gauge staff responses to psychological interventions for individuals who exhibit challenging behaviour (Emerson and Emerson, 1987; Hastings 1995). These studies have indicated the main areas, which may be important in relation to implementation, in terms of staff responses and behaviour. The difficulty is that staff responses have not been analysed in relation to actual on-going interventions. It remains to be seen how factors relating to care staff, such as their knowledge, understanding and expectations actually affect the outcomes of interventions in clinical practice.

Another difficulty is that much of the research has been carried out in large institutions (Emerson and Emerson, 1987; Woods and Cullen, 1983). Although a significant number of individuals with intellectual disabilities continue to live in hospital environments, many now live in community settings and participate more widely in community activities. This creates very different problems for care staff who have to cope with the individuals challenging behaviour in a less structured environment and in a wider variety of situations.



These research findings clearly have major implications for clinical practice. They indicate a need for further research into the possible effects of care staff's knowledge, understanding and expectations on the implementation of behaviour change programmes. Further understanding of the factors which increase the effectiveness of psychological interventions for challenging behaviour in individuals with a intellectual disability would be of great benefit, not only for the quality of life of the clients involved, but also for the well-being of care staff and in the development of appropriate and successful services for this vulnerable group.

A number of researchers have highlighted lack of knowledge or understanding as a barrier to implementation (Hastings, 1996; Emerson and Emerson, 1987). If lack of knowledge is a significant barrier to implementation, staff must be provided with appropriate education and training to enable them to implement interventions effectively. However, it is unclear whether staff beliefs regarding the causes of the challenging behaviour and their expectations of the outcome of interventions are related to their level of knowledge. Staff who are highly trained in the care of individuals with a learning disability, may have little understanding of psychological principles and may therefore have very different expectations regarding the outcome of a psychological intervention.

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### **3. MAJOR RESEARCH PROJECT PROPOSAL**

#### **Psychological Interventions for Challenging Behaviour: The effects of Knowledge, Understanding and Expectations on Implementation.**

**Applicants:**

Ms Hilary Maddox  
Department of Psychological Medicine  
Academic Centre  
Gartnavel Royal Hospital  
1055 Great Western Road  
Glasgow G12 0XH

Prof. Colin Espie  
Department of Psychological Medicine  
Academic Centre  
Gartnavel Royal Hospital  
1055 Great Western Road  
Glasgow G12 0XH

Research proposal prepared in accordance with guidelines in the D. Clin. Psy. Handbook.  
Guidelines based on the application for a mini-project grant in Health Services Research.  
(See Appendix 3.1 for details)

**Summary:**

In the learning disabilities population, challenging behaviours represent a major concern for staff, carers and professionals working in this field. An individual who exhibits challenging behaviour, especially if it is severe, will often be excluded from participating in everyday activities or attending work or leisure facilities. Psychological techniques such as functional analysis and behaviour modification are effective in reducing or eliminating challenging behaviours. However, for these interventions to work effectively it is crucial that they are implemented in the manner in which the clinical psychologist intended and there is much anecdotal evidence that often this does not happen. The reasons for this difficulty in the implementation of psychological interventions are rarely evaluated. This study aims to investigate the effects of three factors on the implementation of psychological interventions, as proposed by a Clinical Psychologist. The factors being evaluated are; care staff's knowledge of the theoretical basis for psychological interventions, their understanding of a specific intervention and their expectations regarding the intervention. It is hypothesised that a greater level of understanding of both the theoretical basis for the intervention and the details of the specific intervention will correlate with a higher degree of implementation of the psychological intervention. The degree to which care staff's expectations correlate with those of the Clinical Psychologist, is also hypothesised to be associated with implementation, with greater concordance indicating superior implementation. The study will use questionnaires and self report measures to gain information from both care staff and clinical psychologists involved with identified clients, who meet the criteria for the study. Additional information will also be collected directly from clinical case notes, in order to independently assess the level of implementation.



## **Introduction:**

Challenging behaviour is one of the biggest issues facing services for people with learning disabilities. The term challenging behaviour is used to emphasise the fact that the issue is a challenge to those who provide services and to the rest of society, not just a problem carried around by the individual (Blunden, 1990). The extent of challenging behaviour in the learning disabilities population is difficult to assess due to variations in the definition of challenging behaviour. (Emerson and Bromley, 1995, Qureshi and Alborz, 1992).

Challenging Behaviour occurs at a much higher rate in the learning disabilities population, than in the general population. Emerson and Bromley (1995) found that in their sample 93% of the individuals had shown more than one form of problematic behaviour within a one-month period. Challenging behaviour is clearly of major concern in the learning disabilities population, having major consequences for the individual, their carers and service providers.

This challenge to services is particularly relevant currently due to the gradual closure of long-stay hospitals and the move towards community based care. Felce and Parry (1995) found little evidence that moves to the community or the generally increased "quality of life" associated with this move, made significant impact on severe behavioural problems. Nocon and Qureshi (1996) found similar results.

As Lowe and Felce (1994) have highlighted, individuals with both a learning disability and challenging behaviour are particularly vulnerable to being excluded from the mainstream of society and are seen by many as a difficult group to maintain in the community. Jenkins et al. (1997) demonstrated that challenging behaviour is associated with high staff anxiety and led to reduced job satisfaction. This impact of challenging behaviour indicates a need for long term interventions aimed at reducing or preventing it.

Research findings over the past 15 years have identified many factors within care environments which have a significant impact on the development and maintenance of challenging behaviours in individuals with learning disabilities, such as staff emotional responses, staff beliefs and attributions relating to individuals who exhibit challenging behaviour (Bromley and Emerson, 1995; Emerson and Bromley, 1995; Hastings, 1994;

Hastings & Remington, 1994; Hastings, 1996). Increasingly the behaviour is being viewed not as a discrete problem within the individual, but within the wider context of their environment and in relation to other people who have an impact on both the person directly and in shaping their environment.

There has also been an increase in research into the effectiveness of interventions designed to reduce or terminate challenging behaviours, such as psychological interventions. However, the extent to which interventions are actually implemented in practice is seldom evaluated, despite a great deal of anecdotal evidence that treatment programmes are often not implemented in the manner in which they were intended by the clinical psychologist.

Woods and Cullen (1983) found that formal programmes are often abandoned by staff, especially after initial interest has subsided. Of greater concern are findings reported by Hastings (1996), that although long term interventions identified by care staff were largely consistent with the aims of psychological interventions, their immediate intervention strategies were similar to counter-habilitative strategies identified in previous research. Staff may therefore be providing reinforcement for the challenging behaviour according to a low rate schedule (Felce et al. 1987).

Care staff may agree in principle to an intervention, but may not follow through with the programme in practice. There has been very little quality research into this problem, which clearly has major implications for clinical practice. Greater understanding of the factors which increase the effectiveness of psychological interventions for challenging behaviour would be of great benefit, not only for the quality of life of the clients involved, but also for the well-being of care staff and in the development of appropriate and successful services for this vulnerable group.

### **Aims and Hypothesis:**

The aim of the study is to investigate the effects of care staff's knowledge, understanding and expectations on the implementation of psychological interventions, as proposed by clinical psychologists, for the treatment of challenging behaviour in individuals with a learning disability who live in community based residences.

Hypothesis 1: Where staff understanding of the theoretical basis for the psychological intervention is good, implementation of the intervention will be as the psychologist intended.

Hypothesis 2: Where staff understanding of the details of the specific treatment programme is good, implementation of the intervention will be as the psychologist intended.

Hypothesis 3: Where staff expectations regarding the intervention are in concordance with the psychologist's, implementation of the intervention will be as the psychologist intended.

### **Plan of Investigation:**

The investigation will gather data at two time points:

- 1: Within the first two weeks of a psychological intervention beginning.
- 2: 4-6 weeks after baseline measures have been collected.

### **Participants:**

Cases will be selected after referral of clients to the Clinical Psychologist. Cases will be included in the study where the referral relates to aggressive behaviour and where the psychologist feels that intervention is appropriate. We do not propose to define challenging behaviour, but will take the acceptance of the referral, by the psychologist as the inclusion criterion.

New episodes with changes to a previous intervention will also be included if they meet the criteria above as many clients will already be known to the psychologist.

There will be no direct work with clients.

### Measures will be carried out with:

#### **Care staff:**

Working in community-based residences for adults with learning disabilities. This will include two care staff for each case, preferably a key-worker and a manager, or senior staff member.

### **Clinical Psychologists:**

Working with clients living in residences as indicated above.

### **Measures:**

#### **1: Baseline Data:**

- a) Demographic Data: Background information will be collected through interviews with care staff (x 2). This will include demographic data on the client and staff members, general information about the service and details regarding the behaviour targeted by the psychological intervention.

(See Appendix 3.2: Demographic Data)

- b) Knowledge of the theoretical basis for the intervention: This measure will require to be piloted and validated. It will be presented in questionnaire form and will be based on the learning objectives in "Approaches to People with Challenging Behaviour", a distance learning pack for direct care staff (University of St. Andrews, 1993)

- c) Understanding of the specific intervention, as proposed by the Clinical Psychologist: This measure will also be in questionnaire form and will be based on the key points that the psychologist identifies as crucial to the intervention. Restricting the focus to one type of challenging behaviour, i.e. aggressive behaviour, will enable the development of a standardised questionnaire. It will also be necessary to pilot this measure.

#### **2: Expectations:**

The expectations of both care staff and clinical psychologists will be recorded at both baseline and at follow-up, 4-6 weeks later.

(See Appendix 3.3: Measures of Expectation)

#### **3: Implementation:**

The criteria to be measured will be identified by the psychologist, in liaison with the applicant. Four criteria will be chosen for each case for analysis at follow-up. Each intervention will contain specific recommendations, from these, four criteria will be chosen, two in each of the following categories:

a) Behaviour / Intervention Tasks:

e.g. Using reinforcements appropriately or consistently ignoring the target behaviour.

b) Administrative Tasks:

e.g. Completing record sheets or returning record sheets to the psychologist.

The level of implementation can then be coded into categories based on the percentage of time which care staff have completed the identified tasks or activities. The categories can then be used for comparison in the statistical analysis. The percentages could also be used as a numerical scale for statistical analysis.

#### **4 Qualitative Data:**

At follow-up a number of other questions will be put to the care staff. The information from these questions will be for qualitative purposes and will not be included in the statistical analysis. Staff responses on a number of these will be discussed with the psychologist to allow verification of their answers.

(See Appendix 3.4: Qualitative Data)

#### **Design and Procedure:**

Cases will be chosen which meet the criteria set out in participants section above.

Measures will be completed by care staff and clinical psychologists during face to face interviews with the applicant, at baseline and follow-up. Additional information will be collected from clinical case notes in order to provide an independent assessment of the interventions.

It is possible that social effects, caused by the researcher when interviewing care staff, could have the potential for affecting their responses. It will be important for the applicant to present the measures in such a way as to minimise these confounding effects.

All information will be confidential and data will be coded to ensure anonymity.

(See Appendix 3.5: Summary Chart of Research Process)

#### **Settings:**

The selection of community-based residences for adults with intellectual disabilities for

participation in the study will depend on where the referrals to the clinical psychologist come from during the study period, i.e. where the clients are living.

The study will be carried out in the Greater Glasgow area in liaison with the Community Learning Disabilities Team. This may be extended to include Forth Valley area in liaison with the Clinical Psychology Department, RSNH, Larbert. Both of the above departments have expressed a willingness to participate in the study.

### **Data Analysis:**

The power calculation indicates the need for 28 cases to be completed.

Data from measures will be converted to categories and numerical codes, which will be transferred to a computer database.

Data will then be analysed statistically using an SPSS package.

Statistical procedures to be used: Chi Square Analysis, Correlation and Regression Analysis.

### **Practical Applications:**

Identification of some of the factors associated with positive and appropriate implementation of psychological interventions has direct practical use. Clinical Psychologists, once aware of these factors, can take them into account when planning interventions for challenging behaviour, thus increasing the likelihood that the intervention will be implemented effectively and that the behaviour will be reduced or eliminated.

If we can demonstrate that knowledge and understanding do have a significant effect on implementation, then this will indicate a need for staff training on psychological interventions; their theoretical basis and clinical functions. This type of training would be most effective if it were undertaken by clinical psychologists with direct experience of this client group in similar community settings. If we demonstrate a significant effect from a lack of concordance in the expectations of the care staff and the clinical psychologist, it may be necessary to further analyse the reasons behind the discrepancy in order to address the difficulty in the future.

Reducing the frequency, intensity or duration of challenging behaviour has implications for the individual, their carers and service providers. Achieving this reduction, through

the effective use of psychological interventions would allow the individual to participate more fully in society, would increase morale amongst care staff and possibly amongst clinical psychologists and would reduce the strain on limited resources.

**Time scales:**

|                               |                              |
|-------------------------------|------------------------------|
| Piloting Measures:            | 3 months                     |
| Data Collection and Analysis: | 8 months                     |
| Writing Up:                   | 4 months                     |
| Baseline Measures:            | Approximately 4 hrs per case |
| Follow-up Measures:           | Approximately 4 hrs per case |

**Ethical Approval:**

There will be no direct patient contact.

Ethical approval will be sought from Greater Glasgow Community and Mental Health Services N.H.S. Trust and Forth Valley Health Board.

Consent will be sought from individual care staff, their employer and clinical psychologists.

Consent will also be sought from the clients whose cases are selected to be included in the study, or from someone acting on their behalf.

Selection of Journals:

The following journals have been selected as possible target publications for the research paper:

Journal of Intellectual Disability Research

British Journal of Learning Disabilities

Research in Developmental Disabilities

### **Amendment to Major Research Proposal:**

Due to difficulties with the implementation of the original research proposal, a number of significant changes were made to the methodology of the project. Every attempt was made to answer the original research questions. The following section indicates the progress that had been made in the original proposal and the reasons why changes to the methodology were necessary.

Detailed discussions took place with clinical psychologists in the Community Learning Disabilities Teams regarding the feasibility of the study. A number of changes were agreed to enable the psychologists to record information about the content of clinical cases in a more flexible format. It was felt that unless this was undertaken it would not be possible to collect information on cases that were less behaviourally orientated. Clinical psychologists participating in the study all received copies of information sheets detailing the referral criteria for the study and the research procedure and thirteen clinical psychologists agreed to refer suitable cases. However, no referrals had been received for the study by December 1998. All of the clinical psychologists who had agreed to participate were contacted at that time and reminded of the time-scale of the project.

In late January 1999, it was decided that there was insufficient time remaining to complete the study with the original methodology. Due to these time constraints a workshop format was planned, enabling the researcher to access a large number of care staff at one time and allowing for a debate of the issues being raised by the research project. This would also provide an opportunity to collect valuable qualitative data.

The original methodology proposed a prospective analysis of ongoing clinical cases, in order to compare expectations of psychologists and care staff in relation to the degree of implementation of a psychological intervention. The level of staff knowledge was also to be measured as a possible barrier to implementation. The workshop format did not allow for a prospective analysis of cases or the measurement of the degree of implementation. Nevertheless, it was possible to compare the expectations of care staff with those of clinical psychologists through the use of case vignettes. It was also possible to explore staff knowledge and experience as possible barriers to implementation using



questionnaires, completed prior to the workshop. In conclusion, despite the significant changes to the methodology the key research questions remained central.

For detailed information of the revised research methodology and procedures, the reader is referred to the main research paper: “Care staff expectations of clinical psychology interventions for challenging behaviours: the influence of knowledge and experience.

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#### **4. MAJOR RESEARCH PROJECT PAPER**

**Care staff expectations of clinical psychology interventions for challenging behaviours: the influence of knowledge and experience.**

Prepared in accordance with the submission requirements for the Journal of Intellectual Disability Research. (*See Appendix 4.1: Notes for Contributors*)

**Title:**

**Care staff expectations of clinical psychology interventions for challenging behaviours: the influence of knowledge and experience.**

**Short Running Title:**

**Care staff expectations of clinical psychology interventions for challenging behaviours: the influence of knowledge and experience.**

**Hilary E. Maddox**

**Department of Psychological Medicine**

**University of Glasgow**

Address for Correspondence:

Ms. Hilary Maddox

Department of Psychological Medicine

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

**Abstract:**

Challenging behaviours present significant challenges to services providers, having a detrimental impact on the individual, their families and carers. Psychological interventions for challenging behaviours have become increasingly refined in recent years. In practice, however, many obstacles remain to the successful implementation of interventions and the effective treatment of challenging behaviours. The aim of the present study was to investigate the association between the knowledge and experience of care staff and their beliefs/expectations regarding clinical psychology interventions for challenging behaviours. The study used a workshop format, questionnaire measures and case illustrations to assess the knowledge/experience and beliefs/expectations of care staff, which were compared with a consensus opinion prepared by a group of experienced clinical psychologists. Results did not demonstrate significant associations between variables, suggesting that a high level of care staff knowledge or experience was not necessarily associated with beliefs or expectations which were in concordance with the clinical psychologist's. The implications of the findings are discussed in relation to potential barriers to the implementation of clinical psychology interventions for challenging behaviours.

**Keywords:**

Beliefs, Care Staff, Challenging Behaviour, Expectations, Experience, Knowledge.

## **Introduction:**

Challenging behaviours, such as violence or aggression to others, self-injurious behaviour, destructive behaviour and repetitive stereotypical behaviours represent one of the biggest challenges facing services for people with intellectual disabilities. The term challenging behaviour is used to emphasise that the behaviours represent a challenge not only to the individual, but also their family, carers, service providers and the wider community. (Blunden, 1990). Emerson et al (1988) defined severely challenging behaviour as "behaviour of such intensity, frequency or duration that the physical safety of the person or others is likely to be placed in jeopardy, or behaviour which is likely to seriously limit or delay access to and use of ordinary community services". (Emerson et al., 1988, p.16)

A wide range of behaviours can be categorised as “challenging” if we accept Emerson’s definition, and these behaviours vary considerably in their presentation and in the specific difficulties which they present for the individual and those around them. The prevalence of challenging behaviours in adults with intellectual disabilities is difficult to assess due to variations in the definition of challenging behaviour. (Emerson and Bromley, 1995, Quereshi and Alborz , 1992). Despite these variations, it is clear that challenging behaviours occur at a much higher rate in people with intellectual disabilities, than in the general population.

There are many negative consequences for the individual exhibiting the behaviour. These can be direct, such as injury to self, or indirect, such as exclusion from services and isolation, with the behaviour acting as a barrier to other people. As Lowe and Felce (1994) have highlighted, individuals with both an intellectual disability and challenging behaviour are particularly vulnerable to being excluded from the mainstream of society and are seen by many as a difficult group to maintain in the community. Jenkins et al. (1997) demonstrated that challenging behaviour is associated with high staff anxiety and led to reduced job satisfaction.

Research findings over the past 15 years have identified many factors within care environments, which have a significant impact on the development and maintenance of challenging behaviours. Care staff often have a central role in the development and maintenance of challenging behaviours (Derby, 1992; Repp et al 1987). The nature of

staff responses is critical, including their emotional responses, beliefs, attributions and behaviour (Hastings, 1997). The manner in which care staff relate to individuals who exhibit challenging behaviour can have a significant impact on the development and maintenance of the behaviours (Bromley and Emerson 1995, Emerson and Bromley 1995, Hastings and Remington 1994, Hastings 1996). Challenging behaviour should therefore be viewed not as a discrete problem within the individual, but within the wider context of the individual's environment and in relation to other people who have an impact on both the individual directly and in shaping their environment.

The significant impact of challenging behaviours indicates a need for interventions aimed at reducing or preventing it. A variety of interventions have been tried and are currently being used to reduce or extinguish challenging behaviours, including physical restraint, time-out procedures, psychotropic medication, and behaviour modification. All of these approaches have both positive and negative aspects, and these should be considered carefully with regard to the individuals needs prior to any intervention.

Psychological interventions for challenging behaviours have become increasingly refined in recent years, taking into account the function(s) which the behaviour serves for the individual, the wider issues in the individuals environment, their needs and wishes. (Iwata, 1982; Durand, 1990; La Vigna & Donnellan, 1986; O'Brien, 1985). Despite these advances, in practice there remain many obstacles to the successful implementation of psychological approaches to the treatment of challenging behaviours. Three main areas have been identified in the literature as presenting potential barriers to the implementation of psychological interventions. First, a lack of understanding by care staff of the intervention, or of the underlying principles; second, the beliefs and attitudes of care staff; and third, inadequate resources. This includes issues such as poor quality accommodation, inadequate numbers of care staff or a lack of appropriately trained staff. (Emerson & Emerson, 1987; Hastings, 1995)

Woods and Cullen (1983) found that formal programmes are often abandoned by staff, especially after initial interest has subsided. Of greater concern are findings reported by Hastings (1996), that although long term interventions identified by care staff were largely consistent with the aims of psychological interventions, their immediate intervention strategies were similar to counter-habilitative strategies identified in previous



research. Staff may therefore be providing reinforcement for the challenging behaviour according to a low rate schedule (Felce et al. 1987). For a more detailed review of the literature on this topic, see Maddox (1999).

A better understanding of the factors that may increase the effectiveness of psychological interventions for challenging behaviours clearly has important clinical implications. It would enable psychologists to intervene more successfully, providing benefits, not only for the quality of life of the clients involved, but also for the well-being of care staff and aid the development of appropriate and effective services for this vulnerable group.

Clinical Psychologists working in the field of learning disabilities combine their knowledge of psychological theory with their clinical experience in planning interventions for challenging behaviours. In delivering services to this client group a number of difficulties can arise, which are often not considered in experimental situations. For example, care staff may fail to complete behavioural records, reward systems may not be used in the manner which the psychologists intended or behavioural programmes may not be followed through.

In clinical settings there are many variables which may have an impact on the degree to which psychological interventions are implemented. Care staff may lack understanding about the role of the clinical psychologist or what might be expected from them in working with the psychologist. Staff expectations of the intervention and their prior experience of working with people with challenging behaviours may also impact on the degree to which interventions are implemented.

If care staff have little training or experience in working with people with challenging behaviours, or have little understanding of the theoretical framework behind psychological interventions, it would seem likely that their response to a client who exhibits challenging behaviour, would be somewhat different to the response of the clinical psychologist.

The present study was designed to contribute to the research literature on the barriers to the successful implementation of psychological interventions for challenging behaviours. The study aimed to investigate the impact of staff knowledge and staff experience on their

expectations regarding interventions provided by clinical psychologists.

### **Method:**

#### Aims and Hypotheses:

The aim of the study was to investigate the association between the knowledge and experience of care staff and their expectations of the effects of clinical psychology interventions for challenging behaviour in adults with an intellectual disability.

#### **Hypothesis 1:**

- a) A higher level of staff knowledge will be associated with greater concordance with the beliefs of the psychologist, in relation to the causes of challenging behaviour.
- b) A higher level of staff experience will be associated with greater concordance with the beliefs of the psychologist, in relation to the causes of challenging behaviour.

#### **Hypothesis 2:**

- a) A higher level of staff knowledge will be associated with greater concordance with the expectations of the psychologist, in relation to the content of the intervention.
- b) A higher level of staff experience will be associated with greater concordance with the expectations of the psychologist, in relation to the content of the intervention

#### **Hypothesis 3:**

- a) A higher level of staff knowledge will be associated with greater concordance with the expectations of the psychologist, in relation to the outcome of the intervention.
- b) A higher level of staff experience will be associated with greater concordance with the expectations of the psychologist, in relation to the outcome of the intervention.

#### Participants:

Following discussion with the 14 voluntary agencies participating in a joint training initiative, care staff working in community-based services for adults with intellectual disabilities were invited to attend a workshop, which would involve both research and teaching elements. Managerial staff attending the joint training initiative were provided

with information on the workshop and booking forms to be circulated to their staff (See Appendix 4.2: Information for care staff). It was emphasised that all levels of staff were welcome to attend. Places at the workshop were limited to 40 and were provided on a first come first served basis.

The workshop was fully booked, with a reserve list in the event of cancellations. A total of 35 people attended the workshop. There were almost 3 times as many females as males, reflecting the disproportionate number of women working in this field. The mean age of participants was 37 years, with an average of 7 years of experience of working with adults with learning disabilities and challenging behaviour. The majority of participants worked in residential services and all had some experience of caring for or working with clients who exhibited a form of challenging behaviour. There was a range of staff working at all levels within the organisations. See Table I for detailed demographic data of study participants.

(**Table I:** Demographic data of care attending workshop: approximately here.)

#### Measures:

Three questionnaire measures were used to collect data. There were no suitable measures available to answer the research questions. It was therefore necessary to devise suitable measures, which are detailed below.

#### **1) Demographic Questionnaire:** (See Appendix 4.3)

The questionnaire collected general demographic data, such as age and sex, and also specific data relating to care staff's experience and training in working with adults with intellectual disabilities and challenging behaviours.

Selected questions were used to calculate the training / experience score, which covered the following areas; specific training or qualifications, their position at work, the number of years of experience of working with individuals with learning disabilities and challenging behaviour and their previous experience of working with clinical psychologists. (See Appendix 4.4: Scoring procedure for Demographic Questionnaire)

## 2) **Knowledge Questionnaire:** (See Appendix 4.5)

The questionnaire measured the amount of knowledge which care staff possessed with regard to challenging behaviour and psychological interventions for challenging behaviour. Questions were based on the learning objectives of “Approaches to People with Challenging Behaviour”, a distance learning pack for direct care staff (University of St. Andrews, 1993). It covered a range of issues including definition, causes, effects of challenging behaviours on the clients and staff, approaches for the modification of challenging behaviours and the role of clinical psychologists in assessing and treating challenging behaviours.

A pilot study was carried out with care staff working in a region some distance from the study area. The pilot questionnaires were circulated via the local community learning disabilities team, who also collected and returned completed questionnaires. Care staff completed the pilot questionnaire anonymously, but were asked to indicate the setting in which they worked and the number of years of experience of working with clients with learning disabilities. Twenty-five pilot questionnaires were sent out and thirteen completed questionnaires were returned.

Results of the pilot study indicated that the questionnaire identified a range of knowledge scores, without significant floor or ceiling effects. A standard scoring procedure was developed from the results, through analysis of staff responses. Similar responses were grouped together into categories and prevalent responses were identified. (See Appendix 4.6: Scoring procedure for Knowledge Questionnaire)

## 3) **Expectations Questionnaires:**

The questionnaires were based on clinical case vignettes describing two adults exhibiting different types of challenging behaviour. Case Illustration 1, (Appendix 4.7), illustrated a young woman who exhibited physical aggression and Case Illustration 2, (Appendix 4.8) illustrated a young man who exhibited self-injurious behaviour. The case illustrations were designed, with input from 3 experienced clinical psychologists, to represent typical cases and to reflect the difficulties commonly faced by care staff and clinical psychologists working with this client group.

The questionnaires which accompanied the case illustrations were divided into 3 sections designed to assess care staff's beliefs about the causes of the client's challenging behaviour, their expectations regarding the process of a clinical psychology intervention and the outcome of the intervention.

The first section was presented as a list of 10 possible causes of the challenging behaviour which care staff had to place in rank order, from the most likely to the least likely cause. The list of possible causes was initially derived from causal statements about challenging behaviour generated by experienced and inexperienced care staff in Hastings et al (1995). Further content validation was carried out through discussion with experienced clinical psychologists, leading to selection of the final 10 possible causes.

The second section assessed staff expectations about the intervention that the clinical psychologist would propose and their role within the intervention, which was presented as 2 open questions. The final section assessed staff expectations regarding the outcome of the intervention. This was presented in the form of visual analogue scales, representing the amount of expected change at 4 weeks and 3 months after the start of the intervention. (See Appendix 4.9: Expectations Questionnaire: Case illustration 1, the questionnaires were identical except for the name used in the example.)

In order to score the expectations questionnaires a standard scoring procedure was devised. Three experienced clinical psychologists, working in the field of intellectual disabilities, reviewed the case illustrations and discussed the content and likely outcomes. A consensus opinion was prepared for each of the 3 sections of the expectations questionnaires. The psychologists ranked the causes of the challenging behaviours from 1 to 10. They provided detail of the process of the intervention and what would be expected of care staff. The consensus opinion regarding outcome was marked on each of the 4 visual analogue scales, indicating the level of change which would be expected at both of the time points for each case illustration. This consensus opinion was used as a standard against which the care staff responses were scored. The scoring procedure produced 3 sets of scores for each case illustration:

Section1: Rank order of beliefs: These were analysed using Spearman Rank Order Correlation to assess the level of concordance between the care staff's ranking and the

clinical psychologists consensus ranking. This provided a Spearman rho for each member of staff on both case illustrations.

Section 2: Process of psychology intervention: One point was given for each idea expressed which matched the psychologists consensus opinion. This provided a total score out of 10 (Case Illustration 1: Aggressive behaviour) or 9 (Case Illustration 2: Self-injurious behaviour).

Section 3: A standard measure was calculated for each visual analogue scale. The standard measure represented a comparison between the maximum possible difference between the staff response and the psychologists consensus opinion, and the actual difference between these responses. This enabled calculation of a score from 0 to 10 for each participant on the 4 visual analogue scales. A score of 10 represented a response on the visual analogue scale exactly the same as the clinical psychologist's consensus response, a score of 9 represented a response one standard measure from the consensus response, a score of 8 was two standard measures from the consensus response and so on. (See Appendix 4.10.1 and 4.10.2: Scoring standard for case illustrations 1 and 2, consensus opinion of clinical psychologists.)

#### Design and Procedure:

A workshop format was chosen because this format appealed to the participating organisations. It provided an opportunity for continuing professional development and at no cost, allowing a number of staff at different levels in the organisation to attend. The workshop was presented as an opportunity for clinical psychologists and care staff to share views, with the goal of enabling the professions to work together more effectively for the benefit of the clients.

The workshop had the further advantage of enabling presentation of the clinical case illustrations to all care staff in a standard format in one session. This was an efficient use of time, and allowed for the collection of qualitative data through group discussions of the issues raised by each of the case illustrations.

As previously mentioned in the “participant’s” section, the workshop was titled “Challenging behaviour: a challenge to staff and services” and staff were informed of the

research element. In addition to the presentation of the case vignettes and completion of the Expectations Questionnaires, the workshop included presentations given by clinical psychologists on topics such as defining challenging behaviours, using a constructional approach and the specific difficulties posed by self-injurious behaviours. (See Appendix 4.11: Workshop Programme)

Opportunities were provided for care staff to ask questions to the panel of clinical psychologists on issues raised during the workshop or wider issues relating to their own experiences. Care staff completed an evaluation form at the end of the workshop, which provided additional qualitative information. (See Appendix 4.12: Workshop Evaluation Form)

There were two phases to the data collection process:

1. Care staff who had received information on the workshop through their employing organisation, completed a booking form for attendance at the workshop and were sent the Knowledge Questionnaire and the Demographic Data Questionnaire to be completed and returned prior to attending the workshop.
2. At the workshop, care staff completed the Expectations Questionnaires for each of the case illustrations and an evaluation form. Qualitative data were also collected during the workshop. Following completion of the expectations questionnaires, participants divided into 5 groups of 7 people, for discussion of issues raised by the case illustrations. During these discussions facilitators, who were trainee clinical psychologists, presented care staff with a number of questions and recorded group responses.

### **Data Management:**

The demographic, knowledge and expectations questionnaires were completed anonymously and a coding system was used to enable matching of questionnaire scores for analysis. As detailed in the measures section the questionnaires provided data in a variety of formats. It was therefore necessary to standardise the scores to allow comparison of the variables. Data from all measures were scored and transformed into dichotomous categories to provide a data set that could be analysed statistically.

There were several reasons for using categorical rather than ordinal data. First, a standard measure was required and the most reliable way of achieving this, with small numbers, was to use groups of high and low scores. Secondly, the scores had to be reduced to the lowest common denominator, across the different measurement styles. It was not possible to assume that data were linear or even ordinal. The third reason was that inspection of the raw data revealed skewed distributions (see below). Finally, the use of categorical data was appropriate as the data from care staff were being compared with the consensus opinion of the clinical psychologists, who are assumed to be both highly knowledgeable and experienced in the field of learning disabilities. At a conceptual level, it would then be possible to explore whether this was repeated in care staff, by comparing them against the clinical psychologist's criteria.

Decisions regarding the division of scores into high and low categories were made following investigation of score distributions. The normality of score distributions was assessed, through examination of graphs, with the normal distribution over-laid, and by calculating skewness values. Scores were then divided on either the median or the mean, depending on the normality of the distribution. Sets of scores showing a close to normal distribution were divided using the mean. Sets of scores that were highly skewed, were divided using the median, as it would be less sensitive to extreme values.

Therefore, the total score for the Knowledge Questionnaire was categorised into one of two categories indicating high or low knowledge. A similar procedure was carried out for the Demographic Data Questionnaire, giving two categories indicating a high or low level of training / experience.

The Expectations Questionnaires were scored against the consensus opinion of the clinical psychologists, as indicated in the measures section above. Data from the Expectations Questionnaires were recorded separately for case illustrations 1 and 2. These scores were also translated to high or low categories, indicating high or low levels of concordance with the beliefs and expectations of the clinical psychologists.

Table II shows the data set, which was developed from the results of the questionnaire measures. The table illustrates the questionnaire measures that were used, the variable



that they were measuring and the categories, which were developed from these measures for statistical analysis.

(Table II: Data set: Development of data from questionnaire measures to categorical data: approximately here)

**Results:**

The analyses of the results were divided into two phases; firstly, analysis directly relevant to the process of hypotheses testing, followed by a second phase addressing additional findings and qualitative data.

Table III presents the raw scores found for each of the measures used, showing the range of scores, mean and standard deviations. The scores on the Knowledge Questionnaire showed a similar range of scores for the pilot data and the research data, however, the mean score was much lower for the research data, 3.83, compared with 6.46 for the pilot study. The Demographic Data Questionnaire produced a wide range of scores for training/experience, from 4 to 29. Care staff expectations regarding the clinical psychology intervention, showed similar mean scores for each of the case illustrations, 3.97 and 4.27.

(Table III: Raw data from questionnaire measures: approximately here)

The Spearman rho results, developed from the rank ordering of beliefs about the causes of the challenging behaviour and the results of the visual analogue scales, assessing participants expectations regarding the outcome of intervention have not been included in Table III and will be discussed separately in the results section.

**Relationship between Knowledge/Experience and Beliefs/Expectations:**

Using a statistical analysis software package, S.P.S.S. for windows 7.5, each of the 3 sections of the expectations scores were compared with both knowledge and training/experience scores to investigate possible associations between variables. As detailed in the Data Management section above, scores for each variable were transformed into categorical data, allowing statistical analysis using a non-parametric chi-square for two independent samples.

### Case illustration 1: Aggressive Behaviour:

Chi-square analyses comparing staff level of knowledge and training/experience with the 3 expectations measures revealed no statistically significant associations between variables. Table IV illustrates the 8 chi square analyses which were performed and the values obtained. (See Appendix 4.13 for full results of chi square analyses for case illustration 1)

(**Table IV:** Chi square analyses results: approximately here)

These results suggest that a higher level of knowledge or training/experience amongst care staff was not associated with a high level of concordance with the clinical psychologists beliefs about the causes of the challenging behaviour, their expectations regarding the intervention process or the outcome of the intervention after 4 weeks or 3 months.

### Case illustration 2: Self-Injurious Behaviour:

The 8 chi-square analyses were repeated for case illustration 2, self-injurious behaviour, and revealed three statistically significant associations. It was necessary to perform a correction procedure to protect against inflation of type 1 error, due to the multiple comparisons that were performed. Since there were 8 comparisons within each set of analyses, the alpha value was amended to 0.004 ( $8 \times 0.05$ ).

Table IV illustrates the chi square analyses that were performed and the values obtained. There were two results which were significant at the 0.05 level; the level of training/experience and expected outcome at 3 months and; the level of knowledge and expected outcome at 3 months. Following the correction procedure it was necessary to disregard these results due to the revised alpha level. The third result however, the level of training/experience and expectation of the clinical psychology intervention was significant at 0.001 level, and could therefore be accepted. (See Appendix 4.14 for full results of chi square analyses for case illustration 2)

### Inter-relationship between Knowledge and Training/Experience:

Of course it is possible that knowledge is simply a function of experience or vice versa. Chi-square analysis was therefore carried out to assess for association between knowledge

and training/experience. The test indicated that the variables were not significantly associated and were therefore independent factors, justifying the preceding separate analysis.

Beliefs about Causes of Challenging Behaviour:

Spearman Rank Order Correlation analyses were carried out to assess concordance between care staff's and psychologist's beliefs about the possible causes of the challenging behaviours described in the case illustrations. Comparison of these results revealed significant differences between the two case illustrations (See Appendix 4.15 for full Spearman rho results). Table V summarises the results in order to compare differences between the case illustrations, with regard to the number of statistically significant correlations found.

(Table V: Spearman rho results: approximately here)

For case illustration 1, which illustrated aggressive behaviour, the median Spearman rho was 0.533, range -0.236 to 0.855. The results show that 20, (71%), of the care staff's ranked responses were significantly correlated with the clinical psychologist's consensus rank order, 0.05 level of significance. The median Spearman rho for case illustration 2, which illustrated self-injurious behaviour, was much lower at 0.242, range -0.557 to 0.661. There were fewer statistically significant correlations, with only 9, (32%), of care staff's ranked responses reaching the 0.05 level of significance.

Care staff expectations regarding outcome of psychology interventions:

The level of concordance between care staff and clinical psychologists expectations regarding the level of change following clinical psychology intervention was assessed using visual analogue scales in section 3 of the expectations questionnaires. Using the technique described in the measures section care staff responses were scored on a scale of 0 to 10.

Table VI illustrates the care staff scores for expected outcome, represented as the number of standard measures from the clinical psychologist's response. Therefore, a score of 0 represents a response on the visual analogue scale that exactly matched the clinical psychologists consensus opinion, a score of 1 represents a response up to one standard

measure from the consensus response, a score of two, up to two standard measures from the consensus response, and so on.

As can be seen from examining the data in Table VI, the majority of care staff responses were highly concordant with the psychologists consensus opinion. The percentages shown in the table represent the number of care staff achieving each level of concordance. For both case illustrations between 80 and 90 percent of care staff gave responses which were within 2 standard measures of the clinical psychologists consensus response.

(**Table VI:** Staff expectations of outcome: concordance with psychologists: approximately here)

#### Results from Qualitative Data collected during workshop:

As described in the design and procedures section, qualitative data were recorded by facilitators during small group discussions of the case illustrations. Key points from each group were selected by the group facilitator and were noted during feedback to the whole group. The key points represented two main themes; barriers to the successful implementation of the intervention, such as a lack of resources or a lack of consistency; and factors which would facilitate a positive outcome, such as increased support for direct care staff and explicitly agreed goals. (See Appendix 4.16 for full details of qualitative data.)

#### Care Staff Evaluation of the Workshop:

Care staff completed evaluation forms at the end of the workshop, which included general questions about the practicalities of the workshop and more specific questions relating to the workshop aims. Questions had a 6 point scale from strongly disagree to strongly agree. The majority of staff attending the workshop evaluated it positively and felt that it provided useful information that would be of benefit to them in working with clients who exhibit challenging behaviours. Staff reported that the small group discussions and the presentations by the clinical psychologists were particularly helpful. (See Appendix 17: Results of Care Staff Evaluation of the Workshop for more detailed results)

### **Discussion:**

Research into challenging behaviours in people with intellectual disabilities has highlighted many factors involved in the development, maintenance and treatment of these behaviours. Recent research has focussed attention on staff working with these individuals, investigating the effects that staff may have on clients exhibiting challenging behaviours and the effect on care staff of working with clients who exhibit these behaviours.

The aim of the present study was to investigate the possibility that greater knowledge and training/experience would be associated with expectations regarding clinical psychology interventions that were more highly concordant with those of the clinical psychologists.

Staff expectations were explored using measures, which represented three phases of a clinical psychology intervention. The aetiology of the challenging behaviour, representing the assessment, the process of the intervention, including treatment recommendations and the role of both psychologists and staff, and the outcome of the intervention. Care staff participating in the study were currently working in community residential settings with adults with intellectual disabilities who exhibited a variety of forms of challenging behaviours.

Using an experimental methodology based on a workshop format, the expectations of care staff were evaluated using questionnaire measures based on two case illustrations. Staff levels of knowledge and training/experience were assessed prior to the workshop using questionnaire measures. The case illustrations, presented at the workshop, were designed to represent typical cases, to highlight the difficulties faced by care staff and the issues involved in psychological interventions for challenging behaviours. The expectations of care staff were compared to a consensus opinion prepared by a team of clinical psychologists working in the field of learning disabilities.

### **Aetiology of Challenging Behaviours:**

Staff beliefs about possible causes of challenging behaviour were found to be highly correlated with the beliefs of the psychologist for the case illustration which described aggressive behaviour, but much lower in the case describing self-injurious behaviour. This may reflect a greater understanding of the issues relating to aggressive behaviour, or

greater experience in dealing with this type of behaviour. It is also possible that this case illustration gave a clearer indication as to the cause(s) of the behaviour.

Hastings et al (1995) found that experienced staff were more likely to identify with causes of challenging behaviour which were dominant in current research literature. This result was not replicated here, with no significant association being found between experience / training and the level of concordance with the psychologists ranking of causes, which would be assumed to reflect a high level of knowledge regarding current research and intervention literature.

#### Process of clinical psychology intervention:

The mean scores for staff expectations of the intervention were similar for both case illustrations. Staff expectations were moderately associated with level of training and experience, but only in relation to the self-injurious case illustration. The findings suggest that, in general care staff do not have a good understanding of the interventions which clinical psychologists are likely to recommend, nor do they have a good understanding of their role within the intervention process. Staff may have found the self-injurious behaviour example more difficult to comprehend, with more experienced or highly trained staff having an advantage.

Hastings et al (1995) suggest that a mismatch between staff views and the underlying principles of an intervention may affect the level to which staff implement interventions. If this is the case then the low levels of understanding regarding the process of the psychological intervention found in this study, are a cause for concern with regard to implementation of future interventions.

#### Expectations regarding outcome of interventions:

It had been hypothesised that care staff's expectations regarding the outcome of interventions would be related to their level of knowledge and their level of experience/training. Care staff's expectations of outcome were found to be highly correlated with the clinical psychologists expectations. Anecdotal evidence suggests that differing expectations may lead staff to give up if no change is noted within a short period. The findings here indicate that staff are realistic in the amount of change expected and the time scale for change and that they do not expect "miracle cures". It is also

possible that this group of staff had prior experience of unsuccessful psychology interventions, and were therefore pessimistic in their expectations for behavioural change.

Care staff who hold realistic expectations regarding the possible outcome of a psychological intervention may nevertheless have difficulty in persevering with an intervention programme. Attitudes, affect and staff cultures can all have an impact on staff behaviour. Studies of human behaviour and attitudes have demonstrated repeatedly that inconsistency in behaviour is common, and can be influenced by many factors, such as context and personal factors (Ajzen, 1988). It is therefore quite possible that despite expressing expectations regarding outcomes in line with the psychologist's, that staff behaviour, in relation to implementing these interventions would be poor.

#### Effects of different content in case illustrations:

It is possible that the difference in findings between the two case illustrations highlights differences in the way in which staff approached or comprehended the two case illustrations. It appears that staff had a better understanding of the issues in relation to aggressive behaviour than self-injurious behaviour. It is possible that care staff were less familiar with the issues relating to self-injurious behaviour, or they may have found this example more difficult to comprehend.

Few significant results were found to support the original hypotheses. This may indicate that the null hypotheses were correct, but it could also be related to other issues, such as the type of measures used and the way the analyses were carried out. These issues will be considered below.

#### Lack of normative data for questionnaire measures:

All of the measures used in the study were newly created and only the Knowledge Questionnaire was piloted, due to time constraints. The mean scores for the Knowledge Questionnaire were lower for the research group than the pilot group. The reasons for this are unclear as detailed demographic data was not collected for the pilot group. The low scores and limited range did not provide ideal data for statistical analysis. A similar problem was encountered for the outcome measures, with staff scoring very highly, giving a limited range of scores for analysis.

### The use of categorical, non parametric statistics in data analysis:

Another possible reason for the few significant results relates to the statistical analyses. As detailed in the data management section, it was necessary to standardise a variety of different types of data. This process may have reduced the significance of some results. The way in which the data was categorised for analysis was not arbitrary, but this process may also have reduced the power of some results.

Non-parametric tests were used for the data analysis which are less powerful than parametric tests. However, due to the nature of the data, it was not possible to use alternative parametric tests.

### Qualitative data from group discussions and workshop evaluation:

The qualitative findings from the workshop have been useful in highlighting the areas which care staff believe to be barriers to implementation, indicating areas which must be given attention if there is to be an improvement in the level of implementation of clinical psychology interventions in the future.

The results of the evaluation suggest that, following the workshop, care staff felt that they had a greater understanding of challenging behaviours and would be able to work more effectively with clinical psychologists. Further research assessing staff behaviour and expectations following this type of workshop may indicate whether these reported changes are incorporated into staff practices. It is possible that although staff reported increased understanding there would be little impact on practice. A problem which Hastings (1996) has previously highlighted.

### Barriers to implementation:

Returning to the three main areas identified in the literature as presenting potential barriers to the implementation of psychological interventions, (Emerson & Emerson, 1987; Hastings, 1995), the current study has identified a number of issues which require further investigation.

### *Knowledge and Understanding:*

The low level of knowledge about challenging behaviours and psychological interventions for challenging behaviour demonstrated by staff who are working with these



clients on a daily basis, is a cause for concern. Staff reported that the workshop increased their knowledge, which may then increase their ability to implement psychological interventions effectively. A post-workshop follow-up of staff knowledge may have provided further evidence of this.

#### *Beliefs of Care Staff:*

Care staff beliefs about possible causes of challenging behaviour were found to be highly correlated with those of the psychologist in the case illustration describing aggressive behaviour, but not in the self-injurious behaviour example. It is unclear whether this reflects less understanding of self-injurious behaviour amongst care staff or other differences between the case illustrations. Hastings et al (1995), also used case illustrations to investigate staff beliefs about challenging behaviours. In contrast to the findings in this study, Hastings et al. found few differences between staff responses in relation to different types of behaviour, aggressive, self-injurious and stereotypical.

#### *Inadequate Resources:*

This third area was not investigated directly in the current study, however, qualitative information from the group discussions indicated that this was a major concern for many care staff. Staff considered experience, training and advice from specialists to be crucial in facilitating a positive outcome from psychological interventions. It was interesting to note that a number of direct care staff made late enquiries about attending the challenging behaviour workshop, having not received the workshop information, despite the fact that senior staff and managers from their organisations had booked their own places early on.

A greater emphasis on improving staff training, including specific information on psychological approaches for challenging behaviours, may improve the likelihood of interventions being implemented as the clinical psychologist intended.

A prospective study, to investigate the degree to which interventions are actually implemented in practice is needed to gain further insight into this issue. Assessing care staff as they gain experience or knowledge, through work and/or training and comparing this with their level of implementation of psychological interventions, could provide useful information on the effects of these variables.

Prospective studies are, however, difficult to implement for a variety of reasons. Planning the investigation can be problematic due to uncertainties relating to the timing of referrals to clinical psychologists. Challenging behaviours frequently require urgent intervention making it difficult to prepare investigations with care staff in advance. Another difficulty is in the measurement of implementation. Clinical Psychologists often use an eclectic approach and may not utilise traditional behavioural interventions, allowing measurement of staff input, such as the completion of record charts and reward systems. Variations in the approaches used by psychologists also makes the standardisation of assessment measures very difficult. There are also a large number of possible confounding variables, such as staff changes, variations in the amount of clinical psychology input to different group homes, and other changes in the circumstances of the client that can affect their challenging behaviour.

#### Conclusions:

In conclusion, the current research has provided further insight into the factors that have an impact on the beliefs and expectations of care staff, in relation to challenging behaviours in adults with intellectual disabilities, and the factors that affect staff expectations of clinical psychology interventions.

It appears that the relationship between the factors investigated is not as straight forward as previously thought. The research did not demonstrate that a high level of knowledge or a high level of training/experience produced beliefs or expectations, which were highly concordant with the clinical psychologist's. As previously discussed this may reflect a true lack of association between these variables, or the results may have been affected by methodological and measurement problems within the study.

The qualitative findings resulting from the workshop also require further investigation, particularly the issues identified by care staff as possible barriers to the effective implementation of psychological interventions. Clinical psychologists working in the field of intellectual disabilities should be aware of the factors within staff groups that may lead to a positive or negative outcome. Although it appears that care staff are generally aware of the factors which are important in the effective implementation of interventions, such as consistency and communication, these do not seem to be the key issues mentioned when staff are faced with clinical case illustrations.

Service providers should also take note of the issues raised by care staff, such as shortages of appropriately qualified staff, and the lack of specialised help and training. Many of these issues arise from inadequate provision of resources, a state of affairs which is unlikely to change. However, it is imperative that care staff and other professionals work together. Sharing concerns and solutions, through open communication, to maximise resources, and to gain the best quality of life for these clients.

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TABLE 1

|  |                                    |                         |
|--|------------------------------------|-------------------------|
| <b>Demographic Data of care staff who attended workshop:</b>   |                                    |                         |
| N=30   |                                    |                         |
| <b>Age:</b>  | Mean age = 37 years                | Range = 23 to 56 years  |
|  | Standard Deviation = 9.15          |                         |
| <b>Sex:</b>  | Female = 22                        | Male = 8                |
|  |                                    |                         |
| <b>Current Employment:</b>   | Management                         | 6                       |
|  | Team Leader / Project Co-ordinator | 5                       |
|  | Senior Support Worker              | 7                       |
|  | Support Worker                     | 12                      |
|  |                                    |                         |
| <b>Years of experience:</b><br>(Working with clients with learning disabilities and challenging behaviour) | Mean No. of Years = 6.90 years     | Median = 6.0 years      |
|  | Standard deviation = 5.33          | Range = < 1 to 24 years |

TABLE II:

Data Set: Development of data from questionnaire measures to categorical data.

| Measure:   | Variable:  | Categories derived for data analysis:   | Method of derivation:   |
|--|--|---|---|
| Knowledge Questionnaire:   | Level of Knowledge   | High or Low Level of Knowledge  | Split at Mean:<br>> mean = hi knowledge<br>< mean = low knowledge           |
| Demographic Data Questionnaire:  | Level of Training and Experience   | High or Low Level of Training and Experience  | Split at Mean:<br>> mean = hi experience<br>< mean = low experience         |
| Expectations Questionnaires:<br>(Based on 2 case illustrations)                            |  |   |   |
| a) Rank ordering of 10 possible causes for Challenging Behaviour.                          | a) Beliefs about causes of Challenging Behaviour.                              | a) High or Low concordance with clinical psychologists consensus opinion.                                       | Split at median:<br>> median = hi concordance<br>< median = low concordance |
| b) Open questions on expectations of clinical psychology intervention.                     | b) Expectations regarding clinical psychology intervention.                    | b) High or Low concordance with clinical psychologists consensus opinion.                                       | Split at median:<br>> median = hi concordance<br>< median = low concordance |
| c) Visual Analogue Scales: recording amount of change expected after 4 weeks and 3 months. | c) Expectations regarding the outcome of the clinical psychology intervention. | c) High or Low concordance with clinical psychologist on amount of change predicted after 4 weeks and 3 months. | Split at median:<br>> median = hi concordance<br>< median = low concordance |

**TABLE III:**

**Raw Data from Questionnaire Measures:**  
**Knowledge scores (pilot data and research data), Training/experience scores and**  
**Expectations scores (Section 2: Expectations of intervention process).**

| Measure                                  | Number of completed questionnaires | Maximum Score | Mean Score | Standard Deviation | Range of scores |
|--|------------------------------------|---------------|------------|--------------------|-----------------|
| Knowledge Questionnaire (Pilot Study)    | 30                                 | 20            | 6.46       | 2.67               | 1 to 10         |
| Knowledge Questionnaire (Research Data)  | 29                                 | 20            | 3.83       | 2.65               | 0 to 9          |
| Training and Experience                  | 30                                 | 33            | 16.10      | 6.64               | 4 to 29         |
| Expectations of Intervention (Example 1) | 30                                 | 09            | 3.97       | 1.97               | 1 to 7          |
| Expectations of Intervention (Example 2) | 30                                 | 10            | 4.27       | 1.95               | 1 to 7          |

TABLE IV:

Results of Chi Square Analyses:

Case Illustrations 1 and 2:

| VARIABLES:  | Chi square<br>value * | d.f. | Level of<br>Significance |
|---|-----------------------|------|--------------------------|
| <b><u>Case illustration 1: Aggressive Behaviour:</u></b>          |                       |      |                          |
| Training/experience and beliefs about causes of the<br>behaviour. | 3.590                 | 1    | 0.05                     |
| Training/experience and expectations of intervention<br>process.  | 2.738                 | 1    | 0.05                     |
| Training/experience and outcome at 4 weeks.                       | 0.909                 | 1    | 0.05                     |
| Training/experience and outcome at 3 months.                      | 0.677                 | 1    | 0.05                     |
| Knowledge and beliefs about causes of the behaviour.              | 3.033                 | 1    |                          |
| Knowledge and expectations of intervention process.               | 0.083                 | 1    | 0.05                     |
| Knowledge and outcome at 4 weeks.                                 | 3.590                 | 1    | 0.05                     |
| Knowledge and outcome at 3 months.                                | 0.480                 | 1    | 0.05                     |
| <b><u>Case Illustration 2: Self-Injurious Behaviour:</u></b>      |                       |      |                          |
| Training/experience and beliefs about causes of the<br>behaviour. | 1.292                 | 1    | 0.05                     |
| Training/experience and expectations of intervention<br>process.  | 13.032 *              | 1    | 0.001                    |
| Training/experience and outcome at 4 weeks.                       | 1.094                 | 1    | 0.05                     |
| Training/experience and outcome at 3 months.                      | 5.673 *               | 1    | 0.05                     |
| Knowledge and beliefs about causes of the behaviour.              | 1.801                 | 1    | 0.05                     |
| Knowledge and expectations of intervention process.               | 0.513                 | 1    | 0.05                     |
| Knowledge and outcome at 4 weeks.                                 | 1.448                 | 1    | 0.05                     |
| Knowledge and outcome at 3 months.                                | 5.073 *               | 1    | 0.05                     |
| * = significant result  |                       |      |                          |



**TABLE V:**

**Care staff beliefs about the causes of the challenging behaviour:**

**Results of Spearman rho analyses.**

**Correlation between care staff rank ordering and clinical psychologists consensus rank order.**

| <b>N = 28</b>   | <b>Case Example 1</b>   | <b>Case Example 2</b>  |
|---|-------------------------|------------------------|
| <b>Median Spearman rho</b>  | <b>0.533</b>            | <b>0.242</b>           |
| <b>Minimum Spearman rho</b>   | <b>-0.236</b>           | <b>-0.557</b>          |
| <b>Maximum Spearman rho</b>   | <b>0.855</b>            | <b>0.661</b>           |
| <b>Percentage of correlations reaching 0.05 level of significance</b> | <b>71%<br/>(n = 20)</b> | <b>32%<br/>(n = 9)</b> |
| <b>Percentage of correlations reaching 0.01 level of significance</b> | <b>64%<br/>(n = 18)</b> | <b>11%<br/>(n = 3)</b> |

TABLE VI:

Staff Expectations regarding outcome of clinical psychology intervention:

| Number of standard measures from clinical psychologist's consensus response on Visual Analogue Scales. |               |               |               |              |             |
|--|---------------|---------------|---------------|--------------|-------------|
|  | 0 *           | 1             | 2             | 3            | 4           |
| Case Illustration 1 (4 weeks)  | 34%<br>n = 10 | 14%<br>n = 4  | 31%<br>n = 9  | 14%<br>n = 4 | 7%<br>n = 2 |
| Case Illustration 1 (3 months)   | 24%<br>n = 7  | 38%<br>n = 11 | 24%<br>n = 7  | 10%<br>n = 3 | 4%<br>n = 1 |
| Case Illustration 2 (4 weeks)  | 17%<br>n = 5  | 40%<br>n = 12 | 35%<br>n = 10 | 4%<br>n = 1  | 4%<br>n = 1 |
| Case Illustration 2 (3 months)   | 14%<br>n = 4  | 41%<br>n = 12 | 28%<br>n = 8  | 17%<br>n = 5 | 0%<br>n = 0 |

(N = 29) Percentages represent the number of staff who indicated that response. \*A score of zero represents a response exactly the same as the clinical psychologists.

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## **5. CLINICAL RESEARCH CASE STUDY 1 (abstract)**

**Psychosocial Consequences of Extreme Short Stature: Effects on the Self-concept and Self-esteem in an 8-year old girl.**

Prepared in accordance with the submission requirements for Clinical Child Psychology and Psychiatry.

**ABSTRACT:**

A single case study is presented illustrating positive changes in the self-concept of an 8-year old girl with extreme short stature, following a cognitive-behavioural intervention. She was the victim of bullying at school resulting in behavioural difficulties, anxious symptomatology and a loss of self-esteem. Treatment was multifaceted in order to address the separate, but related aspects of Clare's\* case. The aims of treatment were to improve her understanding regarding her emotions and behaviour, to teach positive coping skills and to improve her self-esteem. In Clare's case self-esteem was viewed not merely as a correlate of the emotional and behavioural difficulties which she was experiencing, but as a primary factor. Self-esteem was assessed at three points during treatment using the Harter Self-Perception Profile for Children to evaluate the effects of treatment.

*(\* : A fictitious name has been used to protect the identity of the child and her family.)*

**KEYWORDS**

Short-stature, self-esteem, cognitive-behavioural therapy, bullying.

## **6. CLINICAL RESEARCH CASE STUDY 2 (abstract)**

**Cognitive-behavioural group therapy as an adjunct to an exercise based cardiac rehabilitation programme.**

Prepared in accordance with the submission requirements for the Journal of Psychosomatic Research.



**Abstract:**

Coping Skills groups were run by a trainee clinical psychologist, with a focus on the psychological aspects of coping with a myocardial infarction or heart surgery. A cognitive-behavioural framework was used to enable group members to examine their thoughts, feelings and behaviours. A variety of topics were covered, with an emphasis on coping with change and making positive adaptations to their lifestyles. Participants were selected who were attending or had recently completed the rehabilitation programme. Five sessions were offered, with additional individual sessions at the start and end of the intervention. The Hospital Anxiety and Depression Scale (HADS) was completed at the pre-group interview, at the final session and at 3 or 6 month follow-up. Analysis of the HADS scores revealed that in those patients reaching clinical caseness pre-group, there was a reduction in both anxiety and depression scores after the intervention. This was true for 4 out of 5 cases for anxiety and 4 out of 4 cases for depression.

**Keywords:**

Cardiac Rehabilitation, Cognitive-Behavioural Rationale, Coping Skills, Group Therapy.

## **7. CLINICAL RESEARCH CASE STUDY (abstract)**

**Attention Deficit Hyperactivity Disorder in Autistic Children: A case study.**

Prepared in accordance with the submission requirements for Autism.

**Abstract:**

Many children with autistic spectrum disorders also present with hyperactivity, attentional problems or challenging behaviours. Co-morbid diagnosis of attention deficit hyperactivity disorder, (ADHD), and an autistic spectrum disorder has rarely occurred due to diagnostic classificatory systems, which state that diagnosis with a pervasive developmental disorder supersedes an ADHD diagnosis. In clinical settings, this is now changing and these conditions are being diagnosed co-morbidly, particularly in Asperger's syndrome. A case study is presented of a six-year-old girl, previously diagnosed with atypical autism. A comprehensive assessment was carried out, investigating the diagnosis and leading to a co-morbid diagnosis of autism and attention deficit hyperactivity disorder. The issues raised by the case study are discussed in terms of the diagnostic issues and current theories of autism.

(\* A fictitious name has been used to protect the identity of the child and her family.)

**Key words:**

Autism, attention deficit hyperactivity disorder, diagnosis, co-morbidity.

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## APPENDIX 1.1

### CLINICAL PSYCHOLOGY FORUM

#### Notes for Contributors

Clinical Psychology Forum is produced by the Division of Clinical Psychology of The British Psychological Society. It is designed to serve as a discussion forum for any issues of relevance to clinical psychologists. The editorial board welcome brief articles, reports of events, correspondence, book reviews and announcements.

Articles of 1000-2000 words are welcomed. Send two copies of your contribution, typed and double spaced. Contributors are asked to keep tables to a minimum, to ensure that all references are complete and accurate and to give a word count. Please indicate the author's employers at the head of the article, and include an address for correspondence, with email if possible. News of Branches and Special Groups is especially welcome.

*Language:* contributors are asked to use language which is psychologically descriptive rather than medical and to avoid using devaluing terminology; i.e. avoid clustering terminology like "the elderly" or medical jargon like "person with schizophrenia". If you find yourself using quotation marks around words of dubious meaning, please use a different word.

Articles submitted to **Forum** will be sent to members of the Editorial Collective for refereeing. They will then communicate directly with authors.

We reserve the right to shorten, amend and hold back copy if needed.

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Please send all copy and correspondence to the Co-ordinating Editor:

Craig Newnes, Field House, 1 Myddlewood, Myddle, Shrewsbury SY4 3RY.

Fax 01939 291209

## APPENDIX 2.1

### JOURNAL OF INTELLECTUAL DISABILITY RESEARCH

#### Information for Contributors

Papers (in English) should be sent to the Editor, *Journal of Intellectual Disability Research*, University of Wales College of Medicine, Meridian Court, North Road, Cardiff CF4 3BL, Wales, UK. Papers are accepted on the understanding that they have not and will not be published elsewhere. The original and three copies should be submitted to aid refereeing and these should be types (with a wide margin), double spaced, on one side of standard paper (A4---30 x 21 cm). A title page should contain the authors name(s), address for correspondence, full title and short running title. Authors should retain one copy of the text, tables and illustrations as the Editor cannot accept responsibility for damage or loss of manuscripts.

Page proofs must be returned to the Publisher within **three days** of receipt. Typographical errors and essential changes can be made at this stage. Major text alterations cannot be accepted. One free copy of the relevant issue will be distributed by the corresponding author to each co-author(s). Offprints may be purchased at prices determined by the Publisher by returning the form enclosed with page proofs.

The author should provide up to six keywords to aid indexing. Please note that ‘intellectual disability’, as used in JIDR, includes those conditions labelled mental deficiency, mental handicap, learning disability and mental retardation in some locales or disciplines.

*Full reports* of 1500 to 3000 words are suitable for major studies, integrative reviews and e of related research projects or longitudinal enquiry of major theoretical and/or empirical conditions. *Brief reports* of 500-1500 are encouraged, especially for replication studies, methodological research and technical contributions.

## APPENDIX 2.1 (continued)

**A structured summary should be given at the beginning of each article, incorporating the following headings: Background, Method, Results, Conclusions. These should outline the questions investigated, the design, essential findings and main conclusions of the study.**

The text should proceed through sections of Abstract, Introduction, Materials and Methods, Results and Discussion. Tables and figures should be submitted on separate sheets and referred to in the text with an indication of their approximate position recorded in the text margin. The reference list should be in alphabetical order thus:

Giblett, E.R. (1969) *Genetic markers in Human Blood*. Blackwell Scientific Publications, Oxford.

Moss, T.J. & Austin, G.E. (1980) Pre-atherosclerotic lesions in Down's syndrome. *Journal of Mental Deficiency Research* **24**, 137-41.

Journal titles should be in full. References in text with more than two authors should be abbreviated to (Brown *et al.* 1977). Authors are responsible for the accuracy of their references.

Spelling should conform to *The Concise Oxford Dictionary of Current English* and units of measurement, symbols and abbreviations with those in *Units, Symbols and Abbreviations* (1977) published and supplied by the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE. This specifies the use of S.I. units. Illustrations should be labelled with the figure number and author's name in soft pencil on the back identifying the top edge. Photographs should be glossy bromide prints of good contrast and well matched, preferably with a transparent overlay for protection. Colour photographs will be allowed only in special circumstances and the author will be asked to contribute towards the cost of reproduction. Line diagrams should be drawn with black ink on tracing paper or white card, or supplied as glossy prints. Papers may be judged to require extra-rapid publication by the Editor and referees.



**APPENDIX 2.1** (continued)

The Journal welcomes the submission of accepted articles on 3.5" disk. Do not justify the lines of text. All disks must be accompanied by a hard copy of the paper together with details of the type of computer used, the software employed and the type of disk system used, if known. Particular attention should be taken to ensure that any articles submitted in this form adhere exactly to journal style. Please send us digital versions of your figures. Ideally these should be sent in native format or PICT if created on a Mac, or in native format or WMF if created in windows. Files saved as PS, EPS, GIF and TIFF may also be used, but please note that it may not be possible to modify them. Avoid using tints if possible; if they are essential to the understanding of the figure, try to make them course. Always supply a hard copy of digitally supplied figures.

## **APPENDIX 3.1**

### **GUIDELINES FOR APPLICATION FOR MINI-PROJECT GRANT**

#### **Health Services Research (SOHDD – Chief Scientist Office)**

1. Applicants – names and addresses including the names of co-workers and supervisor(s) if known.
2. Title – no more than 15 words.
3. Summary – no more than 300 words, including a reference to where the study will be carried out.
4. Introduction – of less than 600 words summarising previous work in the field, drawing attention to gaps in present knowledge and stating how the project will add to knowledge and understanding.
5. Aims and hypothesis to be tested – these should wherever possible be stated as a list of questions to which answers will be sought.
6. Plan of investigation – consisting of a statement of the practical details of how it is proposed to obtain answers to the questions posed. The proposal should contain information on Research Methods and Design i.e.
  - 6.1 Subjects – a brief statement of inclusion and exclusion criteria and anticipated number of participants.
  - 6.2 Measures – a brief explanation of interviews/observations/rating scales etc. to be employed, including references where appropriate.
  - 6.3 Design and Procedure – a brief explanation of the overall experimental design with reference to comparisons to be made, control populations, timing of measurements, etc. A summary chart may be helpful to explain the research process
  - 6.4 Settings and equipment – a statement on the location(s) to be used and resources or equipment which will be employed (if any).
  - 6.5 Data analysis – a brief explanation of how data will be collated, stored and analysed.
7. Practical applications – the applicants should state the practical use to which the research findings could be put.
8. Timescales – the proposed starting date and duration of the project.
9. Ethical approval – stating whether this is necessary and, if so, whether it has been obtained.

## APPENDIX 3.2

### Demographic Data: to be collected at baseline

#### Information on the behaviour:

Short description of the behaviours e.g. 1) Hitting staff with fists 2) Abusive language.

Identify the **target behaviour** of the psychological intervention.

#### For the target behaviour identify:

- Reason for the referral at this time and whom the referral has come from.
- Previous referral(s).
- Previous treatment(s) or interventions.
- Current management of the target behaviour.
- Time since first occurrence of the behaviour and since the start of current episode.
- Time between referral and clinical psychology input.

#### Frequency:

##### During the past month the target behaviour has occurred:

- Less than weekly
- 2 to 7 times per week
- 1 or 2 times per day
- 3 to 5 times per day
- 5 + times per day

#### Intensity:

##### Average over past month:

- No intervention required
- Verbal intervention required
- Physical intervention required
- Restraint required 1) Chemical  
2) Physical

## APPENDIX 3.2 (continued)

### Community Presence:

Please tick those which have applied during past month:

- Restrictions within living environment.
- Restrictions regarding day placement.
- Restrictions regarding transport.
- Restrictions regarding community activities.

### Duration:

Average time taken to gain control of behaviour or for client to calm down, during past month:

- 2 + hours
- 1 - 2 hours
- 30 mins. to 1 hour
- 15 - 30 mins.
- 5 - 15 mins.
- < 5 mins.

### Client Information:

Age, Sex, Diagnosis (e.g. Down's Syndrome, Autism), Epileptic?, Current Medication, No. of years at current residence, Day Placement.

### Care Staff Information:

Age, Sex, Qualifications and Training, Years of work with client group, No. of years working in current place of employment.

### General Information on each Residence:

No. of staff qualified / unqualified, Staff : Client Ratio, Living Accommodation (e.g. single or shared rooms), Other Professional Input, e.g. Physiotherapist, Occupational Therapist.

**APPENDIX 3.3**

**MEASURES OF EXPECTATION**

**For the visual analogue measures a 100mm scale will be used. The scales will also be divided into three sections.**

**1:** Over the next 4-6 weeks I would expect the number of aggressive incidents to reduce by: ( This question will be specific to each case e.g. John's Biting.)

1% ----- 100%  
[ Hardly at all ][ Partially ][Almost completely]

**2:** At follow-up.

I believe that x's target behaviour has reduced by:

1% ----- 100%  
[ Hardly at all ][ Partially ][Almost completely]

**3:** If staff perceive change in either direction or no change. What do they attribute this to?

**4:** The following choices will be given for care staff and the psychologist to identify their interpretation regarding both the development and the maintenance of the target behaviour:

- social reinforcement
- communication / expression
- physical environment
- emotional
- medical / biological / sexual
- adaptive response to environment
- other (give details)
- don't know

Hastings R.P. (1995) *Mental Handicap Research* **8**, 4, 296-320

**5:**

I regard x's behaviour as:

Not at all intentional ----- Entirely intentional

## **APPENDIX 3.4**

### **Qualitative Data.**

- 1:** Were the aims of the intervention adequately explained to you?
- 2:** Did you agree with the intervention proposed by the psychologist?
- 3:** Would you have intervened differently? If yes, how and why?
- 4:** Did you feel that the intervention was appropriate / feasible?
- 5:** If you disagreed with the psychologist on any of the above issues, were these raised with the psychologist?
- 6:** Approximately how much time did you spend:
  - Reading about the intervention?
  - Discussing the intervention with the psychologist?
  - Discussing the intervention with colleagues?

**APPENDIX 3.5**  
**SUMMARY OF RESEARCH PROCESS**

Referral of client to clinical psychologist

~

Case accepted for study if referral is due to aggressive behaviour and psychologist feels that intervention is appropriate

~

Identification of Target Behaviour

~

Identification of 4 criteria to measure implementation

~

**Collection of Baseline Data**  
(Within first 2 wks of intervention beginning)

- > Background Information (Appendix 1)
- > Knowledge and Understanding Questionnaires
- > Measures of Expectation (Appendix 2)

~

**Follow-up Data**  
(4-6 wks after baseline data collected)

- > Current info. re target behaviour  
(Frequency, Intensity, Duration)
- > Measures of Expectation
- > Additional Qualitative Information
- > Analysis of Implementation Measures

~

## APPENDIX 4.1

### JOURNAL OF INTELLECTUAL DISABILITY RESEARCH

#### Information for Contributors

Papers (in English) should be sent to the Editor, *Journal of Intellectual Disability Research*, University of Wales College of Medicine, Meridian Court, North Road, Cardiff CF4 3BL, Wales, UK. Papers are accepted on the understanding that they have not and will not be published elsewhere. The original and three copies should be submitted to aid refereeing and these should be types (with a wide margin), double spaced, on one side of standard paper (A4---30 x 21 cm). A title page should contain the authors name(s), address for correspondence, full title and short running title. Authors should retain one copy of the text, tables and illustrations as the Editor cannot accept responsibility for damage or loss of manuscripts.

Page proofs must be returned to the Publisher within **three days** of receipt. Typographical errors and essential changes can be made at this stage. Major text alterations cannot be accepted. One free copy of the relevant issue will be distributed by the corresponding author to each co-author(s). Offprints may be purchased at prices determined by the Publisher by returning the form enclosed with page proofs.

The author should provide up to six keywords to aid indexing. Please note that ‘intellectual disability’, as used in JIDR, includes those conditions labelled mental deficiency, mental handicap, learning disability and mental retardation in some locales or disciplines.

*Full reports* of 1500 to 3000 words are suitable for major studies, integrative reviews and e of related research projects or longitudinal enquiry of major theoretical and/or empirical conditions. *Brief reports* of 500-1500 are encouraged, especially for replication studies, methodological research and technical contributions.



## APPENDIX 4.1 (continued)

**A structured summary should be given at the beginning of each article, incorporating the following headings: Background, Method, Results, Conclusions. These should outline the questions investigated, the design, essential findings and main conclusions of the study.**

The text should proceed through sections of Abstract, Introduction, Materials and Methods, Results and Discussion. Tables and figures should be submitted on separate sheets and referred to in the text with an indication of their approximate position recorded in the text margin. The reference list should be in alphabetical order thus:

Giblett, E.R. (1969) *Genetic markers in Human Blood*. Blackwell Scientific Publications, Oxford.

Moss, T.J. & Austin, G.E. (1980) Pre-atherosclerotic lesions in Down's syndrome. *Journal of Mental Deficiency Research* **24**, 137-41.

Journal titles should be in full. References in text with more than two authors should be abbreviated to (Brown *et al.* 1977). Authors are responsible for the accuracy of their references.

Spelling should conform to *The Concise Oxford Dictionary of Current English* and units of measurement, symbols and abbreviations with those in *Units, Symbols and Abbreviations* (1977) published and supplied by the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE. This specifies the use of S.I. units. Illustrations should be labelled with the figure number and author's name in soft pencil on the back identifying the top edge. Photographs should be glossy bromide prints of good contrast and well matched, preferably with a transparent overlay for protection. Colour photographs will be allowed only in special circumstances and the author will be asked to contribute towards the cost of reproduction. Line diagrams should be drawn with black ink on tracing paper or white card, or supplied as glossy prints. Papers may be judged to require extra-rapid publication by the Editor and referees.

**APPENDIX 4.1** (continued)

The Journal welcomes the submission of accepted articles on 3.5" disk. Do not justify the lines of text. All disks must be accompanied by a hard copy of the paper together with details of the type of computer used, the software employed and the type of disk system used, if known. Particular attention should be taken to ensure that any articles submitted in this form adhere exactly to journal style. Please send us digital versions of your figures. Ideally these should be sent in native format or PICT if created on a Mac, or in native format or WMF if created in windows. Files saved as PS, EPS, GIF and TIFF may also be used, but please note that it may not be possible to modify them. Avoid using tints if possible; if they are essential to the understanding of the figure, try to make them coarse. Always supply a hard copy of digitally supplied figures.

## **APPENDIX 4.2: Information Sheet for Care Staff on Workshop**

### **“Challenging Behaviour: A Challenge to Staff and Services”**

A Training Workshop for residential and day care staff working with adults with a learning disability who also exhibit challenging behaviour.

#### **Introduction:**

Anyone working in the field of learning disabilities will be aware of the serious impact which behavioural difficulties can have on the client, their family and their carers. The client may be at risk of self-injury, they may threaten or attack other residents or staff members. This can lead to exclusion from community services and difficulties in finding or retaining residential and day services for the client. Care staff may become anxious about working with the client, leading to low morale and high staff turnover.

Despite significant improvements in many aspects of the care of individuals with learning disabilities, those who exhibit behaviours, such as self-injurious behaviour or aggressive behaviour still represent a significant challenge to service providers.

Clinical Psychologists have been involved in the treatment of behavioural difficulties in people with learning disabilities for over 30 years. Unfortunately, in the past many of the recommended approaches were punitive and the rights and needs of the clients were largely ignored. Psychological interventions now take into account the wider issues and needs of the client, not just focusing on the behaviour itself, but also assessing the client's environment and social circumstances.

However, some difficulties remain with psychological interventions for challenging behaviours, particularly the apparent gap between the expectations of the clinical psychologist and those of the care staff who are asked to follow through with the intervention on a day to day basis. If staff do not feel that the psychological intervention is appropriate or feasible, then it is not likely to be implemented and it is liable to fail, leading to low expectations regarding future input from a clinical psychologist.

It is hoped that through the training workshop we can open a dialogue between care staff and clinical psychologists and begin to illuminate some of the key factors which affect the expectations of care staff with regard to psychological interventions for challenging behaviour. Identification of the factors affecting the implementation of psychological

## **APPENDIX 4.2 (continued)**

interventions has important implications. Clinical psychologists, once aware of these factors, can take them into account when planning interventions for challenging behaviour. This will increase the likelihood that the intervention will be implemented effectively and that the behaviour will be reduced or eliminated. Achieving a reduction in the challenging behaviour allows the client to participate more fully in society and increases their quality of life. It also has implications for care staff and service providers; reducing stress, increasing morale and maximising the use of limited resources.

### **Format of the Workshop:**

The first half of workshop will be based around the discussion of a number of case examples which highlight the difficulties which are frequently encountered when providing psychological interventions for a client who exhibits challenging behaviour. The second half of the evening will take the form of a series of short talks from clinical psychologists on challenging behaviour and its treatment.

The evening will be free of charge and will take place in the lecture theatre of the Department of Psychological Medicine at Gartnavel Royal Hospital. The date and timing of the workshop have not yet been finalised. It will take place on a weekday evening towards the end of March, and will be approximately 3 hours long, including a break for a buffet supper.

Staff attending will be asked to complete a number of questionnaires both prior to the event and at the workshop. The questionnaires will help to illustrate the issues being discussed at the workshop and will also be used as part of a project which is currently being undertaken in the department. The questionnaires will be completed anonymously and the results will be treated as confidential.

### **Who should attend?**

Care staff at all levels who work in day services or residential services for adults with learning disabilities.

### **Would you like to find out more?**

Complete and return a booking form if you would like to attend the workshop. For further information or enquiries contact me directly on **(0141) 334 9979**.

**APPENDIX 4.3**

**Demographic Data Questionnaire:**

**Please complete the following questionnaire and return the completed copy prior to the workshop in the Freepost envelope provided.**

**The questionnaire is to be completed anonymously, but it is necessary to have some details in order to match this questionnaire with the others, which you will be completing.**

**Where it says *Staff Code* below, please place your initials and day of the month on which you were born birth e.g. Joyce Milton, born 13th August 1956 would give the code: J.M.13**

Staff Code: \_\_\_\_\_

Age: \_\_\_\_\_

Sex:        **M**                **F**                (Circle One)

Current job: \_\_\_\_\_

Current place of employment e.g. Hostel, group home, Activity and Resource Centre: \_\_\_\_\_

No. of years working in current place of employment: \_\_\_\_\_

No. of clients in total resident or attending your place of work: \_\_\_\_\_

Staff /Client Ratio: \_\_\_\_\_

Type of Accommodation (e.g. hostel, group home, single or shared rooms): \_\_\_\_\_

**APPENDIX 4.3 (continued)**

Professional Input for clients in your place of employment:

| Type of Professional:    | Yes / No | No. of visits in last 2 mths: |
|--------------------------|----------|-------------------------------|
| • G.P.                   |          |                               |
| • Physiotherapist        |          |                               |
| • Occupational Therapist |          |                               |
| • Clinical Psychologist  |          |                               |
| • Psychiatrist           |          |                               |
| • Speech Therapist       |          |                               |
| • Health Visitor         |          |                               |
| • Social Worker          |          |                               |
| • Other (please specify) |          |                               |

Qualifications: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Training: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Have you received any specific training or qualifications with regard to challenging behaviour?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Number of years of working with individuals with learning disabilities: \_\_\_\_\_

How many of these years has involved working with clients who exhibit behavioural problems or challenging behaviour: \_\_\_\_\_

**APPENDIX 4.3 (continued)**

Describe your previous and/or current level of involvement/experience with client(s) who exhibit challenging behaviour e.g. 1 to 1 worker, key worker, one resident in a hostel: \_\_\_\_\_

Describe the type of behaviour these client(s) exhibited / exhibits e.g. physical aggression to staff, verbal abuse, self-injurious behaviour: \_\_\_\_\_

**Previous / Current contact with Clinical Psychologist(s)**

How many clients with whom you have worked have received input from a clinical psychologist? \_\_\_\_\_

How many of these clients were receiving input from the clinical psychologist due to behavioural difficulties? \_\_\_\_\_

How many of these clients had a programme or guidelines in place from the clinical psychologist? \_\_\_\_\_

Are any of the clients with whom you are currently working receiving input from a clinical psychologist? If yes, describe the reason for the input e.g. anxiety, aggressive behaviour. \_\_\_\_\_

**APPENDIX 4.3 (continued)**

Do any of the clients with whom you are currently working have a programme or guidelines in place from a clinical psychologist for behavioural difficulties / challenging behaviour. If yes, please indicate the type of behaviour and the type of intervention in place: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- During the past year would you describe your contact with clinical psychologist(s) as:  
**(Tick One)**
- **Very frequent** (more than once per 2 weeks) \_\_\_\_\_
  - **Frequent** (Approximately once per month) \_\_\_\_\_
  - **Infrequent** (Approximately once per 2 months) \_\_\_\_\_
  - **Very infrequent** (Less than once per 2 months) \_\_\_\_\_
  - **Rare** (Less than once in 6 months) \_\_\_\_\_
  - **Never** (No contact in last year) \_\_\_\_\_

Any additional information or comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Thank you for your participation*



**APPENDIX 4.4**

**Scoring Procedure for Demographic Data Questionnaire:  
Providing Training/Experience Score**

|   |                                       |                           |                        |
|---|---------------------------------------|---------------------------|------------------------|
| <b>Qualifications:</b>                            | Honours Degree                        | <b>Score:</b><br><b>5</b> | <b>Maximum Score 5</b> |
|   | Ordinary Degree                       | <b>4</b>                  |                        |
|   | HNC                                   | <b>3</b>                  |                        |
|   | SVQ                                   | <b>2</b>                  |                        |
|   | NC                                    | <b>1</b>                  |                        |
| <b>Level of Work:</b>                             | Senior Manager                        | <b>5</b>                  | <b>Maximum Score 5</b> |
|   | Manager                               | <b>4</b>                  |                        |
|   | Team Leader /                         | <b>3</b>                  |                        |
|   | Project Co-ordinator                  |                           |                        |
|   | Senior Support Worker                 | <b>2</b>                  |                        |
|   | Support Worker                        | <b>1</b>                  |                        |
| <b>Training:</b>                                  | Yes / No                              | <b>1 / 0</b>              | <b>Maximum Score 2</b> |
| <b>Specific Challenging Behaviour Training:</b>   | Yes / No                              | <b>1 / 0</b>              |                        |
|   |                                       |                           |                        |
| <b>Years of Learning Disability Experience:</b>   | 1 – 2 years                           | <b>5</b>                  | <b>Maximum Score 5</b> |
|   | 3 – 5 years                           | <b>4</b>                  |                        |
|   | 6 – 8 years                           | <b>3</b>                  |                        |
|   | 9-11 years                            | <b>2</b>                  |                        |
|   | 12 + years                            | <b>1</b>                  |                        |
| <b>Years of Challenging Behaviour Experience:</b> |                                       | <b>Scoring as Above.</b>  | <b>Maximum Score 5</b> |
| <b>Direct Challenging Behaviour Experience:</b>   | Yes / No<br><br>(previous or current) | <b>1 / 0</b>              | <b>Maximum Score 1</b> |

**APPENDIX 4.4 (continued)**

**Contact with Psychologist:**

**Level of Contact with Psychologist:**

|       |   |
|-------|---|
| 0     | 0 |
| 1 – 2 | 1 |
| 3 – 4 | 2 |
| 5 – 6 | 3 |
| 7 – 8 | 4 |
| 9 +   | 5 |

**Maximum Score 5**

**Frequency of Contact with Psychologist: (past year)**

|                 |   |
|-----------------|---|
| Very frequent   | 5 |
| Frequent        | 4 |
| Infrequent      | 3 |
| Very infrequent | 2 |
| Rare            | 1 |
| Never           | 0 |

**Maximum Score 5**

**TOTAL SCORE 33**

**APPENDIX 4.5**

**Knowledge Questionnaire:**

*(Please note that the layout of the questionnaire has been altered in order to save space in the portfolio, but the order of questions remains the same)*

**INSTRUCTIONS:**

Please complete the 10 questions below with as much detail as possible.

If you do not understand any of the questions, miss them out and continue on to the next one. Please complete the questions in the order in which they are written.

Do not use books or other resources to help you to complete the questionnaire, as we are interested in your current knowledge.

The questionnaire will be anonymous, but the following information is necessary for processing the results of the research project.

Staff Code : \_\_\_\_\_ (As Demographic Data Questionnaire)

**1:** Which behaviours exhibited by clients with learning disabilities do you consider to be "challenging" behaviours?

**2:** To whom do these behaviours present a challenge.

**3:** Clients with learning disabilities may exhibit challenging behaviours due to a wide range of factors; list as many of these as you can.

**4:** Resources for those working in the field of learning disabilities are often limited. Describe measures which you feel could improve the environment / lifestyle of individuals with learning disabilities and challenging behaviours.

**5:** Working with clients with learning disabilities and challenging behaviour can affect staff and carers in a variety of ways; emotionally, socially and physiologically. List possible effects under the three headings below:

Emotional

Social

Physiological

**APPENDIX 4.5 (continued)**

**6:** For some individuals with learning disabilities their challenging behaviour(s) can affect their quality of life. List some ways in which you feel the client's quality of life may be negatively affected by their challenging behaviours.

**7:** Since the 1960's a variety of approaches have been tried in order to modify challenging behaviours. List any approaches which you are aware have been tried for clients with learning disabilities. Place your answers in the appropriate column to indicate whether you feel the approach was/is positive or negative.

Positive

Negative

**8:** Three approaches which have been influential in changing challenging behaviours in individuals with learning disabilities in recent years are listed below. Note down the main principles of each of these approaches, i.e. the techniques which they employ in order to create behaviour change. Leave blank those which you are not aware of.

**a) The Constructional Approach:**

**b) Behaviour Modification:**

**c) Gentle Teaching:**

**9:** Clinical Psychologists may utilise a variety of tools to carry out a full assessment of a client's challenging behaviour in order to prepare an appropriate treatment plan. Some of these are indicated below. Describe the aims of these methods.

**a) Background information, from staff and case notes:**

**b) Observation, Video Recording, Behaviour Charts:**

**10:** Following a detailed assessment the Clinical Psychologist may recommend an appropriate intervention to attempt to reduce or eliminate the challenging behaviour. Many of these approaches will involve staff or carers, and their role is likely to be crucial to the success of the intervention. Why is the role of staff / carers so important?

## APPENDIX 4.6

### Knowledge Questionnaire: Scoring Procedures:

**1:** 1 point given for each of the following categories included in answer:-

- harm to self e.g. S.I.B.
- harm to others; verbal aggression.
- harm to others; physical aggression.
- causes stress to others e.g. destructive / shouting / screaming.
- impedes learning e.g. stereotypic behaviours / obsessive behaviours.
- behaviour contrary to social norms e.g. inappropriate sexual behaviour / removing clothes in public.

**Maximum : 6 Scoring: (0,1,2) = 0 (3,4) = 1 (5,6) = 2**

**2:** 1 point given for each of the following categories included in answer:-

- the client
- other clients / residents
- carers
- family
- staff
- managers
- service providers
- other professionals e.g. psychologists, social workers
- community

**Maximum: 9 Scoring: (0,1,2,3) = 0 (4,5,6) = 1 (7,8,9) = 2**

**3:** 1 point given for each of the following categories included in answer:-

- Communication
- Learned Behaviour / Modelling
- Over Stimulation
- Under Stimulation / Boredom / Deprivation
- Frustration
- Attention Seeking
- Biophysiological / medication / pain / illness

**APPENDIX 4.6 (continued)**

- Anxiety / Fear
- Depression / sadness
- Social skills deficits
- Escape
- Reinforcement

**Maximum: 12 Scoring: (0,1,2,3,4) = 0 (5,6,7,8) = 1 (9,10,11,12) = 2**

**4:** 1 point given for each of the following categories included in answer:-

- Changing structure of environment
- Increasing staff nos. / resources
- Increasing staff training / involvement of outside professionals
- Increasing opportunities for client's skill development or personal development
- Involving clients in running of house
- Adopting a consistent approach to the challenging behaviour

**Maximum : 6 Scoring: (0,1,2) = 0 (3,4) = 1 (5,6) = 2**

**5:** 1 point given for each of the following categories included in answer:-

- Depression
- Stress or Anxiety or Tension
- Exhaustion or Tiredness
- Isolation or withdrawing from social contacts
- Illness or sickness (including absence from work)
- Increased smoking or alcohol consumption
- Relationship difficulties
- Specific biophysiological e.g. headaches, insomnia (maximum 3)
- Frustration or Anger
- Apathy or Feelings of Failure

**Maximum: 12 Scoring: (0,1,2,3,4) = 0 (5,6,7,8) = 1 (9,10,11,12) = 2**

**6:** 1 point given for each of the following categories included in answer:-

- Isolation / Restraint (chemical / physical)
- Barriers to other people / social contacts

**APPENDIX 4.6 (continued)**

- Exclusion e.g from community facilities
- Poor quality of life e.g. poverty of environment, lack of opportunities
- Interferes with Learning
- Injury / death

**Maximum : 6 Scoring: (0,1,2) = 0 (3,4) = 1 (5,6) = 2**

**7:** 1 point given for each of the following approaches listed in the answer. Points are not given for repetition of different aspects or parts of the same approach, neither are extra point given if an approach is listed as both positive and negative:-

- Functional Analysis
- A-B-C recording
- Behaviour modification / behavioural approaches
- Individual lifestyle planning / programme planning
- Analogue studies
- Physical Restraint
- Chemical Restraint
- Aversion Therapy (E.C.T) (negative reinforcement)
- Time out / seclusion
- Sanctions / loss of privileges
- Token Economy
- Star Charts (positive reinforcement)
- Gentle Teaching (humanistic approaches)
- Task Analysis
- Constructional Approach

**Maximum: 15 Scoring: (0,1,2,3,4,5) = 0 (6,7,8,9,10) = 1 (11,12,13,14,15) = 2**

**8:** 0,1,2 Scoring:

2 = A description of the approach

and at least one of the main techniques used in the approach

1 = One of the above

0 = Vague information or confused answer

**Maximum : 6 Scoring: (0,1,2) = 0 (3,4) = 1 (5,6) = 2**

**APPENDIX 4.6 (continued)**

**9:** 1 point given for each of the following ideas expressed in either of the answers. If the same idea is given for **a** and **b** it is only counted once:-

- History of the behaviour; development/maintenance
- Previous treatment/intervention
- Skills and deficits
- Any additional difficulties e.g. epilepsy, sensory impairments, significant life events
- Identifying Patterns of Behaviour: Antecedents (triggers) / Consequences (reinforcers)
- Seeing the behaviour in action, real life examples (video - watch same example again)
- Monitoring change / reviewing progress
- Identifying alternative strategies
- Frequency, Intensity, Duration

**Maximum: 9 Scoring: (0,1,2,3) = 0 (4,5,6) = 1 (7,8,9) = 2**

**10:** 1 point given for each of the following ideas expressed in the answer:-

- Day to day contact with client - observation and recording information.

Know the client best:-

- can provide background information
- can provide feedback regarding the appropriateness of the intervention and on progress / change.
- Consistency of managing challenging behaviour.
- Continuity of care.
- Staff values / beliefs can affect outcome.

**Maximum : 6 Scoring: (0,1,2) = 0 (3,4) = 1 (5,6) = 2**

-----

**MAXIMUM TOTAL SCORE = 20**

-----



## APPENDIX 4.7

### Case Illustration 1: Aggressive Behaviour

Victoria is a 21 year-old woman who has a moderate learning disability. She has very limited communication skills, understanding only simple instructions. She lives in a community group home with 3 other residents, and has her own room. She has lived there for 9 months, moving to the house from her parents home. Victoria moved from her parents house to the group home following the death of her mother. The move to the group home had been planned as both parents were elderly but she was not due to move for another 2 months and much of the preparatory work was still to be done. She did not attend her mother's funeral as her father felt it would be too distressing for her. She was an only child and had a close relationship with both of her parents. Victoria sometimes exhibits aggressive behaviour towards staff and residents, kicking and punching them.

She attends an activity and resource centre 4 days per week. Her aggressive behaviour has begun to cause problems there and she has been banned from travelling on the centre bus, following an incident when she punched the escort, badly bruising her arm. Staff at the group home now accompany Victoria to the centre in a taxi which they report is causing major financial and staffing difficulties.

Her father initially visited weekly and took her to their house for an overnight stay. As Victoria's behaviour deteriorated her father felt less able to cope and reduced the overnight stays to once a fortnight, visiting Victoria at the group home on the other weeks.

Staff at the group home report that her behaviour is more aggressive towards male staff and one resident whose parents frequently visit. Staff have attempted to prepare Victoria for the weekends when she goes home and those she doesn't by packing her overnight bag with her and placing this in prominent place on the weekends she goes home.

Staff also reported that Victoria, who was already overweight, had gained over a stone in the past 4 months and that she had begun to steal food. This had caused great difficulties in the group home as staff did not feel it was appropriate to lock food cupboards or the fridge.

## **APPENDIX 4.8**

### **Case Illustration 2: Self-injurious Behaviour**

Simon is a 32 year-old man with a severe learning disability. He has both cerebral palsy and epilepsy. He is unable to communicate verbally and does not use sign language. He is unable to walk, but can manoeuvre himself around by shuffling on his bottom and has good use of his hands. Simon lives in a hostel with 10 residents. He shares a room with one other resident. Simon frequently hits himself on the face and head with his fists. This often causes bruising and sometimes bleeding.

He attends an activity and resource centre 4 mornings per week. At the centre his self-injurious behaviour is rarely seen. He had attended the same centre when he lived at the hospital, and had been attending for 7 years. Simon has lived at the hostel for 18 months, moving there from a large hospital where he had lived since childhood. Simon had shared a room with another resident at the hospital who was less able than him and had been placed in a small group home. Although staff had received a reasonable amount of information about Simon prior to the move, none of the staff at the hostel had worked with him prior to his placement there. He has no regular contact with relatives, his parents had placed him at the hospital when he was 6 years old and were now both dead. He had 2 younger brothers, neither of whom had ever visited Simon.

Staff report that Simon wore a protective head guard almost all of the time when he lived at the hospital due to the self-injurious behaviour and they were very keen to reduce the use of the head guard. Attempts to remove it had not been successful with Simon showing an increase in his self-injurious behaviour. He always wore the head guard at the activity and resource centre.

Staff had attempted to distract him when he began to self-injure by showing him toys or offering drinks. Simon tended to ignore them or to stop briefly. He did appear to be calmer when alone in his room and staff would take him to his room when this was possible. This caused many difficulties and staff were concerned about restricting his room-mate's choices. His room-mate also has a severe learning disability, but is more mobile than Simon. He slept well at night, but staff had found that they had to take the

**APPENDIX 4.8** (continued)

other resident to bed first and ensure that he was asleep before taking Simon to bed or the behaviour would continue, this also caused problems with his room-mate.

Simon's epilepsy was not well controlled, but staff had difficulty recording his seizures due to confusion with his self-injurious behaviour and movements related to his cerebral palsy.

Staff reported that Simon smiled when he played with certain toys, particularly mobiles and that he loved to touch the vacuum cleaner when it was on. He would frequently eat non-food items, such as bits of fluff from the carpet and small pieces of thread. He is very fussy about food and requires to be fed. He was under weight and staff expressed concern about him having an adequate diet.

## **APPENDIX 4.9**

### **Expectations Questionnaire:**

#### **Case Illustration 1: Aggressive Behaviour**

#### **Instructions**

Please read Case Example 1 and complete the questionnaire.

When reading the case example, imagine that you are the client's key worker.

We are aware that some staff will and others will not have previous experience of input from a clinical psychologist for a client with whom they have worked. Do not worry if you have no previous experience, since there are no right or wrong answers.

#### **Questions**

1: These are all statements that Victoria might make. After reading the case example please rank the statements in their likely order of importance to Victoria, based on the information provided.

(Please rank the statements in order of importance, 1 – most important, 10 – least important)

#### **RANK ORDER**

- I AM BORED
- I FEEL DEPRESSED
- IT IS JUST THE WAY I AM
- I DON'T FEEL WELL
- I NEED A BREAK
- I CAN'T COPE WITH CHANGES
- I DON'T UNDERSTAND
- THERE'S TOO MUCH GOING ON
- I'M SEXUALLY FRUSTRATED
- I NEED ATTENTION

Please turn over....

APPENDIX 4.9 (continued)

2: For Victoria’s case I would expect the advice from the clinical psychologist to include:

3: For Victoria’s case the most important thing(s) for me to do as his key worker would be:

4: a) In 4 weeks following advice given by the clinical psychologist, I would expect Victoria’s aggressive behaviour to be:

|-----|

|       |           |        |
|-------|-----------|--------|
| Very  | Unchanged | Very   |
| Much  |           | Much   |
| Worse |           | Better |

b) In 3 months following advice given by the clinical psychologist, I would expect Victoria’s aggressive behaviour to be:

|-----|

|       |           |        |
|-------|-----------|--------|
| Very  | Unchanged | Very   |
| Much  |           | Much   |
| Worse |           | Better |

## **APPENDIX 4.10.1**

### **Standard Scoring procedure: Case Illustration 1: Aggressive Behaviour**

#### **Questions**

##### **1. RANK ORDER:**

1. I CAN'T COPE WITH CHANGES
2. I NEED A BREAK
3. I FEEL DEPRESSED
4. I DON'T UNDERSTAND
5. THERE'S TOO MUCH GOING ON
6. I AM BORED
7. I NEED ATTENTION
8. IT IS JUST THE WAY I AM
9. I DON'T FEEL WELL
10. I'M SEXUALLY FRUSTRATED

##### **2. For Victoria's case I would expect the advice from the clinical psychologist to include:**

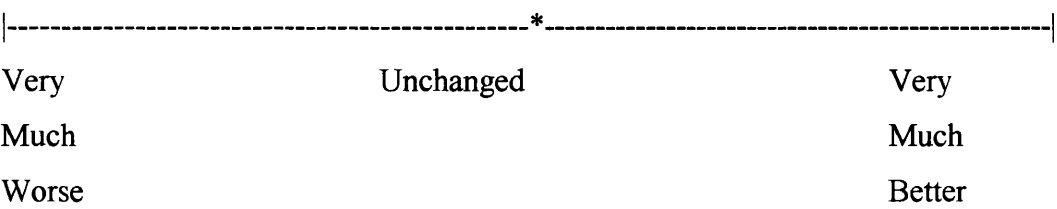
- Help with understanding loss and change – Direct 1 to 1 work
- Staff support, building relationships – Life story book, mementoes from mother
- Taking pressure off – responsive to her needs:
- Time out from Centre
- Meeting with father (respite arrangements)
- Assessment and monitoring of depressive symptoms and aggression

##### **3. For Victoria's case the most important thing(s) for me to do as his key worker would be:**

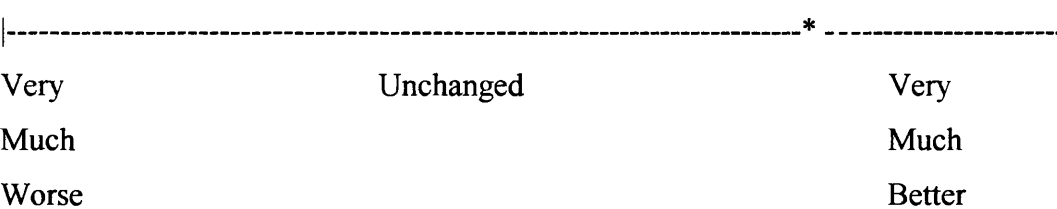
- Co-therapist
- Support
- Monitoring (depression/aggression)
- Interpreter (of Victoria's behaviour to other staff, at home & centre and father)

APPENDIX 4.10.1 (continued)

4: a) In 4 weeks following advice given by the clinical psychologist, I would expect Victoria's aggressive behaviour to be:      \* = 0 % CHANGE



b) In 3 months following advice given by the clinical psychologist, I would expect Victoria's aggressive behaviour to be:      \* = 55 % CHANGE



## APPENDIX 4.10.2

### Standard Scoring: Case Illustration 2: Self-injurious Behaviour:

#### Questions

##### 1: RANK ORDER:

1. I AM BORED
2. THERE'S TOO MUCH GOING ON
3. I DON'T FEEL WELL
4. I DON'T UNDERSTAND
5. I NEED ATTENTION
6. I NEED A BREAK
7. I FEEL DEPRESSED
8. I'M SEXUALLY FRUSTRATED
9. I CAN'T COPE WITH CHANGES
10. IT IS JUST THE WAY I AM

##### 2: For Simon's case I would expect the advice from the clinical psychologist to include:

- Review of his general health including seizure management
- Observation and assessment (functional analysis) of presentation of behaviour – S.I.B & absence of S.I.B
- Build on communication using visual timetable to increase predictability of events and sense of control
- Increase engagement on personal preferences / reinforcing activities
- Planning a care environment to take above into account

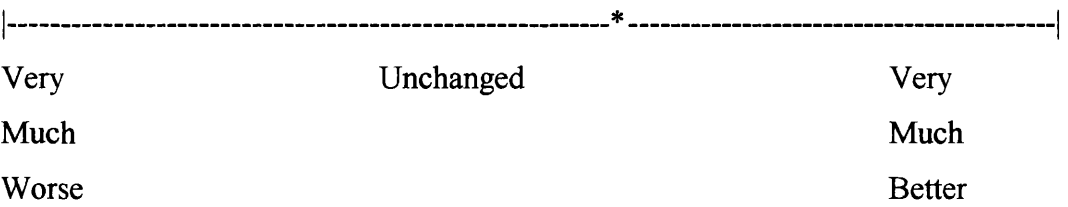
##### 3: For Simon's case the most important thing(s) for me to do as his key worker would be:

- Develop a greater understanding of Simon's world
- Collect observational data
- Participate in visual timetable and preference tasks
- Take Simon to the doctor (? Dentist)

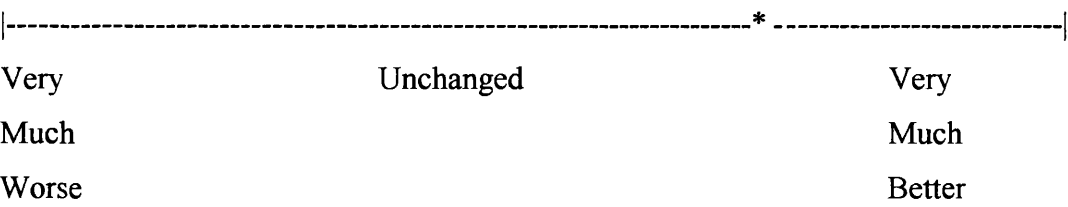


APPENDIX 4.10.2 (continued)

4: a) In **4 weeks** following advice given by the clinical psychologist, I would expect Simon's self-injurious behaviour to be:    \* = 20 % CHANGE



b) In **3 months** following advice given by the clinical psychologist, I would expect Simon's self-injurious behaviour to be:    \* = 50 % CHANGE



**APPENDIX 4.11****Workshop Programme:**

## **Challenging Behaviour Workshop PROGRAMME**

---

**Gartnavel Royal Hospital  
Wednesday 31<sup>st</sup> March 1999  
5.30 to 9 p.m.**

**5.30 Registration and tea, coffee, biscuits**

**6.00 Introductory Presentation**

**6.10 Workshop Discussions:**

- **Presentation of 1<sup>st</sup> Case Example**
- **Completion of Questionnaire based on Case Example**
- **Presentation of 2<sup>nd</sup> Case Example**
- **Completion of Questionnaire based on Case Example**
- **Group and Panel Discussion of Case examples and related issues.**

**7.15 BUFFET**

**7.45 Presentations:**

- **Challenging Behaviour: Introduction.**
- **The Constructional Approach.**
- **Self-Injurious Behaviour: Main Issues and Treatment Approaches.**

**8.45 Panel Discussion and Feedback**

**9 p.m. CLOSE**

APPENDIX 4.12

Workshop Evaluation Form:

CHALLENGING BEHAVIOUR WORKSHOP  
WEDNESDAY 31<sup>ST</sup> MARCH 1999

EVALUATION FORM

Please indicate your reaction to the following statements by rating them on a scale of 1 to 6. Place a tick in the box below the statement that indicates your reaction, based on the key below.

KEY:

- 6: Strongly Agree
  - 5: Moderately Agree
  - 4: Agree
  - 3: Disagree
  - 2: Moderately Disagree
  - 1: Strongly Disagree
- 

1. The venue was an appropriate size for the workshop.

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

2. This was the most suitable timing for the workshop.

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

3. There were an ideal number of participants attending.

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**APPENDIX 4.12 (continued)**

**4. The overall quality of the workshop was excellent.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**5. The presentations were useful.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**6. There was sufficient participant involvement.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**7. The workshop provided information that I will use at work.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**8. The workshop has increased my understanding of Challenging Behaviours.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**9. The workshop will enable me to work more effectively with Clinical Psychologists in the future.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**APPENDIX 4.12 (continued)**

**10. The workshop would be helpful for all staff working with clients who exhibit Challenging Behaviour.**

|                       |                         |           |              |                            |                          |
|-----------------------|-------------------------|-----------|--------------|----------------------------|--------------------------|
| Strongly<br>Agree (6) | Moderately<br>Agree (5) | Agree (4) | Disagree (3) | Moderately<br>Disagree (2) | Strongly<br>Disagree (1) |
|                       |                         |           |              |                            |                          |

**11. The most useful part of the workshop for me was:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**12. Any other comments:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Thank you for your participation*

APPENDIX 4.13

Results of Chi square Analyses: Case Illustration 1

|                  |       | Training and Experience Category |      | Total |
|------------------|-------|----------------------------------|------|-------|
|                  |       | LOW                              | HIGH |       |
| Beliefs Category | LOW   | 5                                | 9    | 14    |
|                  | HIGH  | 10                               | 4    | 14    |
|                  | Total | 15                               | 13   | 28    |

|  |       | Training and Experience Category |      | Total |
|--|-------|----------------------------------|------|-------|
|  |       | LOW                              | HIGH |       |
| Expectations of Intervention<br>Process Category | LOW   | 9                                | 3    | 12    |
|  | HIGH  | 8                                | 10   | 18    |
|  | Total | 17                               | 13   | 30    |

|                             |       | Training and Experience Category |      | Total |
|-----------------------------|-------|----------------------------------|------|-------|
|                             |       | LOW                              | HIGH |       |
| Outcome at 4 weeks Category | LOW   | 7                                | 8    | 15    |
|                             | HIGH  | 9                                | 5    | 14    |
|                             | Total | 16                               | 13   | 29    |

|                              |       | Training and Experience Category |      | Total |
|------------------------------|-------|----------------------------------|------|-------|
|                              |       | LOW                              | HIGH |       |
| Outcome at 3 months Category | LOW   | 5                                | 6    | 11    |
|                              | HIGH  | 11                               | 7    | 18    |
|                              | Total | 16                               | 13   | 29    |

|                  |       | Knowledge Category |      | Total |
|------------------|-------|--------------------|------|-------|
|                  |       | LOW                | HIGH |       |
| Beliefs Category | LOW   | 5                  | 9    | 14    |
|                  | HIGH  | 9                  | 4    | 13    |
|                  | Total | 14                 | 13   | 27    |

|  |       | Knowledge Category |      | Total |
|--|-------|--------------------|------|-------|
|  |       | LOW                | HIGH |       |
| Expectations of Intervention<br>Process Category | LOW   | 7                  | 5    | 12    |
|  | HIGH  | 9                  | 8    | 17    |
|  | Total | 16                 | 13   | 29    |

|                             |       | Knowledge Category |      | Total |
|-----------------------------|-------|--------------------|------|-------|
|                             |       | LOW                | HIGH |       |
| Outcome at 4 weeks Category | LOW   | 10                 | 4    | 14    |
|                             | HIGH  | 5                  | 9    | 14    |
|                             | Total | 15                 | 13   | 28    |

|                              |       | Knowledge Category |      | Total |
|------------------------------|-------|--------------------|------|-------|
|                              |       | LOW                | HIGH |       |
| Outcome at 3 months Category | LOW   | 5                  | 6    | 11    |
|                              | HIGH  | 10                 | 7    | 17    |
|                              | Total | 15                 | 13   | 28    |

APPENDIX 4.14

Results of Chi square Analyses: Case Illustration 2

|                  |       | Training and Experience Category |      | Total |
|------------------|-------|----------------------------------|------|-------|
|                  |       | LOW                              | HIGH |       |
| Beliefs Category | LOW   | 9                                | 5    | 14    |
|                  | HIGH  | 6                                | 8    | 14    |
|                  | Total | 15                               | 13   | 28    |

|  |       | Training and Experience Category |      | Total |
|--|-------|----------------------------------|------|-------|
|  |       | LOW                              | HIGH |       |
| Expectations of Intervention<br>Process Category | LOW   | 15                               | 3    | 18    |
|  | HIGH  | 2                                | 10   | 12    |
|  | Total | 17                               | 13   | 30    |

|                             |       | Training and Experience Category |      | Total |
|-----------------------------|-------|----------------------------------|------|-------|
|                             |       | LOW                              | HIGH |       |
| Outcome at 4 weeks Category | LOW   | 4                                | 9    | 13    |
|                             | HIGH  | 12                               | 4    | 16    |
|                             | Total | 16                               | 13   | 29    |

|                              |       | Training and Experience Category |      | Total |
|------------------------------|-------|----------------------------------|------|-------|
|                              |       | LOW                              | HIGH |       |
| Outcome at 3 months Category | LOW   | 5                                | 6    | 11    |
|                              | HIGH  | 11                               | 7    | 18    |
|                              | Total | 16                               | 13   | 29    |

|                  |       | Knowledge Category |      | Total |
|------------------|-------|--------------------|------|-------|
|                  |       | LOW                | HIGH |       |
| Beliefs Category | LOW   | 5                  | 8    | 13    |
|                  | HIGH  | 9                  | 5    | 14    |
|                  | Total | 14                 | 13   | 27    |

|  |       | Knowledge Category |      | Total |
|--|-------|--------------------|------|-------|
|  |       | LOW                | HIGH |       |
| Expectations of Intervention<br>Process Category | LOW   | 9                  | 9    | 18    |
|  | HIGH  | 7                  | 4    | 11    |
|  | Total | 16                 | 13   | 29    |

|                             |       | Knowledge Category |      | Total |
|-----------------------------|-------|--------------------|------|-------|
|                             |       | LOW                | HIGH |       |
| Outcome at 4 weeks Category | LOW   | 8                  | 4    | 12    |
|                             | HIGH  | 7                  | 9    | 16    |
|                             | Total | 15                 | 13   | 28    |

|                              |       | Knowledge Category |      | Total |
|------------------------------|-------|--------------------|------|-------|
|                              |       | LOW                | HIGH |       |
| Outcome at 3 months Category | LOW   | 4                  | 9    | 13    |
|                              | HIGH  | 11                 | 4    | 15    |
|                              | Total | 15                 | 13   | 28    |

APPENDIX 4.15

Spearman rho results:

APPENDIX 4.15  
Spearman Rho Results : Beliefs About the Causes of Challenging Behaviour : Case Illustrations 1 & 2

| Spearman Rank Correlations : Case Illustration 1 |           |                    |                      |
|--|-----------|--------------------|----------------------|
| rho  | Frequency | Cumulative Percent |                      |
| -0.236   | 1         | 3.6                |                      |
| -0.139   | 1         | 7.1                |                      |
| -0.042   | 1         | 10.7               |                      |
| 0.127  | 1         | 14.3               |                      |
| 0.333  | 2         | 21.4               |                      |
| 0.345  | 1         | 25                 |                      |
| 0.37   | 1         | 28.6               |                      |
| 0.406  | 1         | 32.1               | $\alpha$ 0.05 = 0.38 |
| 0.455  | 1         | 35.7               |                      |
| 0.491  | 1         | 39.3               | $\alpha$ 0.01 = 0.49 |
| 0.515  | 1         | 42.9               |                      |
| 0.527  | 2         | 50                 |                      |
| 2  | 2         | 57.1               |                      |
| 0.564  | 1         | 60.7               |                      |
| 0.588  | 1         | 64.3               |                      |
| 0.6  | 1         | 67.9               |                      |
| 0.624  | 1         | 71.4               |                      |
| 0.661  | 1         | 75                 |                      |
| 0.685  | 1         | 78.6               |                      |
| 0.709  | 2         | 85.7               |                      |
| 0.758  | 1         | 89.3               |                      |
| 0.782  | 1         | 92.9               |                      |
| 0.842  | 1         | 96.4               |                      |
| 0.855  | 1         | 100                |                      |
| Total  | 28        |                    |                      |

| Spearman Rank Correlations : Case Illustration 2 |           |                    |                      |
|--|-----------|--------------------|----------------------|
| rho  | Frequency | Cumulative Percent |                      |
| -0.557   | 1         | 3.6                |                      |
| -0.236   | 1         | 7.1                |                      |
| -0.176   | 1         | 10.7               |                      |
| -0.03  | 1         | 14.3               |                      |
| 0.006  | 1         | 17.9               |                      |
| 0.03   | 1         | 21.4               |                      |
| 0.079  | 1         | 25                 |                      |
| 0.103  | 1         | 28.6               |                      |
| 0.139  | 1         | 32.1               |                      |
| 0.152  | 1         | 35.7               |                      |
| 0.164  | 1         | 39.3               |                      |
| 0.176  | 1         | 42.9               |                      |
| 0.236  | 2         | 50                 |                      |
| 0.248  | 1         | 53.6               |                      |
| 0.261  | 1         | 57.1               |                      |
| 0.285  | 1         | 60.7               |                      |
| 0.297  | 1         | 64.3               |                      |
| 0.309  | 1         | 67.9               |                      |
| 0.345  | 1         | 71.4               | $\alpha$ 0.05 = 0.38 |
| 0.382  | 1         | 75                 |                      |
| 0.394  | 1         | 78.6               |                      |
| 0.418  | 2         | 85.7               |                      |
| 0.442  | 1         | 89.3               |                      |
| 0.539  | 1         | 92.9               | $\alpha$ 0.01 = 0.49 |
| 0.612  | 1         | 96.4               |                      |
| 0.661  | 1         | 100                |                      |
| Total  | 28        |                    |                      |



## APPENDIX 4.16

### **Qualitative Data collected during workshop group discussions:**

During small group discussions at the workshop, the group facilitators presented care staff with the following questions that were to be discussed in relation to the two case examples. Facilitators recorded staff responses and key points were discussed during the feedback session.

- a) If these individuals lived in your service what would you consider to be the main difficulties and management issues?
- b) What would facilitate a positive outcome of the clinical psychology intervention?
- c) What might be the barriers or obstacles to the successful implementation of the clinical psychologist's advice?

The key points were divided into two main themes:

#### 1) Barriers to the successful implementation of the advice or intervention:

- Lack of consistency.
- Lack of communication between staff and with other services.
- Lack of resources; including experienced and well trained staff, access to specialist help.
- Long waiting times for specialist help.
- Different agendas; within groups of care staff, between care staff and other professionals and between other professionals.

#### 2) Factors which would facilitate a positive outcome:

- Increased support for direct care staff.
- Explicit and agreed goals.
- Taking a holistic view of the individual exhibiting the challenging behaviour.

## **APPENDIX 4.17**

### **Care Staff Evaluation of the Workshop:**

#### **“Challenging Behaviour: A challenge to staff and services”**

Evaluation forms, (Appendix 4.11), were completed by all care staff at the end of the workshop.

- ◆ 97% of those attending agreed that the overall quality of the workshop was excellent and that it would be of benefit to all staff working with clients who exhibit challenging behaviour.
- ◆ 94% of care staff agreed that the workshop had increased their understanding of challenging behaviours, had provided information which they would use at work, and that it would enable them to work more effectively with clinical psychologists in the future.

Care staff completed an open question asking them which part of the workshop they had found the most useful. The three most common responses were:

- ◆ The presentations by the clinical psychologists, particularly those on the constructional approach and on self-injurious behaviour.
- ◆ Group discussions with other care staff, allowing the exchange of experiences, ideas and concerns.
- ◆ Illustration of the issues using case examples.

