Doctor of Clinical Psychology Degree

This volume was submitted in partial fulfillment of the degree of Doctor of Clinical Psychology

THE EFFECTS OF WRITTEN PROMPTS ON

HOMEWORK COMPLIANCE AND OUTCOME IN

A COGNITIVE BEHAVIOURAL TREATMENT FOR DEPRESSION

and

RESEARCH PORTFOLIO

EWAN M. LUNDIE M.A. (Hons)

Submitted in part fulfilment towards the degree of
Doctorate in Clinical Psychology

Department of Psychological Medicine
Faculty of Medicine
University of Glasgow

August 1998

TABLE OF CONTENTS

APPENDICES

ACKNOWLEDGEMENTS

First, I am indebted to my research supervisor Paul Fleming for giving so freely of his time to advise and support me throughout. Also, to the course administrator Shiela Nielson for her wise use of discretion. Thanks are also due to my parents Pat and Morris for their long-standing patience and belief. Finally, the greatest thanks are due to my wife Adele and my children Blair, Alyth and Erin for enduring the long absences along the way.

Small Scale Service Evaluation Project

Clinical Psychologist's Perspectives on the Psychological Debriefing of Healthcare Staff after the Dunblane Shootings

Prepared in accordance with guidelines for submission to the Journal of Traumatic Stress (Appendix 1.1)

Clinical Psychologist's Perspectives on the Psychological Debriefing of Healthcare Staff after the Dunblane Shootings

Ewan Lundie

Trainee Clinical Psychologist

Department of Psychological Medicine

Academic Centre

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Abstract

In response to the murder of sixteen school-children and their teacher at Dunblane Primary School, Clinical Psychologists from Central Scotland Healthcare NHS Trust delivered Critical Incident Stress Debriefings (CISDs) to healthcare personnel. Most of the psychologists had no prior training or experience in conducting CISDs. Interview with the psychologists 4 months post-incident indicated that psychologists with no previous training were able to accommodate the model within 1.5-2 hours but were often not able to overcome process factors affecting its delivery. Recommendations are made to reduce the effects of process factors through planning initiatives and training. Overall, most psychologists believed that CISDs were a suitable approach to meeting the needs of traumatised healthcare personnel in this instance.

Key words: CISDs; training; process factors.

Introduction

Group interventions following critical incidents have become increasingly used to prevent the development of psychopathology in helpers and victims (Raphael, 1986). Some empirical data has been put forward which indicates that it is effective (Mitchell & Everly, 1993; Robinson & Mitchell, 1993) however other studies and commentaries claim that psychological debriefings are of dubious benefit, and may increase problems (Raphael, Meldrum & McFarlane, 1995; Kenardy et al. 1996). There has been no controlled evaluation research (Dyregov,1997).

Mitchell (1983) and Dyregov (1989) were the first to formulate the structures and procedures to be followed in these group interventions often called Critical Incident Stress Debriefings (CISDs) or psychological debriefings. They described a psychological debriefing as a planned structured group activity organised to review in detail the facts, thoughts, impressions, and reactions following a critical incident as well as providing information on typical reactions to events. The aims of a debrief are to prevent unnecessary after-effects, accelerate normal recovery, assist group cohesion, normalise reactions, stimulate emotional ventilation, and promote cognitive accommodation of the event (Dyregov, 1997). It is crisis intervention and, although a follow-up debriefing may be organised, most of the work is done in a single session.

Variables such as group characteristics and environmental factors interact to make it a complex process and it is considered distinct enough from standard

clinical practice to warrant specific attention and additional training (Quevillon & Jacobs, 93). Some go so far as to recommend that debriefings should only be carried out by properly qualified and trained team members (Robinson & Mitchell, 93). Westernink (1996), in a summary of the literature, proposed that recipients are more likely to suffer negative consequences when debrief leaders lack the training. In addition, there is empirical evidence to suggest that the death of children is particularly difficult for health service personnel to deal with (Robinson, 84; Robinson & Mitchell 1993).

In response to the murder of sixteen school-children and their teacher at Dunblane primary school in March 1996, Clinical Psychologists from the Central Scotland Healthcare NHS Trust were called upon to assist healthcare staff in managing their work-related stress. Most of the psychologists had no previous training or experience in delivering CISD's. A psychological debriefing designed for use with small groups was employed (adapted by Wostenholme (1991) from the models by Mitchell (1983) and Dyregov (89)).

The aim of this project was to evaluate, from a psychologist's perspective, the clinical psychology department's delivery of critical incident stress debriefings. Particular emphasis was placed on: (i) whether clinical psychologist's had adequate levels of preparation and training for delivery of the debriefings; (ii) whether clinical psychologists were able to overcome process factors affecting its delivery; and (iii) the suitability of this approach to meeting the needs of traumatised healthcare personnel.

Method

Sample

Ten clinical psychologists, one trainee clinical psychologist and one assistant psychologist who were involved in delivering all of the debriefings. One trainee (the researcher) involved in delivering three debriefs did not complete an interview. Of the qualified psychologists, three had less than 4 years post-qualification clinical experience, one had 6 years, and six had more than 10 years (range = 3 months-26 years; $x = 12.13$, $sd = 8.92$).

Measures

A semi-structured questionnaire was devised specifically for this study. It contained 60 items covering seven areas: (i) quantitative description of debriefings delivered; (ii) adherence to CISD protocol (13 set-response items); (iii) level of preparation for delivering CISDs (6 semi-structured items, 7 set-response items); (iv) evaluation of self-competency in delivering the CISDs (1 semi-structured item, 8 set response items); (v) process factors affecting delivery (14 semi-structured items); and (vi) suitability of CISDs in this instance (2 semi-structured item, 7 set-response items). (See Appendix 1.3).

Procedure

Participants were individually interviewed four months after the incident. Prior to interview participants were given an information sheet outlining the aims of the study (see Appendix 1.2). Most referred to diaries and notes made

shortly after delivering debriefs. Each interview took about an hour to complete.

Results

Quantitative Description of CISDs delivered

In total this group delivered 67 debriefs to 291 recipients (1:1 debriefs = 31; 1:2 debriefs = 6; groups of >3 <10 = 22; groups of >10 = 8). Group size ranged from 3 to 30 ($x = 9.7$, $sd = 6.39$). Three of the psychologists delivered only one debrief, five delivered 3-4 debriefs, the remaining four collectively delivered 51 debriefs (*range* = 1-26, $x = 6.33$, $sd = 7.46$). The ten psychologists who described themselves as inexperienced in delivering CISDs conducted 26% of the 1:1 debriefs and 52 % of the group debriefs; the two senior psychologists with prior training and experience in delivering CISDs conducted 74% of the 1:1 debriefs and 48% of the group debriefs. With groups of >3 <10 ($n = 22$), twenty were conducted by a lone psychologist, and two were conducted by a pair; with groups of >10 ($n = 8$), seven were conducted by a pair, one by a lone psychologist. Distribution of CISDs by length of time elapsed since incident is set out in table 1. Recipients with high levels of exposure to traumatic events were mostly debriefed within the first 48hrs.

INSERT TABLE 1 HERE

Adherence to CISD protocol

Responses indicated that there was close adherence to both the structure and content of the model. From the set-response items they reported 92.5% adherence to the inclusion of recommended CISD elements, 5% uncertainty, and 2.5% exclusion. Responses to an open question also indicated close adherence to the recommended ordering of the phases.

Level of Preparation for delivering CISDs

Two of the participants had more than 6 hours training prior to this event, one had 4-6 hours, two had 2-3 hours, the remaining seven had 1.5-2 hours on the morning after the incident to read the protocol and discuss delivery with colleagues (range = 1.5-6 hours, x = 2.95, sd = 1.66). Table 1 shows psychologists self-ratings in relation to experience in dealing with PTSD, bereavement, and delivering CISD's.

INSERT TABLE 2 HERE

Participants with minimal or no prior experience of CISDs thought they were able to accommodate it within a short space of time (1-2 hours = 6, 2-4 hours = 2, 4-6 hours = 2), those with CISD experience and training believed longer was required (8-12 hours = 1, 12-24 hours = 1). Six thought that the skills of a psychologists were necessary to deliver the debriefing effectively, three were

undecided and three disagreed. Those in agreement commented that the model had a good logical order but they believed it's effectiveness would be limited without the application of a wider base of psychological theories and skills. Others believed that non-psychologists, with adequate training, could deliver CISD's effectively.

Nine thought further training was necessary to deliver debriefs to a higher standard than 'adequate' and that one day's training per annum would suffice. In contrast, two saw no need for further training as major incidents were such infrequent occurrences and two thought that a 'refresher' at the time of the next incident would be adequate preparation.

Self-Evaluation

Five were self-critical of overall performance immediately after some debriefs, and nine were self critical about specific aspects of their performance immediately after some CISDs. Four months later, at the time of the research interview, none were self-critical of overall performance and two were still critical about specific aspects of performance at certain debriefs. Several of the psychologists with no prior experience of delivering CISDs reported suffering from performance anxiety on the night preceding the first day of debriefs. In response to items describing the distinctions between CISDs and normal duties, ten believed the contrasts did not adversely affected their ability to conduct the debrief. However, several stated they found it extremely difficult having to work with people recently involved in such a traumatic incident whilst they themselves were still distressed about it.

Process factors affecting delivery

Timing - Some 1:1 debriefs were delivered only 2-3 hours after the incident with several more conducted within the first 12-14 hours. In these cases, the psychologists suggested that this was too soon as neither the deliverer or the recipients had absorbed the emotional impact of the event. Participants were aware that the creators of the CISD model recommend between 24 and 72 hours as the most suitable timing but stated they found it difficult, like other healthcare personnel, to resist the urge to do something to help as soon as possible.

Within the 24-36 hour period a substantial number of debriefs were carried out with recipients with a high level of exposure and participants held mixed views about the suitability of the timing. Most believed the timing was ideal as recipients expressed what was considered to be important raw emotions and cognitions. Others, however, thought that this was too soon as there was evidence of re-traumatisation for some recipients. For debriefings conducted more than 2 weeks afterwards the belief was that the process had lost some of its potency by this stage.

Setting - Most thought that settings were adequate, if not always ideal. The settings considered most suitable were (i) in the workplace; (ii) room size and shape was appropriate to the number of recipients; and (iii) time and privacy for the debrief was protected. These conditions were not met in a significant

minority of cases and this contributed to the general absence of an atmosphere conducive to venting emotions.

Number of recipients - One-to-one debriefs were mostly with medical consultants on duty in hospital who claimed that staffing levels would not allow for more than one consultant to be absent from the team. Participants believed this reduced efficacy because there was no opportunity to 'normalise' with other recipients. Furthermore, having been debriefed themselves, many did not attend their team's debrief.

Groups containing in excess of twelve recipients were generally agreed to be too big. Common complaints were: (i) it was a rush to get through the debrief in the time set aside; (ii) distress was coming up but they were unable to attend to it; and (iii) recipients used it more as a forum for complaints about operational matters. Most participants believed that 4-8 recipients was optimal.

Level of exposure Most psychologists believed the debrief held the greatest meaning for those most directly involved with the dead, injured or bereaved on the day of the event and was less useful for those with indirect involvement but nonetheless upset. The most commonly encountered problem was where individuals were too heavily traumatised to actively participate in the debrief and in some instances recipients left mid-debrief and did not return.

Employment Background - The majority of psychologists believed that the support systems already in place for healthcare workers in dealing with the psychological impact of trauma served to facilitate the debriefing process. However, some participants believed certain CISDs did not meet their aims because of an employment-related set of attitudes which doubted the efficacy of any type of 'talking-therapy'.

Absenteeism - The majority of cases were doctors and nurses from the acute services whose absence was attributed to the debriefs taking place during their shift. There were, however, several instances of doctors, senior nursing staff, team leaders, managers, and porters being present in the locality but refusing to attend. At an organisational level, psychologists were denied access to the ambulance service and groups of porters by line managers.

Cohesion - There were several reports of apparent group cohesion prior to debrief seeming to enhance its impact. Also, there were some reports of the debrief objectives not being met because of cliques within a group who refused to open up to the process.

Hierarchies - Half of the participants believed that the hierarchical arrangement of certain groups did not adversely effect the CISD because the intensity of the traumatic event seemed to make everyone an equal in the debriefing process. In addition, they observed that potential problems were often mitigated by a head of staff openly participating in the process. Difficulties tended to occur when the head stayed 'in-role' and took on the mantle of spokesperson for the

group, or, where autocratic heads of staff made it clear that they thought it was inappropriate to discuss distress.

Heterogeneity - Participants often found it difficult to get recipients to empathise with each other if they were from different employment backgrounds, localities, or there were large discrepancies in the level of exposure to the incident. In some instances, however, groups consisting of clerical and clinical staff from different locales who appeared to bond well together.

Table 3 summarises the participant's views on their ability to overcome process related difficulties.

INSERT TABLE 3 HERE

Suitability of CISDs in this instance

All participants thought that the debriefings provided opportunities for the venting of emotions and emotional reassurance. All but one believed that overall the CISD's appeared to be a good stress prevention method for traumatic incidents, the other was undecided. Nine thought the overall aims of reducing the impact of the incident and facilitating the normal recovery process were typically met. The other two believed lack of experience in dealing with group factors resulted in the aims of the debrief not being met on several occasions.

Most believed the model was flexible enough to cope with variation in group characteristics and other factors. The remaining three had doubts over the suitability of CISD's to deal with: (i) recipients too traumatised to discuss their thoughts and feelings; (ii) recipients with a personal link to the massacre; (iii) individuals with a history of difficulty in expressing emotions; and (iv) pre-existing group dynamics such as lack of cohesion.

Discussion

Psychologists with no prior experience of delivering CISDs believed they were able to accommodate the CISD model within the short time span available mainly as a result of previous clinical training and experience. However, many felt that rapid accommodation did not necessarily translate into suitable application. It seems that lack of experience in dealing with group characteristics, rather than the contrast between crisis intervention and standard treatment approaches, made it distinct enough from standard clinical

practice to warrant the additional training recommended by Quevillon & Jacobs, (1993). Those with prior experience also found it difficult on occasions to deal with complex group dynamics but held the belief that CISDs did not, by necessity, have to be delivered by specially qualified and trained team members as suggested by Robinson & Mitchell (1993). A further study (with data from the recipients of the debrief) would be required to evaluate whether recipients were more likely to suffer negative consequences when debriefed by psychologists with no prior training, as proposed by Westernink (1996).

For each of the factors enquired into there was evidence that participants had encountered problems, with some being more frequent and difficult to overcome than others. Problems related to factors such as timing, environmental setting, the number of recipients present, the level of exposure, group heterogeneity, and absenteeism because of operational requirements could possibly be resolved at an organisational level when the debrief is arranged. For example, many of the CISDs delivered on the day of the incident failed to meet their objectives because recipients were still too traumatised or there were absenteeisms due to operational requirements. With the benefit of hindsight, the participants involved believed that their time could have been used more effectively used to organise appropriate timing, group size, heterogeneity, and settings.

With recipients who experienced a high level exposure it was suggested there may be a case for offering some form of shortened, simple debrief during the

12-48 hour stage with an extra, more detailed, debrief later. The aims of the early debrief would be to offer education and support, and obtain an insight into individual's raw cognitions and emotions before they became too filtered. It was suggested that a more didactic style of delivery could be employed at this time to assist in protecting vulnerable recipients from over-exposure. This sort of intervention would be more along the lines of the psychological first aid and educational debrief described by Gorton (1990).

Absenteeism is a well documented recurring problem with emergency services personnel (Dunning, 90). Some participants proposed that the prominence of absenteeism in group debriefs by individuals employed in supervisory positions could be attributed to anxiety about expressing emotions in front of supervisees and therefore avoidance ensued. A group debrief with other supervisors was suggested as one possible solution to this problem.

Lack of group cohesion, dominant heads of staff, and anti 'talk-therapy' attitudes were amongst the most difficult obstacles to overcome. This is consistent with the findings of Dyregov's (1997) review of process factors adversely impacting on CISDs. Even with the best of planning there is always the possibility that such factors could arise during CISDs. It is in areas such as this where training in techniques designed to deal with group dynamics may have increased the likelihood that the debrief's aims would have been met.

Finally, it is difficult to draw any conclusions as regards the suitability of the debriefs to meet the needs of the recipients solely on the basis of

psychologist's perspectives. Generally speaking, participants believed that CISD was a suitable method for reducing the impact of the traumatic event, however, limited post-incident interventions such as this may require follow-up sessions to assess whether or not workers continue to experience trauma-related difficulties.

Recommendations

1. In the absence of specialised teams, it may be suitable to deploy locally-based clinical psychologists to deliver CISDs after major incidents. Generic clinical experience and training facilitates rapid accommodation of the model but further training is required to deal successfully with complex group processes. Most participants in this project believed one full day of CISD training per year would suffice.
2. At an organisational level, plans should identify suitable settings and describe practices likely to facilitate successful debriefing (e.g., timing, group size, heterogeneity of exposure level).
3. Arrangements should also include follow-up assessment to establish whether or not workers continue to experience trauma-related difficulties.

Table 1

	< 24 hrs	>24 < 72 hrs	>72hrs < 9 days	>7days
1:1 debriefs	5	14	6	6
1:2 debriefs	1	3	2	0
Group of >2<10	2	13	7	0
Groups of >10	0	3	3	2
Follow-up groups	0	0	3	2

Table 1: Distribution of CISDs by length of time elapsed since incident by type of debrief (range= 3 hours - 4 months) and number of recipients present.

Table 2

	very experienced	experienced	average	inexperienced	very inexperienced
PTSD	2	4	4	2	0
Bereavement	3	4	4	1	0
Any CISD	0	1	1	4	6
This CISD	0	1	0	2	9

Table 1- Psychologist's self-ratings of experience in dealing with PTSD, bereavement, and delivering CISD's prior to the critical incident.

Table 3

	No difficulty	overcame difficulty	couldn't overcome difficulty
Time elapsed since critical incident	25 %	58 %	42 %
Setting for the CISD	42 %	33 %	42 %
High or Low Number of Recipients at CISD	16 %	33 %	66 %
High Level of exposure to traumatic events	42 %	50 %	42 %
Employment Background of Recipients	58 %	25 %	25 %
Absenteeism from CISD	50 %	16 %	33 %
Lack of Group Cohesion	42%	16%	42%
Hierarchical Group Structure	50 %	16 %	33 %
Lack of Group Heterogeneity	42 %	16 %	42 %

Table 3 - Psychologists estimates of success in overcoming specific process factors effecting delivery of a CISD.). ***N.B. In some cases responses total more than 100%, this is due to an individual reporting a range of experiences across different debriefs.***

Bibliography

Dunning, C. (1990). Mental Health Sequelae in Disaster Workers: Prevention and Intervention. *International Journal Of Mental Health, 19 (2)*, 91-103.

Dyregov, A. (1989). Caring for helpers in disaster situations: psychological debriefing. *Disaster Management, 2*, 25-30.

Dyregov, A. (1997). The Process in Psychological Debriefings. *Journal of Traumatic Stress, 10 (4)*,589-605.

Gorton, G. (1990). Psychological problems after disasters. In *'Psychological support for hospital staff initiated by Clinical Psychologists in the aftermath of the Hillsborough disaster'*, Shapiro, D. (Ed.) Sheffield Health Authority, 1990.

Kenardy, J. A., Webster, R. A., Lewing, T. J., Carr, V. J., Hazell, P. L. & Carter, G. L. (1996). Stress debriefing and patterns of recovery following a natural disaster. *Journal of Traumatic Stress, 9*, 374-379.

Mitchell, J. (1983). When disaster strikes. The critical incident stress debriefing process. *Journal Of Emergency Services, 1*, 36-39.

Mitchell, J.T. & Everly, G. S. (1993). *Critical Incident Stress debriefing: An operations manual for the prevention of traumatic stress among emergency services and disaster workers.* Ellicott City, MD:Chevron Publishing Company.

Raphael, B. (1986). *When Disaster Strikes: A Handbook for the Caring Professions.* Unwin Hyman, London.

Raphael, B., Meldrum, L. & McFarlane, A. C. (1995). Does debriefing after psychological trauma work? *British Medical Journal, 310,* 1479-1480.

Robinson, R. (1984). *Health and stress in ambulance services.* Social Biology Resources Centre, Melbourne.

Robinson, R.C. & Mitchell, J.T. (1993). Evaluation of Psychological Debriefings. *Journal of Traumatic Stress, 6 (3),* 367-382.

Quevillon, R.P. & Jacobs, G.A. (1993). Treatment issues in Mental Health Responses to disasters. In *'Innovations in Clinical Practice: A Source Book'* (pp) .

Westernink, J. (1996). *Lessons from History. What variables are important when providing a critical incident stress debriefing or evaluating its effectiveness.* Manly, NSW: Australian graduate School of Police Management, Charles Sturt University. Unpublished Manuscript.

Wolstenholme, J. (1991). Psychological Debriefing. *Prison Service Psychology Conference Proceedings 1991.*

Literature Review

Homework Compliance in Cognitive Behavioural Treatments for Depression

Prepared in accordance with guidelines for submission to the British Journal of Clinical Psychology (Appendix 2.1)

Homework Compliance in Cognitive Behavioural Treatments for Depression

Ewan Lundie

Trainee Clinical Psychologist

Department of Psychological Medicine

Academic Centre

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Abstract

Purpose This paper aims to review the literature in four areas related specifically to homework compliance in cognitive behavioural treatments for depression; the measurement of homework compliance, the effect of self-help assignments on treatment outcome, factors hypothesised to affect compliance with homework, and improving patient compliance with homework.

Method Studies were selected from the 'Psychlit' database (January 1978 - May 1998). Criteria for inclusion was theoretical and empirical evaluations of process-outcome issues in cognitive behavioural treatments for mood disorders with a specific emphasis on those dealing with homework compliance. There was no statistical analysis of the information gathered.

Conclusions A more fine grained approach to measurement is required incorporating therapist compliance with assigning homework, the quantity of compliance, and the quality of compliance. Whilst high levels of compliance is highly correlated with positive outcome the direction of causality is not known. Non-specific factors such as therapeutic empathy and motivation are positively correlated with both compliance and outcome, and, these factors may have a greater effect on outcome than homework. Recommendations for improving compliance have tended to centre on therapist's in-session behaviour, between-session behaviour-modification techniques such as a written prompt have been suggested on the basis of clinical experience but not systematically investigated.

Introduction

A number of psychological approaches to the treatment of depression have been used but it is only in the last 25 years that controlled evaluations comparing these different approaches have been carried out (Bradley 1994). The most comprehensively researched cognitive-behavioural treatment is Cognitive Therapy and there is a substantial body of empirical evidence to support its effectiveness in the treatment of, and prevention of relapse in, unipolar non-psychotic depression (Dobson,1994; Hollon & Beck, 94; Antonuccio, Danton & De Nelsky, 1995; Clark & Steer, 1996).

The active ingredient in cognitive therapy, and the mechanism underlying the change in mood, is hypothesised to be the patient's reduced belief in his negative automatic thoughts. The therapist's energies are accordingly directed towards that end. In theory, self-help assignments are considered to be a critical component of the active treatment, being accorded a causal role affecting outcome (Beck, Rush, Shaw & Emery, 1979; Rush, 1983; Beck & Young, 85). In practice, therapist recommended self-help assignments (homework) are a standard part of many cognitive-behavioural therapies for depression (Burns, Adams, & Anastopolous, 1985).

Whilst early, carefully conducted, outcome studies (Blackburn, Bishop, Glen, Whalley, & Christie, 1981; Kovacs, Rush, Beck, & Hollon, 1981; Rush, Beck, Kovacs & Hollon, 83; Murphy, Simons, Wetzel, & Lustman, 1984) provided evidence that cognitive therapy is an efficacious treatment for depression, they told us little about the active mechanisms of cognitive therapy (Persons & Burns, 1985). Despite the importance attached to homework, these studies had not investigated the extent to which homework was an active therapeutic ingredient. Commenting on studies from the same period Primakoff,

Epstein & Covi (1986) pointed out that some had made no explicit mention of homework monitoring (Blackburn et al, 1981; Murphy et al, 1984); some noted that homework was monitored clinically, but did not describe the collection of data on homework compliance (Rush, Beck, Kovacs & Hollon, 1977; Zeiss, Lewinson & Munoz, 1979); and others indicated that written data on homework compliance was collected but included no statistical control for this variable in data analysis (Antonuccio, Lewinsohn, & Steinmetz, 1982; McLean and Hakstian, 1979).

This paper aims to review the literature in four areas related specifically to homework compliance in cognitive behavioural treatments for depression; the measurement of homework compliance, the effect of self-help assignments on treatment outcome, factors hypothesised to affect compliance with homework, and improving patient compliance with homework.

Measurement of Compliance with Homework Assignments

Primakoff et al. (1986) stressed the need to develop a method of accurate measurement of compliance with homework in cognitive therapy for depression as a precursor to investigating its role in relation to outcome. In order to assess patient compliance meaningfully they recommended that three separate components be measured: therapist compliance with the assignment of homework, the degree (i.e. quantity) of homework compliance and the quality of homework compliance.

Therapist compliance with the assignment of homework: In order to assess patient compliance meaningfully, one must first assess therapist adherence to the homework assignment protocol. Levy (1984) investigated this issue by comparing therapist ratings

of compliance with independent ratings of audio-recordings and found a low correlation between therapists' memories of what they had assigned and what they had actually assigned. He concluded that therapists' self-reports regarding homework assigned do not necessarily represent valid data. Subsequently, attempts have been made to address this in some studies (Young, Beck, & Budenz,1983; Elkin, Parloff, Hadley & Autry, 1985). However, some disagreement still exists as to aspects of the homework assignment process which merit inclusion (Primakoff et al., 1989).

Degree and Quality of Compliance: In pharmacological research the quantity of medication prescribed is measurable and therefore comparable between patients (Paykel, 1995). Specificity of quantification and complexity of homework prescribed in cognitive behaviour therapy is not such a straightforward task. Shapiro & Startup (1990) classified assignments into eight major categories (e.g. increasing pleasure and mastery, recording thoughts, etc.) but acknowledged the limitations of this system. Each assignment places distinctly different demands on the patient and therefore may have different effects on compliance. Further, even if consistency in type and dosage under one of these categories were attained in assignment the idiosyncratic differences in each patients' personal circumstances surrounding treatment would render comparability in terms of 'difficulty to execute' impossible.

Primakoff et al. (86) made general recommendations for principles that should be applied to the measurement of quality of compliance. These involved a high degree of specificity in defining the requirements of each task and a generalised set of scale categories for assessing quality of compliance. As yet it seems no study has been conducted which has even measured quality yet alone applied these recommendations (Psychlit search 1/78 -

5/98). More recent studies have acknowledged and welcomed the recommendations without adhering to them (e.g. Leung and Heimberg, 1996). One possible explanation is that the pragmatics of research invariably hinders the implementation of such concepts.

Effect of Homework Compliance on Treatment Outcome

Early empirical studies investigating the relationship of homework compliance to outcome adopted the 'dismantling' methodology described by Kazdin (1989). With dismantling the effects of the full treatment package are compared with the effects of the same package without self-help assignments. Using this approach, Kornblith, Rehm, O'Hara, and Lamparski (1983) found that the inclusion of homework had no greater effect than comparable treatment without homework. A main criticism of this study is that subjects in the homework condition were rated as not having completed their assignments in 45% of sessions. Moreover, some subjects in the 'no-homework' group reported that they devised and implemented their own homework. This example highlights the difficulty in applying the dismantling strategy to homework - whilst it is possible to control whether or not therapists recommend it, it is not possible to control whether or not patients implement it. Using the same method in a study of group cognitive therapy for depression Neimeyer and Feixas (1990) found the homework condition contributed significantly to the prediction of improvement in therapist-rated depression at the end of treatment.

In light of the problems with dismantling, some investigators have preferred to adopt a more 'naturalistic' non-experimental approach in which the degree of compliance is correlated with outcome. Using this technique, Persons, Burns and Perloff (1988) and Burns and Nolen-Hoeksema (1991) found that their measures of compliance contributed

significantly to the prediction of successful treatment outcome. In both of these studies however compliance was assessed globally and retrospectively by the therapist, thus, good compliance may have reflected beneficial changes that had already occurred early in treatment.

In an attempt to establish the direction of causality between compliance and outcome Fennell and Teasdale (1987) assessed compliance early in treatment. They found that patient's compliance during the first two sessions of treatment predicted both immediate and long-term reductions in depression. However, this was not the original aim of the study and the analysis used was a retrospective bid to explain observed individual differences in responsiveness to cognitive therapy. Startup and Edmonds (1994) examined whether the results of Fennell and Teasdale could be replicated with a prospective design using a multi-modal treatment similar to Beck's cognitive therapy. In agreement with other studies (Persons et al., 1988, and Burns and Nolen-Hoeksema, 1991) they found that compliance throughout the course of treatment made a contribution to the prediction of Beck Depression Inventory scores (BDI) at the end of treatment which was independent of the initial BDI. Additionally, they found that outcome could be predicted from compliance following the first two sessions alone, thus supporting Fennell and Teasdale's (1987) suggestion that an early positive response to home work is related to post-treatment outcome.

These findings merely demonstrate a correlational - not causal - relationship between compliance with self-help assignments and outcome. There are no reported studies of experimental within-subject manipulation of homework using a naturalistic design.

Factors associated with homework compliance

Various factors have been associated with both poor compliance with self-help assignments and outcome. Freeman, Pretzer, Fleming and Simon, (1990) defined these under the headings of 'intra-patient factors' (e.g. history of substance abuse, schizophrenia, or personality disorder); 'demographic factors' (e.g. low socio-economic status or poor educational attainment); 'therapist factors' (e.g. level of experience and training); 'relationship factors' (e.g. living with an unsupportive or abusive partner); and 'process factors' (e.g. resistance, dependence, therapist's lack of specificity in delivering the homework assignments, demand characteristics).

The failure to delineate between compliance and outcome makes it somewhat difficult to tease out the elements linked positively to homework compliance which are not also implicated in outcome. Primakoff et al. (1986), raise the issue of a possible 'confounding third variable' that might be correlated with both compliance and outcome. Therapeutic empathy, learned resourcefulness, motivation, and 'depression about depression' are among the main factors implicated in the research so far.

Therapeutic Empathy: In cognitive therapy for depression the relationship between patient and therapist is stressed and is seen as important in applying the therapy (Beck et al., 1979). Genuineness, an attitude of concern for the patient's well being, and demonstrating an understanding of how the patient feels - and communicating this to the patient - are all viewed as necessary elements of a successful treatment package (Burns, 1996). In an extensive review of patient co-operation Orlinsky, Grawe & Parks (1994) report that approximately 69% of the findings drawn from 50 studies show significant associations of 'patient co-operation' with favourable outcome and patient resistance

with unfavourable outcomes. In response to some previously reported literature suggesting that general factors (such as the quality of the therapeutic relationship) may play a more important role in clinical improvement than do the specific factors that are unique to each type of treatment (Luborsky, McLellan, Woody, O'Brien & Auerbach, 1985; Stiles, Shapiro & Elliot, 1986) they argue that process-outcome research has in fact succeeded in documenting consistent differential aspects related to therapeutic operations. Burns and Nolen-Hoeksema (1992) investigated the role of therapeutic empathy by obtaining post-sessional ratings from 185 depressed outpatients. They found therapeutic empathy had a moderate-to-large effect on recovery from depression separate and additive to the effects of homework compliance. They drew the conclusion that the quality of the therapeutic relationship has a substantial impact on the extent of recovery - even in a highly technical intervention such as cognitive-behavioural therapy.

Motivation: A number of investigators have proposed that the motivation to engage in therapy is also an important predictor of outcome regardless of treatment type (e.g. Gomez Scwartz, 1978; Feinstein, 1979). This theory was supported by Epstein and Cluss (1982), on the basis of findings from studies of medical treatment, which indicated that adherence to placebo or active drug treatment was predictive of superior clinical outcome. Burns & Nolen-Hoeksema (1991) obtained pre-treatment measures of 'willingness to comply' from 307 consecutive outpatients seeking cognitive-behavioural therapy for depression and compared these with therapists ratings of compliance with homework and independent outcome measures. The 'willingness' factor was only marginally correlated with homework compliance, but more strongly correlated with decline in levels of depression. Regression analyses showed that this factor made additive and separate contributions to the degree of recovery. They also concluded that

'willingness' may be a general factor that predicts patient's responses to a variety of interventions.

Depression about depression: Teasdale (1985) proposed that, for some individuals, 'depression about depression' is a state where individuals are depressed because they can find no ready explanation for symptoms and so interpret them as signs of irremediable inadequacies. Further, he suggests that depression about depression is a major factor impeding spontaneous remission. Fennel and Teasdale (1987) found that their measure of this construct was unrelated to pre-treatment BDI score but correlated significantly with a measure of response to the first homework assignment, which consisted of reading about the cognitive model of depression. They propose that people who suffer from depression about depression respond well to the cognitive model because it promotes the idea that depression is understandable as a commonly occurring state that can be controlled by clearly specified strategies.

Learned Resourcefulness: Simons, Lustman, Wetzel and Murphy (1985) conducted a study to investigate whether depressed people who enter cognitive-behavioural treatments with a more active coping style may recover more rapidly than those with a ruminative coping style. At the outset they took a measure of 'learned resourcefulness' which they defined as the capacity to solve personal problems through active efforts. The subjects, 35 moderately depressed outpatients, were randomly assigned to 12 weeks of cognitive therapy or anti-depressant drug therapy. Although improvement did not differ as a function of the type of treatment received, initial scores on the learned resourcefulness measure were differentially correlated with the outcome in the two groups. Patients with high scores responded better to cognitive therapy, whereas those

with low scores responded better to pharmacotherapy. Contrary to this Burns & Nolen-Hoeksema (1991) instead found that individual differences in the frequency with which patients used active coping strategies before the beginning of treatment were not correlated with subsequent compliance with homework assignments or with the degree of recovery.

Enhancement Methods

Suggestions for improving compliance with self-help assignments in the cognitive-behavioural treatment of depression have tended to centre on therapist characteristics or techniques that may elicit greater homework compliance (Burns & Auerbach, 1992). The most common recommendations include making the tasks simple, describing them clearly with cogent rationales, involving the clients in setting the tasks, and anticipating the problems the clients might encounter (Luciano & Herruzo, 1982; Kanfer, 1980). Burns (in Burns & Auerbach, 1992) describes the practice of sending all prospective patients a detailed memo prior to the first treatment session. This 'memo' emphasises the importance of self-help assignments between sessions, explains the rationale behind homework, and, outlines the types of assignments patients may be asked to complete. His clinical impression over seven years of implementation was that it had a significant effect in reducing problems with homework compliance. Primakoff et al. (1986) also recommend that patients be given written instructions regarding homework. These include precise instructions of the requirements of each assignment after every session e.g., "Complete the first three columns of the Daily Record of Dysfunctional Thoughts on a daily basis. Record a minimum of ten situations, emotions, and automatic thoughts during the next week." (Primakoff et al., 1986, pp.441). Despite the face validity of

many of the intra-session and between-session strategies recommended it appears there has been no systematic evaluation of their efficacy to date.

Concluding Comments

Recently, a focus on treatment adherence in clinical research has highlighted the extent to which error variance is present in many treatment outcome studies (Kazdin, 1994). Advanced level methods allow investigators to move beyond treatment integrity questions, i.e. "did the therapy occur as intended", and towards treatment process questions, i.e., "what exactly occurred within and between sessions" (Yeaton & Seacrest, 1981). If research is to elucidate the efficacious role, if any, of self-help assignments in cognitive-behavioural treatments for depression then more fine grained methods of measurement have to be employed.

We cannot yet say that homework compliance actually leads to clinical improvement since it is equally possible that clinical improvement motivates patients to complete homework assignments (Burns & Auerbach, 1992). Further studies will be needed to assess the causal links between homework compliance and clinical outcome. Such studies must also take into account possible confounding variables such as 'therapeutic empathy', 'patient willingness', 'depression about depression', and 'learned helplessness'.

The main purpose of homework is to consolidate the gains made in treatment (Primakoff et al., 1986; Fennell, 1995). As such, the cognitive-behavioural approach embodies a significant educational component in which patients are expected to generalise the concepts introduced in the consulting room to their natural environment. However, common symptoms of depression such as apathy, fatigue, and poor concentration and

memory will adversely effect an individuals ability to learn (Williams, 1996). Despite this, therapists typically give nothing in the way of assistance between sessions.

Operant conditioning techniques such as prompting have been effectively used in the clinical domain for some time (Kazdin, 1989) and letter prompts have previously been shown to be effective in improving attendance rates (Kendall & Hailley, 93; Swenson & Parik, 1988; Bartel, Pessione, Bouvier & Rueff, 1995; Kournay, Garber & Tornusciolo, 1990). A systematic investigation of the effectiveness of letter prompts in improving compliance with homework (in line with the strategies described by Burns and Auerbach (1992) and Primakoff et al., (1986)) is recommended.

Bibliography

Antonuccio, D. O., Lewinsohn, P. M. & Steinmetz, J. L. (1982). Identification of therapist differences in a group therapy for depression. *Journal of Consulting and Clinical Psychology, **50**,* pp 433-435.

Antonuccio, D.O., Danton, W. G. & DeNelsky, G.Y. (1995). Psychotherapy versus medication for depression: challenging the conventional wisdom with data. *Professional Psychology: Research and Practice, **26(6)**,* pp 574-585.

Bartel, P., Pessione, F., Bouvier, A.M. & Rueff, B. (1995). Prompting alcoholics to be referred to an alcohol clinic: the effectiveness of a simple letter. *Addiction, **90**,* pp 811-814.

Beck, A.T., Rush, A.J., Shaw, B.F. & Emery, G. (1979). *Cognitive Therapy of Depression.* New York: Guildford Press.

Beck, A.T. & Young, J. E. (1985). *Depression.* In D.H. Barlow (Ed). *Clinical Handbook of Psychological Disorders* (pp. 206-244) New York, Guildford Press.

Blackburn, I. M., Bishop, S., Glen, A. I. M., Whalley, G. J. & Christie, P. J. (1981). Efficacy of Cognitive Therapy and Pharmacotherapy, each alone and in combination. *British Journal of Psychiatry, **139**,* pp 181-189.

Bradley, B. P. (1994). *Depression treatment.* In Lindsay, S. J. E. & Powell, G. E. (Eds) *The Handbook of Clinical Adult Psychology,* (pp. 110-143). Routledge: London.

Burns, D.D. (1996). Therapeutic Empathy in Cognitive-Behavioural Therapy: Does it Really Make a Difference? In P. Salkovskis (Ed) *Frontiers of Cognitive Therapy*, (pp. 135-164). Guildford Press: New York.

Burns, D.D., Adams, R.L. & Anastopoulos, A.D. (1985). The role of self-help assignments in the treatment of depression. In E.E. Beckham & W.R. Leber (Eds), *Handbook of depression: Treatment, assessment and research.* (pp 634-668). Homewood, IL: Dorsey Press.

Burns, D.D. & Nolen-Hoksema S. (1991). Coping styles, homework compliance and the effectiveness of cognitive-behavioural therapy. *Journal of Consulting and Clinical Psychology, **59(2)**,* pp 305-311.

Burns, D.D. & Nolen-Hoksema S. (1992). Therapeutic Empathy and recovery from depression in cognitive-behavioural therapy: a structural equational model. *Journal of Consulting and Clinical Psychology, **60(3)**,* pp 441-449.

Burns, D.D. & Auerbach, A. H. (1992). Does Homework Compliance enhance recovery from depression? *Psychiatric Annals, **22(9)**,* pp 465-469.

Clark, D.A. & Steer, R.A. (1996). Empirical Status of the cognitive model of anxiety and depression. In P. Salkovskis (Ed) *Frontiers of Cognitive Therapy*, (pp.75-96). Guildford Press: New York.

Dobson, K.S. (1994). Innovation in cognitive-behavioural therapy for depression. Work-shop presented to the college of New Brunswick Psychologists, Saint John, New Brunswick, Canada.

Elkin, I., Parloff, M. B., Hadley, S. W. & Autry, J. H. (1985). NIMH Treatment of Depression Collaborative Research Programme. *Archives of General Psychiatry, **42**,* pp 305-316.

Epstein, L. H. & Clusss, P. A. (1982). A behavioural medicine perspective to adherence to long-term medical regimes. *Journal of Consulting and Clinical Psychology, **50**,* pp 950-971.

Feinstein, A. R. (1979). 'Compliance Bias' and the interpretation of therapeutic trials. In R.B. Haynes, D. W. Taylor & D. L. Sackett (Eds), *Compliance in Healthcare* (pp. 309-322). Baltimore, Maryland: John Hopkins Press.

Fennel, M. J. & Teasdale, J. D. (1987). Cognitive Therapy for depression: Individual differences and the process of change. *Cognitive Therapy and Research, **11**,* pp 253-271.

Fennel, M. J. (1995). In *Cognitive Behaviour Therapy for Psychiatric Problems.* Hawton, K., Salkovkis, P., Kirk, J. & Clark, D. (Eds), (pp. 169-234): Oxford University Press.

Freeman, A., Pretzer, J., Fleming, B., & Simon, K. M. (1990). *Clinical Applications of Cognitive Therapy.* New York: Plenum.

Gomez-Schwarz, B. (1978). Effective ingredients in psychotherapy: predictions of outcome from process variables. *Journal of Consulting and Clinical Psychology, **46,*** pp 1023-1035.

Hollon, S.D. & Beck, A.T. (1994). Cognitive and Cognitive Behavioural therapies. In S. L. Garfield and A. E. Bergin (Eds), *Handbook of psychotherapy and behaviour change* (pp. 428-466). New York: Wiley.

Kanfer, F. H. (1980). *Self-management methods.* In F. H. Kanfer & A. P. Goldstein (Eds), *Helping people Change.* (pp. 334-389). New York: Pergamon Press.

Kazdin, A. E. (1989). *Behaviour Modification in Applied Settings.*(4th Edition). Brookes-Cole: California.

Kazdin, A. E. & Bass, D. (1989). Power to detect differences between alternative treatments in comparative psychotherapy and outcome research. *Journal of Consulting and Clinical Psychology, **57,*** 138-147.

Kazdin, A. E. (1994). Methodology, design and evaluation, in psychotherapy research. In A. Bergin & S. Garfield (Eds), *Handbook of psychotherapy and behaviour change* (4th edition, pp. 143-189). New York: John Wiley.

Kendall, C. & Hailley, B. J. (1993). The relative effectiveness of three reminder letters on making and keeping mammogram appointments. *Behavioral Medicine, **19(1)**,* pp 29-34.

Kornblith, S. J., Rehm, L. P., O'Hara, M. W. & Lamparski, D. M. (1983) The contribution of self-reinforcement training and behavioral assignments to the efficacy of self-control therapy for depression. *Cognitive Therapy and Research, 7,* pp 499-528.

Kournay, R.F.C., Garber, J. & Tornusciolo, G. (1990) Improving first appointment attendance rates in child psychiatry outpatient clinics. *Journal of American Academy of Child and Adolescent Psychiatry, **29 (4)**,* pp 657-660.

Kovacs, M., Rush, A. J., Beck, A. T. & Hollon, S. D. (1981). Depressed outpatients treated with cognitive therapy or pharmacotherapy. *Archives of General Psychiatry, **38**,* pp 33-41.

Leung, A.W. & Heimberg, R.G. (1996) Homework compliance, perceptions of control and outcome of cognitive -behavioral treatment of social phobia. *Behaviour Research and Therapy, 34, 5,* pp 423-432.

Levy, R. L., (1984). Therapist-recorded and audiotaped-coded client homework assignments. *The Behaviour Therapist, 7,* p 122.

Luborsky, L., McLellan, T., Woody, G., O'Brien, C. & Auerbach, A., (1985). *Therapist success and its determinants.* Archives of General Psychiatry, *37*, pp 471-481.

Luciano, M., C. & Herruzo, J. (1992). *Some relevant components of adherence behaviour.* Journal of Behaviour Therapy and Experimental Psychiatry, ***23(2)***, pp 117-124.

Mclean, P. D. & Hakstian, A. R. (1979). *Clinical Depression: comparative efficacy of outpatient treatments.* Journal of Consulting and Clinical Psychology, ***47***, pp 818-836.

Murphy, G. E., Simons, A. D., Wetzel, R. D. & Lustman P. J. (1984). *Cognitive Therapy and Pharmacotherapy: Singly and together in the treatment of depression.* Archives of General Psychiatry, ***41***, pp 33-41.

Neimeyer, R.A. & Feixas, G. (1990). The role of homework and skill acquisition in the outcome of group Cognitive Therapy for depression. *Behaviour Therapy, **21**,* pp 281-292.

Orlinsky, D. E. , Grawe, K. & Parks, B. K. (1994). Process and outcome in psychotherapy - noch einmal. In S. L. Garfield and A. E. Bergin (Eds), *Handbook of psychotherapy and behaviour change* (pp. 270-376). New York: Wiley.

Paykel, E. S., (1995). Psychotherapy, Medication Combinations, and Compliance. *Journal of Clinical Psychiatry, **56(1)**,* pp 24-30.

Persons, J. B. & Burns, D. D. (1985). Mechanisms of action of cognitive therapy: the relative contributions of technical and interpersonal interventions. *Cognitive Therapy and Research, **9(5)**,* pp 539-551.

Persons, J. B., Burns, D. D. & Perloff, J. M. (1988). Predictors of Dropout and Outcome in cognitive therapy for depression in a private practice setting. *Cognitive Therapy and Research, **12(6)**,* pp 557-575.

Primakoff, L., Epstein, N. & Covi, L. (1986). Homework compliance: an uncontrolled variable in cognitive therapy outcome research. *Behaviour Therapy, **17**,* pp 443-446.

Rush, A. J., Beck, A. T., Kovacs, M. & Hollon, S. (1983). Comparative efficacy of Cognitive Therapy and pharmacotherapy in the treatment of depressed outpatients. *Cognitive Therapy and Research, **1**,* pp 17-37.

Rush, A. J. (1983). Cognitive Therapy for Depression. In M. Zales (Ed), *Affective and Schizophrenic Disorders* (pp. 178-206). New York: Brunner/Mazel.

Rush, A. J., Beck, A.T., Kovacs, M. & Hollon, S. D. (1977). Comparative efficacy of Cognitive Therapy and pharmacotherapy in the treatment of depressed outpatients. *Cognitive Therapy and Research, **1**,* pp 17-37.

Shapiro, D. A. & Startup, M. (1990). *Raters Manual for the Sheffield Psychotherapy Rating Scale (Memo 1154).* Sheffield, U.K.: University of Sheffield.

Simons, A. D., Lustman, P. J., Wetzel, R. D. & Murphy, G. E. (1985). Predicting response to cognitive therapy: the role of learned resourcefulness. *Cognitive Therapy and Research, **9***, pp 79-89.

Startup, M. & Edmonds, J. (1994). Compliance with homework assignments in cognitive-behavioural psychotherapy for depression: Relation to outcome and methods of enhancement. *Cognitive Therapy and Research, **18(6)***, pp 567-579.

Stiles, W. B., Shapiro D. A. & Elliot, R. (1986). "Are all psychotherapies equivalent?" *American Psychologist, **41***, pp 165-180.

Swenson, T. R. & Parik, G (1988). Interventions for reduced missed initial appointments at a Community Health Centre. *Community Mental Health Journal, **24(3)***, pp 205-218.

Teasdale, J. D. (1985). Psychological Treatments for depression: How do they work? *Behaviour Research and Therapy, **23***, pp 157-165.

Williams, J. M. G. (1996). Memory Processes in Psychotherapy. In P. Salkovskis (Ed) *Frontiers of Cognitive Therapy*, (pp.97-113). Guildford Press: New York.

Yeaton, W. H. & Sechrest, L. (!981). Critical dimensions in the choice and maintenance of successful treatments: Strength, integrity and effectiveness. *Journal of Consulting and Clinical Psychology, **49**,* pp 156-167.

Young, J., Beck, A.T. & Budenz, D. (1983). *Assessment of competence in cognitive behaviour therapy*. Unpublished manuscript, University of Pennsylvania.

Zeiss, A. M., Lewinsohn, P. M. & Munoz, R. F. (1979). Non-specific improvement effects in depression using interpersonal skills training, pleasant activity schedules or cognitive training. *Journal of Consulting and Clinical Psychology, **47**,* pp 427-439.

Major Research Project Ethics Proposal

The Effect of Written Prompts on Homework Compliance and Outcome in a Cognitive Behavioural Treatment for Depression

Prepared in accordance with guidelines for submission to the Greater Glasgow Community and Mental Health services NHS Trust (Appendix 3.1)

GREATER GLASGOW COMMUNITY AND MENTAL HEALTH SERVICES NHS TRUST

APPLICATION FORM FOR ETHICAL APPROVAL

---

1. **Name and status of proposer:** Ewan Lundie, Trainee Clinical Psychologist.

   Supervisor: Paul Fleming, Clinical Psychologist.

---

2. **Address for correspondence:** Department of Psychological Medicine,
   Academic Centre,
   Gartnavel Royal Hospital,
   1055 Great Western Road,
   Glasgow G12 OXH.

---

3. **Employing authority:** Greater Glasgow Community and Mental Health Services NHS Trust.

---

4. **In which hospital(s) or other location will the study be undertaken:**

NHS Adult Mental Health Clinic, Glasgow.

5. **Title of project:** "The Effect Of Written Prompts on Compliance with Homework and Outcome in a Cognitive-Behavioural Treatment for Depression."

---

6. **Has the proposed research been approved by any other committee on ethics? (Give details):** No.

---

7. Has the proposed, or similar, research been carried out in any other centre? (Give details)

Some related research on the effects of written prompts on attendance rates in both the UK and USA. However, nothing identical in terms of treatment, client group or specificity of prompting technique.

---

8. Please give a summary of the project, including the question to be answered, the procedures to be used, the measurements to be made and how the data will be analysed (please see question 15 for recording details of how consent is to be obtained):

Summary

Early theoretical proponents of cognitive behaviour therapy for depression stressed the importance of patients completing self-help assignments between sessions. Subsequent research confirmed that high rates of compliance were positively correlated with good outcome. However, there was only evidence to support correlation - and not causality - in the homework-outcome relationship. The purpose of this project is to use a simple behaviour modification technique - written prompts between sessions - in an attempt to improve compliance with treatment and elucidate the relationship between homework completion and treatment outcome.

Hypotheses

1. Between-session written prompts will increase compliance with homework assignments in a cognitive behaviour therapy intervention for depressed patients independent of the effects of 'therapeutic empathy' and 'participant willingness'.

2. Between-session written prompts will improve the overall outcome effects of a cognitive behaviour therapy intervention for depressed patients independent of the effects of 'therapeutic empathy' and 'patient-willingness'.

Procedure

After assessment patients will commence a manualized 12 session cognitive-behavioural treatment programme similar to Beck's cognitive therapy (Beck et al, 1979). Patients will serve as their own controls and at the outset they will be assigned to a phasing pattern which will alter during treatment. In the control phase they shall receive no between-session written prompt, in the experimental phase they shall. Regardless of experimental phase status, the therapeutic process shall follow its normal course with the therapist issuing a self-help assignment ('homework') at the end of each session.

When the session is over the therapist shall compile a brief personalised written prompt containing the details of the homework assigned, placing it in the context of the foregoing session. The therapist shall be blind as to the phase pattern each participant is in (to reduce the possibility of bias when completing ratings of homework compliance). When patients are in 'control phase' shall have their message confidentially disposed of by a research assistant. When they are in the 'experimental phase' the research assistant shall send the message to them by first class post the following morning.

Measures

On a session to session basis, the patient shall be required to complete a self-administered 26 item questionnaire prior to the commencement of each session. This shall contain statements related to 'willingness to comply', 'therapeutic empathy' and personal measures of outcome. Additionally the therapist shall administer the Beck Depression Inventory and Hamilton Depression Rating Scale (hereafter referred to as BDI-II and HDRS respectively) every third session.

The therapist shall complete a set of ratings for each session (quality and quantity of compliance; therapist compliance with the assignment of homework and the type and quantity of homework assigned).

Each session shall be recorded on audio-tape. An independent rater experienced in delivering cognitive-behaviour therapy for depression shall complete a rating scale (similar to the one used by the therapist) with a randomised 20% sample of treatment sessions. The same rater shall also rate therapist adherence to treatment protocol.

Data Analysis

Please see response to question 14.

9. Please state whether there are any expected benefits to patient care and, if so, summarise:

Increased impact of intervention.

---

10. Please state the likely duration (a) of the project itself and (b) for individual patients:

(a) 26 weeks.

(b) 12-14 weeks.

---

11. Please state who will have access to the data and what steps will be taken to keep data confidential:

1. Ewan Lundie, Trainee Clinical Psychologist.

2. Paul Fleming, Clinical Psychologist.

Questionnaires will not contain the name of the patient, instead a coded identification number shall be used. Questionnaires and audio-tapes will initially be stored in a locked filing cabinet at locus for treatment. After completion of treatment this data will be transferred for analysis to the Psychology Department, Academic Centre, Gartnavel Royal Hospital where, once again, it will be stored in a locked filing cabinet. After statistical analysis has been conducted the audio-tapes and questionnaires will be destroyed.

12. Please give details of how consent is to be obtained. A copy of the proposed consent form, along with a separate patient information sheet, written in simple, non-technical language, must be attached to this proposal form.

After assessment, and prior to the commencement of treatment, patients shall be informed verbally about the research project and be invited to participate in it. Additionally they shall be given a patient information sheet (copy attached) containing the same information. If willing to participate the patient shall be asked to read over and sign the consent form prior to commencement of the first treatment session.

---

13. Is the power of the study sufficient to answer the question that is being asked? Please indicate the calculations used for the required sample size, including any assumptions you may have made. (If in doubt, please obtain statistical advice).

The small total sample size chosen was selected in the context of historical and contemporary research literature reflecting appropriate sample sizes for use in such single-subject-series intensive repeated-measures designs.

---

14. What statistical tests will you apply to your results? Please give details of proposed methods:

Given that the test selected ought to be chosen with sensitivity to the eventual data we cannot, at the outset, nominate a definitive choice. Despite this, we have already discussed the following as potential options, dependent on the data collected:

(i) t-tests,

(ii) interrupted time-series analysis,

(iii) ordinal pattern analysis.

15. Scientific background to study (give a brief account of relevant research in this area with references):

In cognitive therapy for depression homework assignments are considered to be a critical component of treatment (Beck et al, 1979). Patients vary greatly as to compliance but research has shown that compliers improve more than abstainers (Burns & Nolen-Hokesema, 1991). However, there is debate as to whether homework compliance has a significant causal role. Most published studies demonstrating the efficacy of cognitive treatments claim that homework was assigned and monitored clinically, but, no statistical analysis of the relationship between quantity and quality of homework to outcome was made (Primakoff et al, 1986; Kazdin, 1994). Subsequently others have shown that homework compliance has a separate - less significant - causal effect when compared with therapeutic empathy (Burns & Nolen-Hokesama, 1992). Moreover it has been suggested that some unmeasured variable, such as 'patient-willingness', may be the cause of clinical recovery (Gomez-Schwartz, 1978). A simple behaviour modification technique - the use of written prompts - has been used effectively in other areas of mental health to improve attendance rates (Swenson & Parik, 1988; Kournay, Garber & Tournusciolo, 1990; Kendall & Hailley, 1993; Bartel, Pessione, Bouvier & Rueff, 1995). However there are no reports of investigations into its effectiveness in improving compliance with homework in cognitive-behavioural treatments.

References

Beck, A.T., Rush, A.J., Shaw, B.F. & Emery, G. (1979). *Cognitive Therapy of Depression.* New York: Guildford Press.

Bartel, P., Pessione, F., Bouvier, A.M. & Rueff, B. (1995). Prompting alcoholics to be referred to an alcohol clinic: the effectiveness of a simple letter. *Addiction, 90,* pp 811-814: pp 441-449.

Burns, D.D. & Nolen-Hokesema S. (1991). Coping styles, homework compliance, and the effectiveness of cognitive behaviour therapy. *Journal of Consulting and Clinical Psychology, 59(2),* pp 305-311.

Burns, D.D. & Nolen-Hokesema S. (1992). Therapeutic empathy and recovery from depression in cognitive-behavioural therapy: a structural equational model. *Journal of Consulting and Clinical Psychology, 60(3),* pp 441-449.

Gomez-Schwarz, B. (1978). Effective ingredients in psychotherapy: predictions of outcome from process variables. *Journal of Consulting and Clinical Psychology, 46,* pp 1023-1035.

Kazdin, A.E. (1994). Methodology, design and evaluation in psychotherapy research. In A. E. Bergin and S. Garfield (Eds), *'Handbook of psychotherapy and behaviour change'* (4th ed.), pp. 19-71. New York: John Wiley.

Kournay, R.F.C., Garber, J. & Tournusciolo, G. (1990) Improving first appointment attendance rates in child psychiatry outpatient clinics. *Journal of American Academy of Child and Adolescent Psychiatry, 29 (4),* pp 657-660.

Primakoff, L., Epstein, N. & Covi, L. (1986). *Homework compliance: an uncontrolled variable in cognitive therapy outcome research.* Behaviour Therapy, 17, 443-446.

Swenson, T. R. & Parik, G. (1988). Interventions for reduced missed initial appointments at a Community Health Centre. *Community Mental Health Journal, 24(3),* pp 205-218.

16. Does the research involve additional invasive procedures over and above the normal treatment of the patient? If so, are there any hazards associated with the procedure?

Yes, but no hazards.

---

17. Please state any other potential hazards to participants arising from the research, their estimated probability (if possible) and the precautions to be taken to meet them:

Confidentiality of information - the participants shall be asked to nominate an address where they are confident that there is little or no risk of unauthorised individuals reading the letters. Also, each prompting letter and its envelope shall be marked 'private and confidential'. The wording of the prompt shall be couched in general terms designed to minimise the confidential information contained. For example, "At the last session we discussed the role of negative thoughts in depression - in preparation for the next session keep a record of any negative thoughts you have and their effect on your mood and behaviour."

---

18. Please describe any procedures which may cause discomfort or distress to participants, the degree of discomfort or distress entailed and their estimated probability:

Between session written prompts - these may remind participants of the emotive content of therapy sessions. The degree of discomfort should not necessarily be over and above what would normally be expected. However, the probability of such an event is increased as the prompt may succeed (as is intended) in encouraging them to tackle an emotionally difficult task which they may otherwise avoid.

19. Who are the proposed participants in the research (and controls if appropriate), and how are they to be selected? Please give details of age, sex, numbers involved and any other relevant details:

Participants in the research shall be outpatients referred to community based clinical psychology services for depression. They shall be aged between 18-65 and assessed at clinical interview to establish a diagnosis of uni-polar major depression using the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1997). They must have at least a basic level of literacy and score at or above 'mildly depressed' (i.e. >13) on the Beck Depression Inventory. No exclusion to be made on grounds of gender or concomitant psychopharmacological treatments. Exclusion criteria to include current substance abuse and the personality disordered. It is hoped that approximately 8-10 individuals will take part, each serving as his or her own control under the alternating phase pattern.

---

20. Are questionnaires to be used? If yes, a copy must be attached to this application form.

1. *Patient's Questionnaire:*

Section A - Patient's self-rating of 'Willingness to Comply' with treatment protocol (visual analogue scales developed for this project and adapted from the Self Help Inventory measures devised by Burns, Shaw & Crocker, 1987).

Section B - Patient's self-rating of 'Therapeutic Empathy' (visual analogue scales developed for this project and adapted from the Empathy Scale devised by Persons & Burns, 1985).

Section C - Patient's self-rating of outcome (visual analogue scale developed for this project, covering three target areas specific to each individual and a global measure).

2. *Therapist's Questionnaire:*

Section A - Classification of type and quantity of homework assigned (categories adapted from the Sheffield Psychotherapy Rating Scale; Shapiro & Startup, 1990).

Section B - Therapist's self-rating of compliance with the assignment of homework (categories adapted from Cognitive Therapy Rating Scale; Young, Beck, & Budenz, 1983).

Section C - Therapist ratings of quantity of homework compliance (developed for this project, categories adapted from recommendations made by Primakoff, Epstein & Covi, 1986).

Section D - Therapist ratings of quality of homework compliance (developed for this project, categories adapted from recommendations made by Primakoff, Epstein & Covi, 1986).

3. *Independent Rater's Questionnaire:* Identical format to therapist's questionnaire at '3' above (sections A - D), except that ratings are completed by an independent rater (a qualified clinical psychologist).

4. *Beck's Depression Inventory* (B.D.I.-II; Beck et al, 1996 - patient's self-rating of the symptoms of depression).

5. *Hamilton's Depression Rating Scale* (H.D.R.S.; Hamilton, 1960 - therapist rating of the symptoms of depression).

A copy of each instrument is attached.

---

21. How is the project to be funded?

No external funding required. Instruments to be used will be donated by the site where patients are to be assessed and treated.

22. Please state any 'interests', ie. profit, personal or departmental, financial or otherwise, relating to the study. Details of payments per patient recruited, and/or any other remuneration details must be included. Not applicable.

---

23. Will the research have revenue consequences for the NHS? No.

---

24. Please attach other relevant material: for instance, letters to subjects (which must be in simple non-technical language). Copies attached.

The information supplied above is to the best of my knowledge and belief accurate. I have read the notes to investigators and clearly understand my obligations and the rights of the subject, particularly in so far as to obtaining freely given informed consent. I also confirm that I have read and understood *"The Declaration of Helsinki."*

Date of Submission: .....

Signature of Principal Investigator: .....

Major Project

The Effect of Written Prompts on Homework Compliance in a Cognitive Behavioural Treatment for Depression

Prepared in accordance with guidelines for submission to the British Journal of Clinical Psychology (Appendix 4.1)

The Effect of Written Prompts on Homework Compliance in a Cognitive Behavioural Treatment for Depression

Ewan Lundie

Trainee Clinical Psychologist

Department of Psychological Medicine

Academic Centre

Gartnavel Royal Hospital

1055 Great Western Road

Glasgow G12 0XH

Abstract

Objectives To test whether between-session written prompts would increase quantity and quality of compliance with homework assignments and improve the overall outcome effects in a cognitive behavioural treatment (CBT) for depression, independent of the effects of therapeutic empathy and motivation.

Design A single-subject-series repeated-measures design was used as this was considered to be the most effective way to investigate the hypotheses with the small *n* involved. The intervention was introduced using a multiple baseline across participants.

Methods Participants were seven outpatients referred to a community clinical psychology service. Assessment with The Structured Clinical Interview (SCID-IV) indicated that all were suffering from recurrent uni-polar depression. They were treated using CBT. The independent variable was the prompting letter. The dependent variables were therapist ratings of homework compliance and outcome (Hamilton Depressive Rating Scales) and patient self-ratings of motivation, therapeutic empathy, and outcome (including Beck Depression Inventory-II).

Results Prompting appeared to improve the quantity of compliance but not the quality. There was no clear indication that prompts were effective in improving outcome. Increases in quantity of compliance seemed to have a close association with increases in motivation. No such association was found with therapeutic empathy.

Conclusions Written prompts are an effective way of improving quantity of compliance with homework. This simple cost-effective method could improve the efficacy of various psychological and non-psychological treatments where non-compliance is an issue.

Introduction

In theory, self-help assignments are considered to be a critical component of cognitive behavioural treatments for depression, being accorded a causal role affecting outcome (Beck, Rush, Shaw & Emery, 1979). In practice, homework is a standard part of many cognitive-behavioural therapies for depression (Burns, Adams, & Anastopolous, 1985). Whilst early, carefully conducted, outcome studies provided evidence that cognitive therapy was an efficacious treatment for depression they had not investigated the extent to which homework was an active therapeutic ingredient (Persons & Burns, 1985; Primakoff, Epstein & Covi, 1986).

Primakoff et al. (1986) stressed the need to develop a method of accurate measurement of compliance with homework as a precursor to investigating its role in relation to outcome. They recommended that three separate components be measured: therapist compliance with the assignment of homework, the degree (i.e. quantity) of homework compliance, and the quality of homework compliance (see Lundie, 1998, (unpublished manuscript) for a review). Whilst recent studies have adopted some of the recommendations re therapist compliance with the assignment of homework and quantity of homework compliance, there are no reports of quality of compliance being measured in the current research literature.

Empirical studies have found that greater compliance is significantly correlated with positive outcome. The most informative studies adopted a 'naturalistic' non-experimental approach. However, findings merely demonstrated a correlational - not unequivocally causal - relationship between homework compliance and outcome, and, it is equally possible that clinical improvement motivated participants to complete homework assignments (see Lundie, 1998, (unpublished manuscript) for a review).

Factors such as low socio-economic status, therapist inexperience, and patient resistance have been associated with poor compliance with self-help assignments and negative outcome (Freeman, Pretzer, Fleming and Simon, 1990). Factors that might be positively correlated with both compliance and outcome include therapeutic empathy (Orlinsky, Grawe, & Parks, 1994; Burns, 1996), motivation (Gomez-Schwarz, 1978), and 'depression about depression' (Teasdale, 1985), (see Lundie, 1998, (unpublished manuscript) for a review).

Suggestions for improving compliance with self-help assignments in the cognitive-behavioural treatment of depression have tended to centre on therapist characteristics or techniques that may elicit greater homework compliance (Burns & Auerbach, 1992). Burns (in Burns & Auerbach, 1992) also describes the practice of sending all prospective patients a detailed 'memo' prior to the first treatment session which emphasises the importance of self-help assignments, explains the rationale behind homework, and outlines the types of assignments patients may be asked to complete. His clinical impression was that it had a significant effect in reducing problems with homework compliance. Primakoff et al. (1986) recommended that patients be given precise written instructions detailing the requirements of each assignment after every session. Despite the face validity of many of the in-session and between-session strategies recommended it appears there has been no systematic evaluation of their efficacy to date.

Operant conditioning techniques such as prompting have been effectively used in the clinical domain for some time (Kazdin, 1989; Kazdin, 1994). Letter prompts have previously been shown to be effective in improving attendance rates (Kendall & Hailley, 1993; Swenson & Parik, 1988; Batel, Pessione, Bouvier & Rueff, 1995; Kournay, Garber & Tornusciolo, 1990). Again, there does not appear to have been any systematic

evaluations of the effectiveness of letter prompts in improving compliance with homework.

The present study aims to test three hypotheses in relation to between-session written prompts in a cognitive behavioural treatment (CBT) for depression: (i) prompts will increase quantity of compliance with homework assignments independent of the effects of therapeutic empathy and motivation; (ii) prompts will improve quality of compliance with homework assignments independent of the effects of therapeutic empathy and motivation, and; (iii) prompts will improve the overall outcome effects independent of the effects of therapeutic empathy and motivation.

Method

Participants. Participants were seven consecutive outpatient referrals for depression to a primary care community clinical psychology service. They were aged between 23-63, and there were six females and one male. Three were married, and six were single. All had at least a basic level of literacy, although only one had gone on to higher education. Two were unemployed, two had manual jobs, two had clerical jobs, and one was a housewife.

Therapist - the researcher, a male trainee clinical psychologist in the final year of a three year doctorate training course. He had supervised clinical experience in treating approximately 15-20 cases of mood disorder in adults using CBT.

Measures

Therapist - a self-administered questionnaire devised specifically for this project. It contained four sections: (i) description of the assignments recommended; (ii) therapist

self-rating of compliance with the assignment of homework; (iii) therapist rating of participant's quantity of compliance with homework; and (iv) therapist's ratings of participant's quality of compliance with homework, (see Appendix 4.2, parts A-D).

Independent Expert Rater - (i) qualitative assessment of therapist's competence in implementing the treatment protocol (Cognitive Therapy Scale; Beck, Young and Budenz, 1983); and (ii) a questionnaire identical to that used by the therapist. (see Appendix 4.3 parts A-D).

Participants - a self-administered rating scale devised specifically for this project. It contained 26 visual analogue scale (VAS) items in three sections: (i) 12 items designed to measure motivation to complete cognitive behavioural homework assignments; (ii) 10 items designed to measure therapist empathy; and (iii) four items designed to measure outcome - three were subjective measures of improvement in relation to target complaints identified at the beginning of treatment and one was a subjective measure of overall coping ability compared with pre-treatment levels (see Appendix 4.4, parts A-C).

Formal outcome measures - The Beck Depression Inventory (BDI-II, a self-report measure of depression severity (Beck, Steer & Brown, 1996)), and the Hamilton Depression Rating Scale (HDRS, a therapist rating scale of depression severity (Hamilton, 1960)).

Post treatment interview - a semi-structured questionnaire devised specifically for this project. It was designed primarily to screen for demand characteristics, but also, to gather qualitative information about the experience and effects of the prompt letters. It was split into four sections: (i) knowledge of experimental hypotheses; (ii) effects of

instrumentation (questionnaires, audio-recorder, and prompt letters); (iii) awareness of role as a participant, and; (iv) subject pressure (feeling compelled to remain in treatment, get better, or complete homework) (see Appendix 4.5, sections A-D).

(For more details on the development, administration and scoring of all listed measures see Appendix 4.6)

Design

A single-subject-series repeated-measures design was used. The independent variable was the presence or absence of a prompting letter. The dependent variables were therapist ratings of homework compliance and outcome, and patient self-ratings of motivation, therapeutic empathy, and outcome. The intervention was introduced using a multiple baseline across participants. Two participants were on a three-session baseline, three on a four-session baseline, and two on a five-session baseline.

Procedure

Fourteen outpatients were assessed by the researcher using The Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1997). Three were rejected at the outset as depression was not the main presenting problem, two failed to attend any appointments, and a further two males began treatment but were not included in the final data analysis because attendance rate was so low that comparative analysis could not be carried out on the data. Of the remaining seven, all met DSM-IV criteria for recurrent major depressive disorder. Six of these also had co-morbid anxiety disorders. In each case depression appeared to be the main presenting problem. Severity of depression was assessed using the BDI-II. Scores indicated that one patient was mildly depressed, three were moderately depressed and three were severely depressed.

At the end of the assessment process assignments for the first session were administered, this included a handout based on the 'memo' described by Burns (1992) (see Appendix 4.7). Questionnaires, audio-recordings, and letters were all described as being commonly used research instruments with no distinction being made between the significance of each in an effort to reduce potential demand characteristics.

Patients were randomly assigned to a phasing pattern. The therapist, although having discussed several possible suitable experimental designs with the research supervisor, was blind as to the design ultimately implemented and to the phasing pattern for each participant.

Five were treated using CBT alone, two were treated with a combination of CBT and anti-depressant medication (initiated 2 months prior to treatment with dosage remaining

consistent throughout treatment). CBT consisted of a manualized 12 session treatment programme similar to Beck's cognitive therapy (Beck et al., 1979) as described by Fennel (1995). Typically, the behavioural components of treatment were delivered in the first 4-6 sessions and the cognitive components in the final 6-8 sessions. Co-morbid problems were also addressed within this framework.

Prior to each session participants completed the participant's questionnaire which was given to them by an administration assistant. This was returned to the assistant before the session commenced. Participants were aware that the therapist would not access these ratings until the treatment programme was completed. Additionally, participants completed a BDI-II prior to every third session, which they then took into the session.

Treatment sessions lasted 45-50 minutes and involved both technical and empathic interventions. Audio-recordings were made of all sessions and a randomised sample of 20% of sessions were selected for ratings by the expert rater. At the end of each session participants were assigned homework. The therapist completed the 'therapist questionnaire' immediately after the patient left the room. Next, a brief personalised letter was compiled according to a standard three-part format: part one described the content of the session; part two detailed the homework assignment(s); and part three was a standardised statement stressing the importance of compliance with homework (see Appendix 4.8 for an example). Attempts were made to minimise the confidential information contained in the letters. According to the experimental phasing the letter was then either destroyed or sent out the following morning by the administration assistant.

Therapy sessions were conducted once per week or fortnight depending on the patients needs. All patients completed the treatment programme. The post-treatment questionnaire was administered by the therapist at the close of session thirteen.

Results

Descriptive Analysis - Independent expert ratings of therapist compliance with treatment protocol indicate that treatment was delivered effectively in terms of general skills (e.g. structuring session, eliciting feedback, collaboration) and cognitive therapy skills (e.g. encouraging empiricism, focusing on cognitions, strategies for change).

Therapist self-ratings of compliance with assigning homework suggested that homework was appropriately assigned in all sessions with similar standards applying across phases. Independent expert ratings of therapist compliance with assigning homework correlated highly ($r = .82$) with therapist self-ratings.

The total number of sessions where homework was set and rated for compliance was 84 (baseline n = 28, intervention n = 56). The total number of assignments set was 252 (baseline: n = 90, intervention: n = 162). Of these, 80 assignments were handouts (33% of total *n* in both baseline and intervention). Of the remaining 172 assignments, 62 were set during the baseline phase (range = 1-5, $x = 2.28$, $sd = 1.21$) and 110 were set during the intervention phase (range = 1-5, $x = 1.96$, $sd = .94$).

Proportion of different types of assignment set in baseline and intervention phases of treatment are displayed in table 1. Independent expert categorisations of type of assignment set correlated highly ($r = .94$) with therapist's categorisations.

INSERT TABLE 1 HERE

Comparative Analysis - Handouts were excluded from comparative analysis of compliance due to the high consistency of compliance in both phases (baseline: quantity x = 95.66, quality x = 73.44; intervention: quantity x = 96.02, quality x = 72.53). In the intervention phase the participants did more homework than was set in 23% of the sessions (54% of these cases occurred within the first two sessions after the intervention had commenced), there were no such occurrences in the baseline phase. For a global comparison of quantity of compliance see table 2, for quality of compliance see table 3). Independent expert ratings of quantity and quality of compliance correlated highly with therapist's rating's (quantity - $r = .90$; quality - $r = .78$).

INSERT TABLES 2 & 3 HERE

Direct comparisons of baseline versus intervention compliance on particular types of assignments were limited due to the variation in assignment type across phases. The most meaningful comparison can be made in relation to completing mastery and pleasure diaries: quantity of compliance was full in 59% of baseline cases and 91% of intervention cases (baseline n = 17, intervention n = 22); and quality of compliance was good in 31% of cases and excellent in 29% of cases in baseline and good in 32% of cases and excellent in 36% of cases in intervention (baseline n = 13, intervention n = 22).

Interrupted time series analysis using ITSAcorr (Crosbie, 1994) was carried out on therapist ratings of quantity and quality of compliance, and patient ratings of motivation,

therapeutic empathy, improvement in target complaints, and improvement in global coping ability (for all of these factors scores were converted into a 0-100 scale as described in Appendix 4.6). The results are set out in table 4.

INSERT TABLE 4 HERE

Comparison of pre and post treatment formal measures of outcome (BDI-II and HDRS) are set out in table 5.

INSERT TABLE 5 HERE

Graphical presentation of the data for compliance, outcome, and associated factors for each individual participant is set out in figures 1-7.

INSERT FIGURES 1-7 HERE

Analysis of qualitative data - None of the patients indicated knowledge of the main aims of the project, all reported thinking that it was investigating the causes of depression. Also, there was no evidence to indicate that demand characteristics were a confounding factor.

Four felt very positive about receiving letters, two felt quite positive, and one felt neutral. Spontaneous responses revealed that six thought the letter enhanced their recall of the session and the set homework. So far as the effect on behaviour was concerned, six thought the letter increased the likelihood that they would complete homework, two attributed this to the letter's explanation of the rationale behind the homework. Three stated the letter had no effect on the way they felt between sessions, two thought it had a moderate positive effect, and two thought it had quite a large positive effect. Spontaneous responses revealed that it reduced anxiety by re-framing their problems. There were no reports of confidentiality being breached.

Discussion

It appears that treatment was delivered according to protocol and homework was set appropriately. There were some differences in the type of assignments set across phases and one cannot neglect the possibility that such differences could introduce a slight confounding factor in this study.

Comparisons of total sets of descriptive data suggest a substantial increase in overall quantity of compliance after the intervention was introduced. Where direct comparison by assignment type was possible (therapist ratings of mastery and pleasure diaries) this also indicated a significant improvement in the quantity of compliance after the intervention was introduced. Interrupted-time-series analyses show high levels of significance in the increased quantity of compliance for some individuals (participants 2,3, & 4) but not for all. Graphical presentation of the data appears to show a general increase in quantity of compliance after the introduction of the intervention and these gains seem to have been maintained. The graphs of some participants seemed to show an initial high level start followed by a downward trend which then appears to have been reversed after the introduction of the intervention (see figures 2, 3, 4, and 5). In summary, the intervention appears to have been effective in improving quantity of compliance.

For quality of compliance the descriptive data provided some evidence of improvement after the introduction of the intervention but this was less compelling when compared with the figures for improvement in quantity. Interrupted-time-series analyses also suggests more moderate levels of statistically significant improvements in quality of compliance. Graphical representations of quality of compliance provide no clear picture of change after introduction of the intervention. There are a number of possible explanations for the discrepancy in level of change between quantity and quality were considered: there is the possibility that the differences are an artefact of the system of measurement employed which made it easier to detect differences in quantity; another possible explanation is that the discrepancy may reflect the fact that participants typically entered 2-3 cycles of learning new skills during treatment, however, examination of the graphical data revealed no evidence of repeated 'learning trends'.

Statistical analysis of pre- and post-treatment BDI-II and HDRS scores indicate that treatment was effective in reducing severity of depression. It is difficult to draw any conclusion about the effect of the intervention on outcome from BDI-II and HDRS scores during treatment due to the multiple baseline design. Examination of the 'global improvement in coping' data provides an indication of the effect of intervention on global outcome as measures were collected every session. Interrupted-time-series analysis indicates the intervention had a good effect on global improvement in coping with five p values of $<.10$. The graphical presentation of improvement in global coping suggests that participants could be categorised into 3 types: type 1 (participants 1, 2 &3) show rapid improvement within the first few sessions which was maintained - such individuals may be similar to those described by Teasdale (1987) as being 'depressed about being depressed'; type 2 (participants 4 & 5) follow a general trend of improvement but ratings of global coping appear to be more responsive to ongoing life problems, such ratings also seemed to be positively associated with motivation but not with therapeutic empathy; type 3 (participants 6 & 7) whose improvement in overall coping was slower and more gradual. Drawing the evidence together, there was no clear indication that prompts were effective in improving outcome.

Interrupted-time-series analyses and graphical presentations suggests that levels of therapeutic empathy were consistent throughout for all participants and therefore were not a confounding factor. This may have been due to ceiling effects as most of the participants rated then therapist highly on these measures throughout. Interrupted-time-series analysis of motivation indicates the intervention had a good effect on this variable with five p values of $<.10$. One possible explanation for the results is that the letter increases the likelihood of homework completion, compliance then has the knock-on

effect of improving mood state which in turn increases the probability of future compliance. However, graphical presentations of motivation provide little clear evidence of such relationships.

Responses to the post-treatment questionnaire suggest the prompt improved recall of the content of the session. Such comments are not surprising considering the empirical evidence to suggest that the poor concentration and memory are commonly experienced by sufferers of depression (Williams, 1996). Also, most believed that the letter increased the likelihood that they would complete homework (including participant 6 who openly expressed resistance to homework until the intervention was introduced at which point she duly completed extra homework for the following two sessions). Reason (1990) describes prospective memory as serving the function of prompting about goals and intentions. However, forgetting can increase over time as sources of interference affect retention (Riccio, Ackil & Burch-Vernon, 1992). Further, the system can fail altogether if there are insufficient reminders in the natural environment (Ellis, 1988). One possible explanation of the effect of the letters on homework compliance, therefore, is that they aided prospective memory by placing a controlling stimulus in the natural environment which compensated for the increase in forgetting which takes place over time.

With regards to the literature on the measurement of compliance this study provides evidence to suggest that the distinction between quantity and quality made by Primakoff et al. (1986) is appropriate. Their suggestion for more detailed definitions of what each task involves to improve the process of rating quantity and quality of compliance is also supported. This study appears to demonstrate that the use of written prompts as suggested by Primakoff et al. (1986) can be effective in enhancing quantity of compliance but not necessarily quality. So far as the relationship between compliance and outcome

is concerned it is difficult to draw any conclusions from this project, possibly because instances of no compliance were rare. Where therapeutic empathy was concerned it was also difficult to draw any conclusions about a causal role in compliance and outcome because of the consistently high ratings. Interrupted time series analyses also indicated that motivation is positively correlated to compliance and outcome but once again it is difficult to draw any conclusions about directions of causality.

Conclusions

This study has demonstrated that improving quantity of compliance with homework is feasible through the use of a simple cost-effective method. Personalised prompt letters could improve the efficacy of various psychological and non-psychological treatments where non-compliance is an issue. The project has also shown that it is possible to effectively transfer some of the components of the treatment session to the participant's natural environment through the use of personalised prompt letters. These achievements open the door for future research to investigate further the causal role that homework compliance may have on outcome.

Table 1 - Type of Homework Set

	Baseline (n = 62)	Intervention (n = 110)
practising alternative behaviours (e.g. distraction, relaxation, written exercises)	55%	16%
mastery and pleasure diaries	27%	20%
increasing mastery and pleasure	6%	10%
positive reinforcement	5%	3%
scheduling / structuring activities	6%	9%
thought diaries	0%	22%
challenging negative thoughts	0%	23%

Types of homework set: Proportion of different types of assignment set in baseline and intervention phases of treatment, excluding handouts.

Table 2 - Quantity of Homework Compliance

	BASELINE (N=62)	INTERVENTION (N=110)
nil	27%	10%
partial	35%	2%
full	37%	88%

Quantity of compliance with homework: proportion of separate assignments categorised as nil compliance, partial compliance, or full compliance.

Table 3 - Quality of Homework Compliance

	Baseline (n = 45)	Intervention (n = 99)
poor	11%	1%
moderate	27%	16%
good	40%	47%
excellent	22%	35%

Quality of compliance with homework: proportion of separate assignments categorised as poor compliance, moderate compliance, good compliance, or excellent.

Table 4 - Analysis of Change Between Baseline and Intervention Phases

	Quantity of compliance	Quality of compliance	Global Improvement	Target Complaints	Motivation	Therapeutic Empathy
participant 1	.56	.49	.28	.42	<.001***	.45
participant 2	<.001***	.074*	.014**	.69	.68	.14
participant 3	.002***	.08*	.02**	.07*	.03**	.89
participant 4	<.001***	.042**	.006***	.054*	.60	1.00
participant 5	.78	.11	.087*	.73	.016**	.23
participant 6	.33	.42	.70	.74	.040**	.29
participant 7	.17	<.001***	.021**	.38	.094*	.87

*ITSAcorr interrupted-time-series analysis of change between baseline and intervention phases (***p< = .01, ** = p<.05, * = p<.10).*

Table 5 - Analysis of Pre and Post Treatment Measures of Outcome

	Pre-treatment	Post-treatment	*p* value
BDI-II	$x = 29.29$ ($sd = 12.57$)	$x = 14.29$ ($sd = 13.9$)	.018**
HDRS	$x = 25.57$ ($sd = 4.5$)	$x = 10.43$ ($sd = 8.98$)	.019**

*Results of Wilcoxon 2- related samples analysis of Beck Depression Inventory (BDI-II) and Hamilton Depression Rating Scales (HDRS) scores pre and post-treatment (** = $p<.05$).*

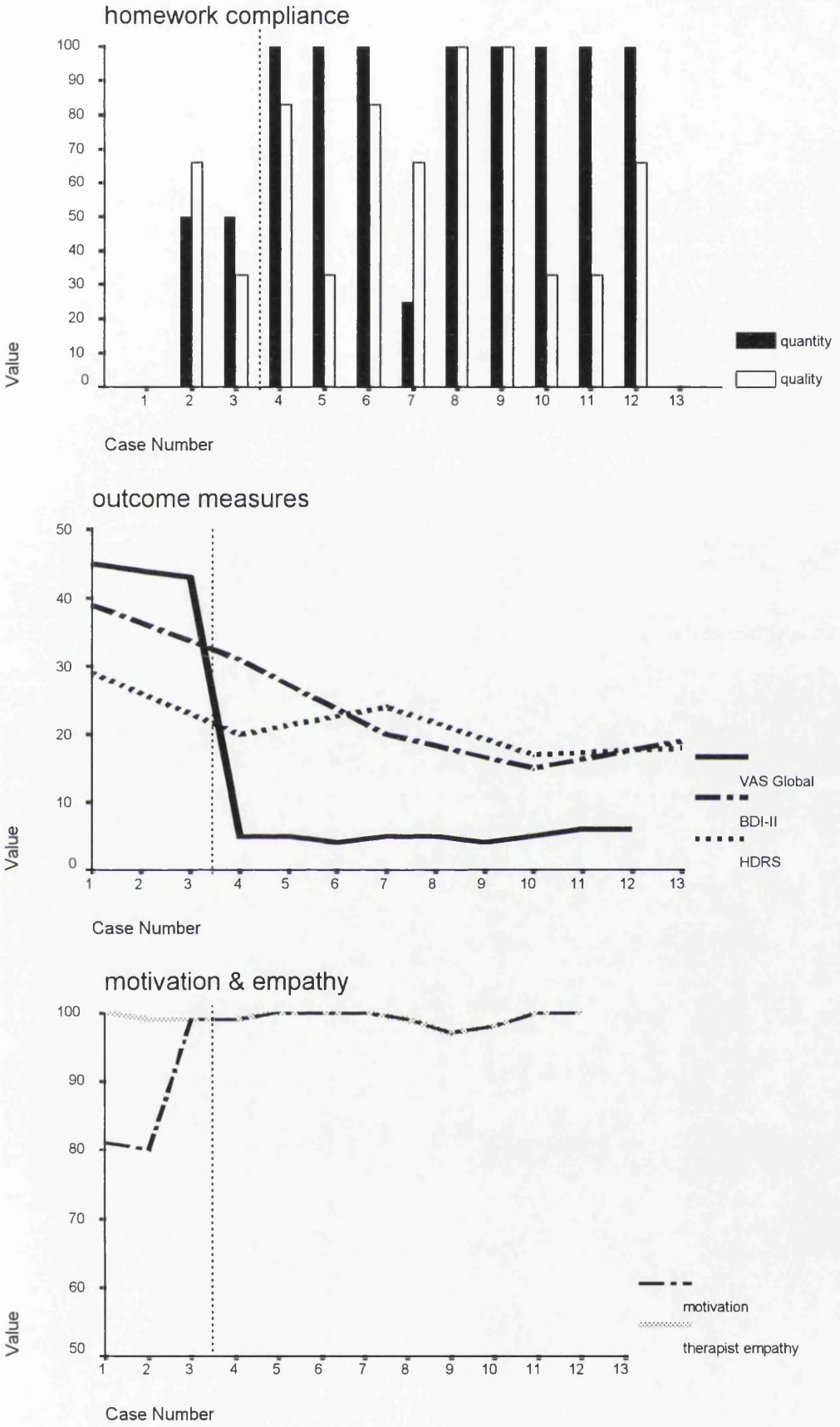

Figure 1: *participant 1 (3 baseline) - female, age 63, housewife, co-morbid panic disorder with agoraphobia, no medication, no previous psychotherapy, reported being recurrently depressed for 40 years.*

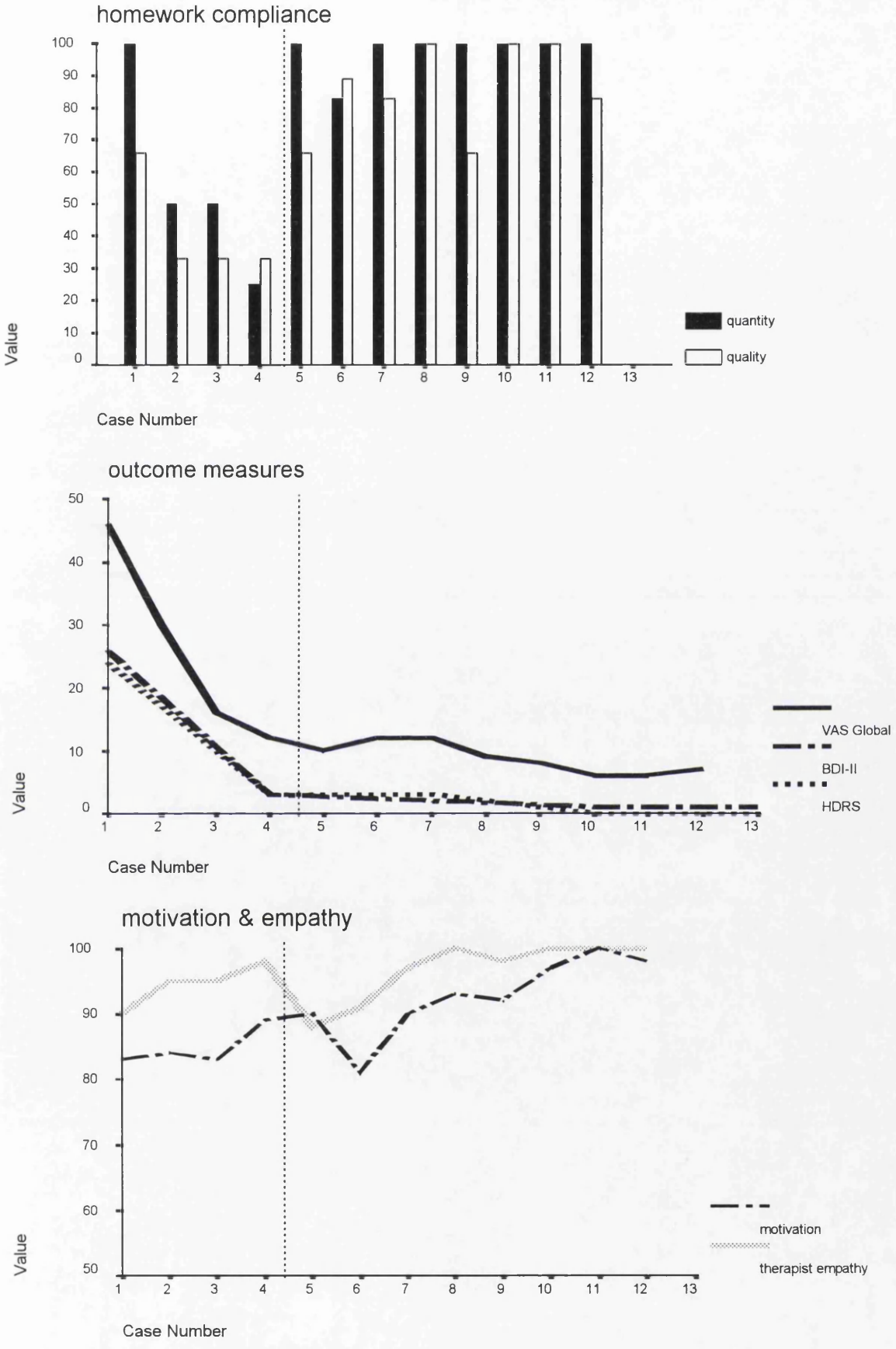

Figure 2: *participant 2 (4 baseline) - female, age 36, factory worker, co-morbid generalised anxiety, no medication, previous psychotherapy (3 sessions CBT for depression 3 years previous), reported being recurrently depressed for 12 years.*

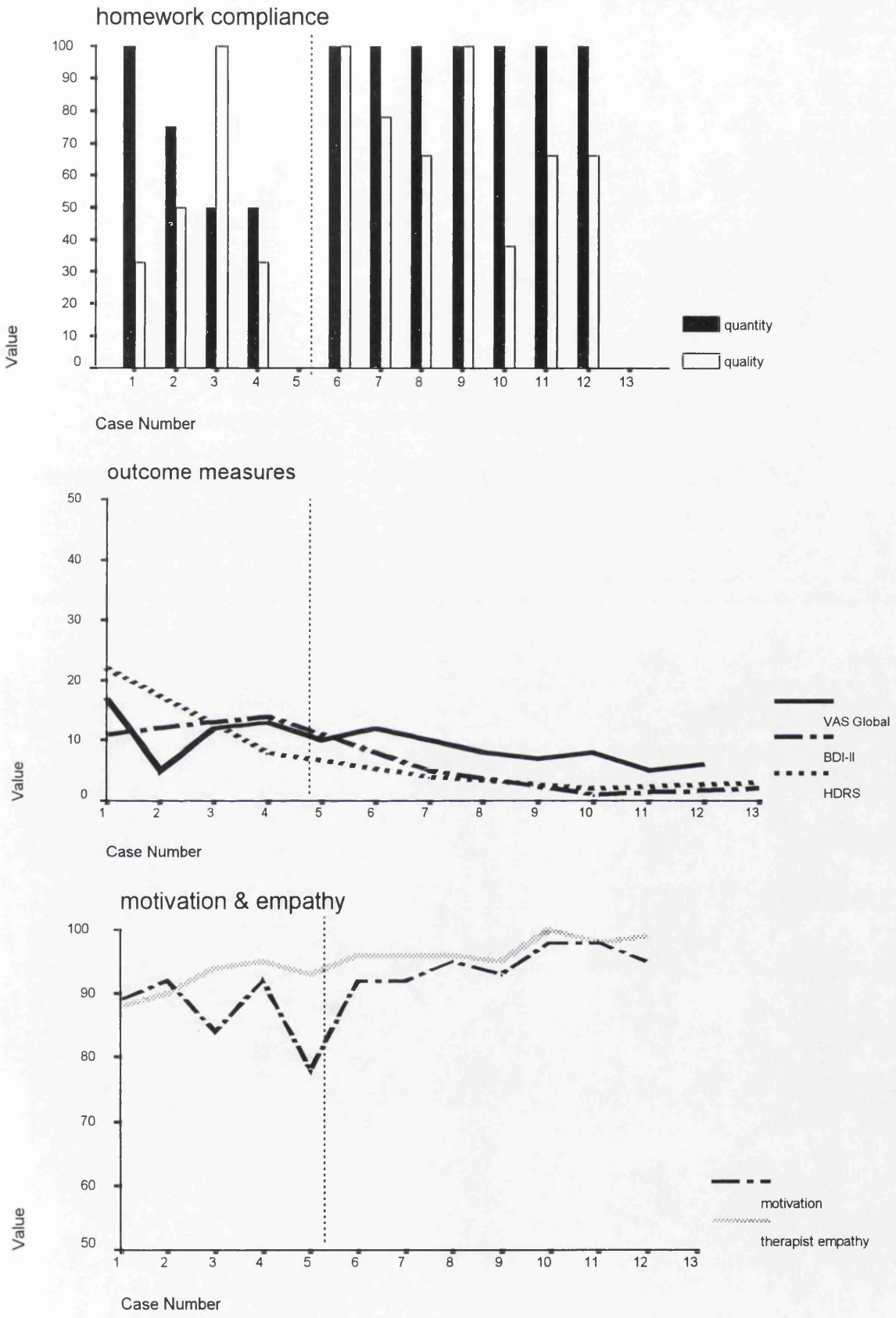

Figure 3: *participant 3 (5 baseline) - female, age 45 years, shop assistant, no co-morbidity, medicated (20 mgm seroxat - remained consistent throughout), no previous psychotherapy, reported being recurrently depressed for 7 years.*

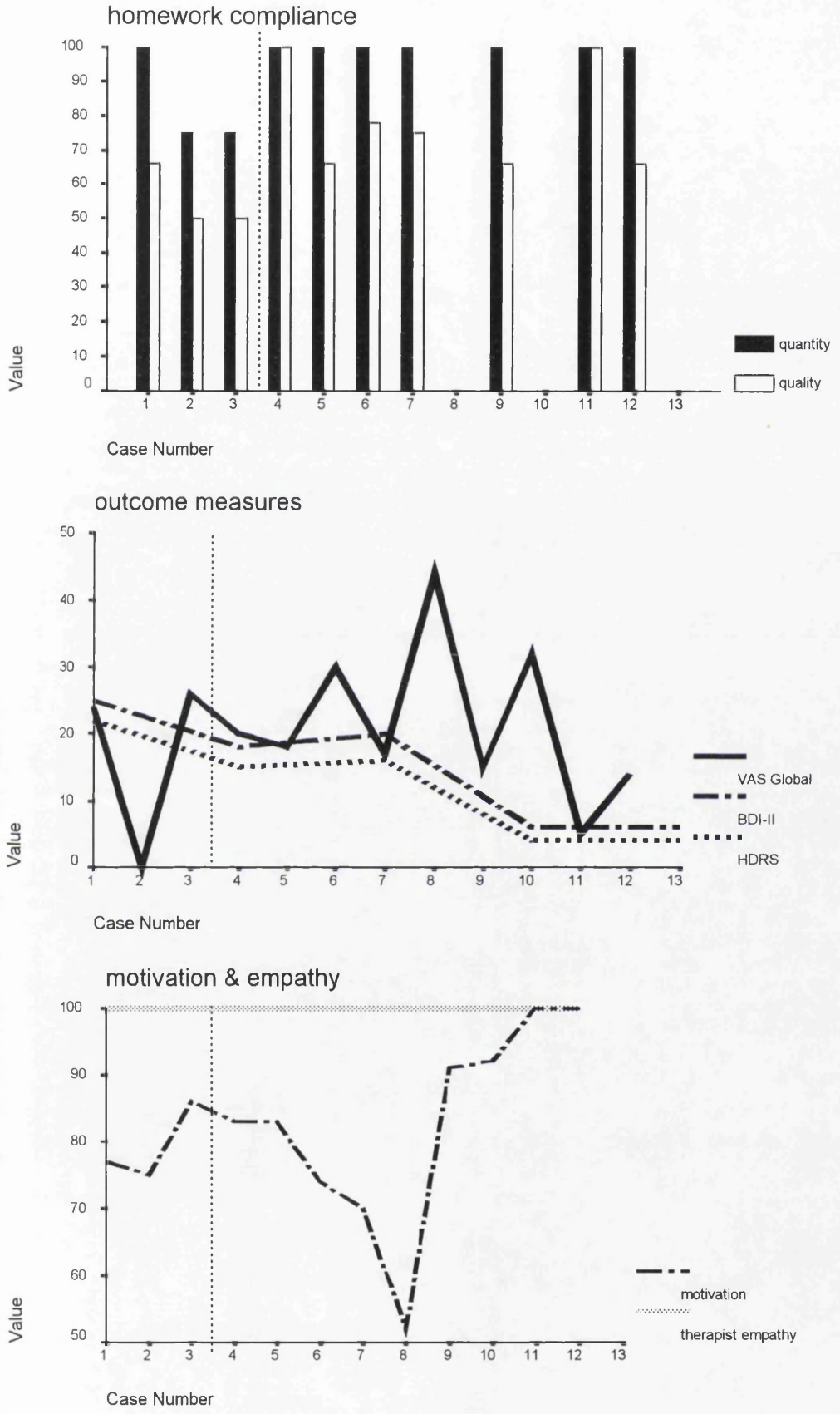

Figure 4: *participant 4 (3 baseline) - female, age 23, unemployed, co-morbid PTSD, medicated (40 mgm fluoxetine - remained consistent throughout), no previous psychotherapy, reported being recurrently depressed for 6 years.* ***N.B. - sessions 8 & 10 homework not completed due to extenuating circumstances.***

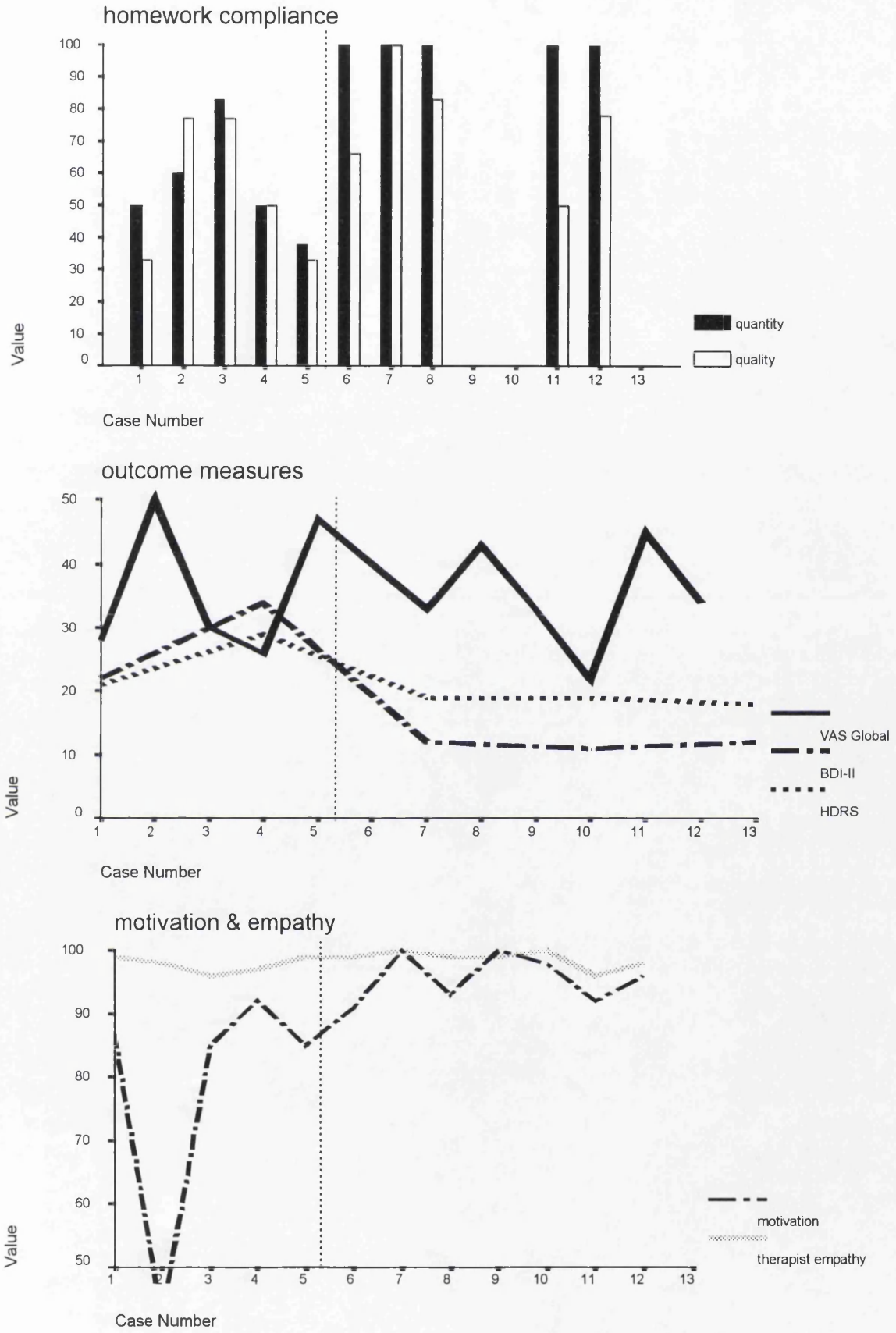

Figure 5: *participant 5 (5 baseline) - female, age 29, clerical assistant, co-morbid social phobia, no medication, no previous psychotherapy, reported being recurrently depressed for 10 years.* ***N.B. sessions 9 and 10 - participant reported feeling frustrated because depression homework was not reducing her social anxiety.***

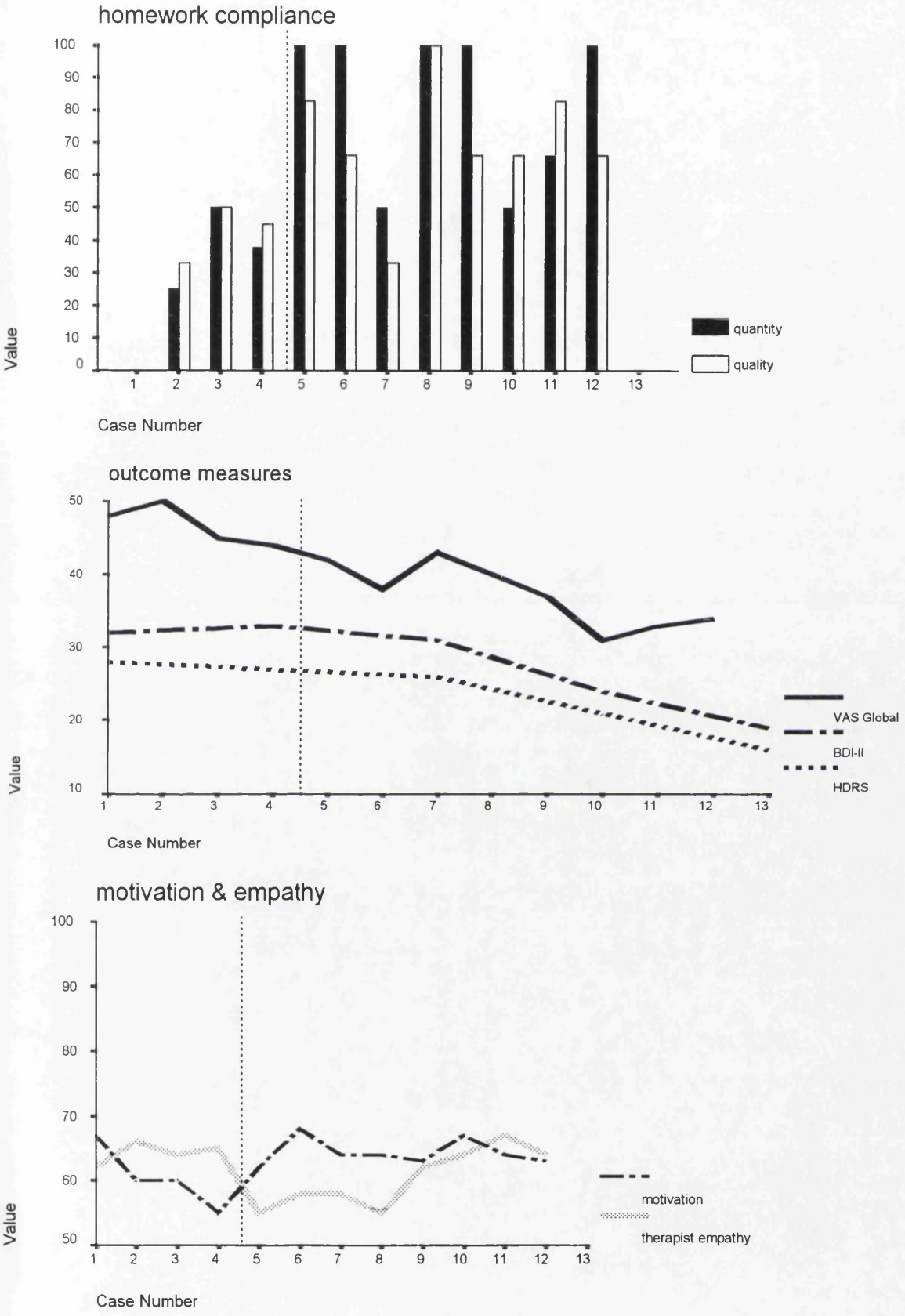

Figure 6: *participant 6 (4 baseline) - female, age 31, social work assistant, co-morbid agoraphobia without panic disorder, no medication, previous psychotherapy (40 sessions client-centred therapy; 4 sessions group CBT for depression), reported being recurrently depressed for 7 years.*

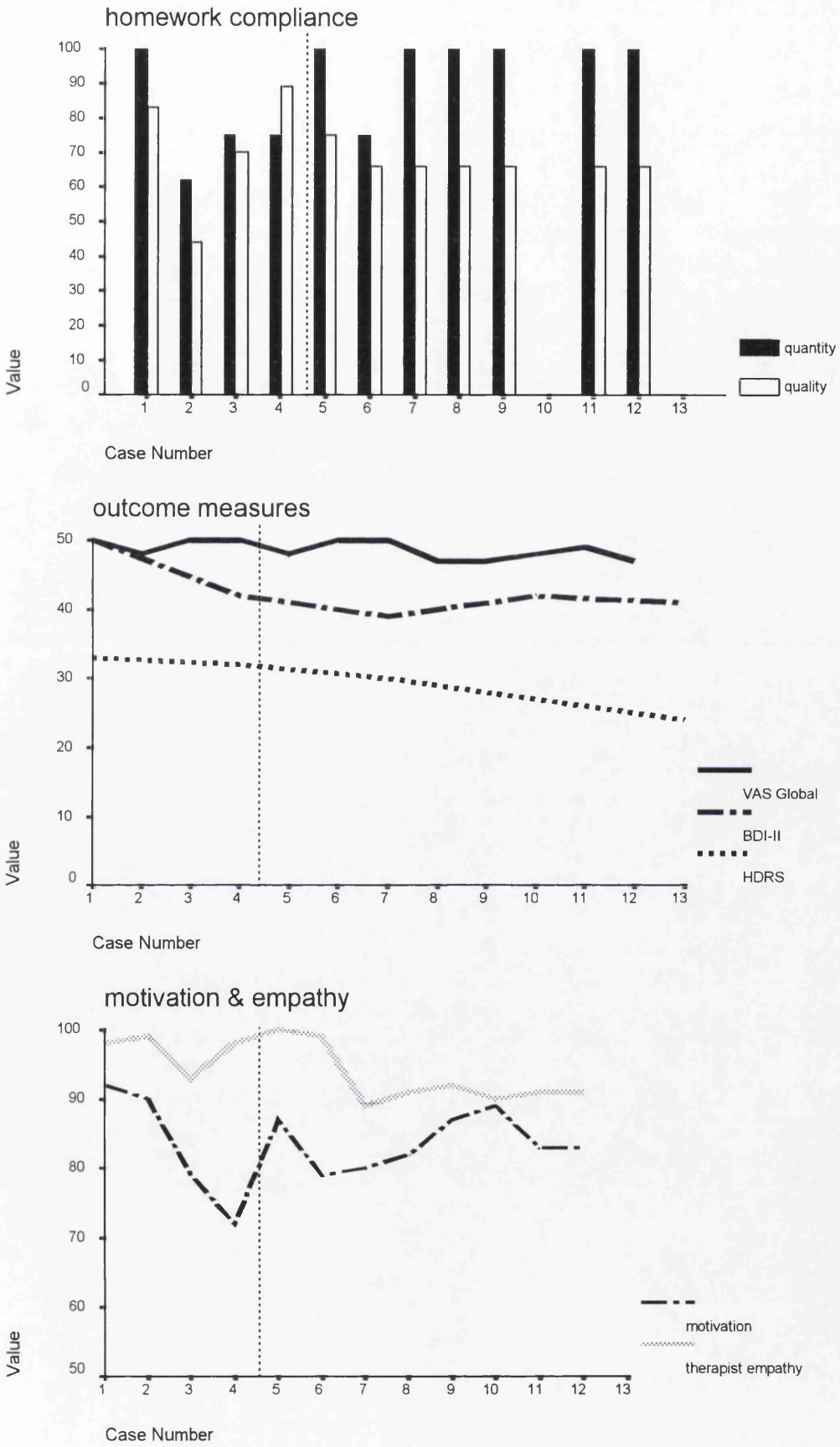

Figure 7: *participant 7 (4 baseline) - male, age 28, unemployed, co-morbid generalised anxiety, no medication, previous therapy (12 months depression support group), reported being continuously depressed for 5 years.* ***N.B. session 10 homework not completed due to extenuating circumstances.***

Bibliography

American Psychiatric Association (1994), Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, American Psychiatric Association, Washington, D.C.

Anderson,T., & Strupp, H. H. (1996). The ecology of Psychotherapy Research. *Journal of Consulting and Clinical Psychology, **64(4)**,* 776-782.

Bartel, P., Pessione, F., Bouvier, A.M., & Rueff, B. (1995). Prompting alcoholics to be referred to an alcohol clinic: the effectiveness of a simple letter. *Addiction, **90**,* 811-814.

Battle, C., Imber, S.D., Hoehn-Saric, R., Stone, A. R., Nash, E. H., & Frank, J. D. (1966). Target complaints as criteria for improvement. *American Journal of Psychotherapy, **20**,* 184-192.

Beck, A.T., Rush, A.J., Shaw, B.F., & Emery, G. (1979). *Cognitive Therapy of Depression.* New York: Guilford Press.

Beutler, L. E. & Hamblin, D. L. (1986). Individualised Outcome Measures as Predictors of Internal Change: Methodological Considerations. *Journal of Consulting and Clinical Psychology, **54 (1)**,* 48-53.

Burns, D.D. (1996). Therapeutic Empathy in Cognitive-Behavioral Therapy: Does it Really Make a Difference? In P. Salkovskis (Ed) *Frontiers of Cognitive Therapy,* (pp.135-164). Guilford Press: New York.

Burns, D.D., Adams, R.L. & Anastopoulos, A.D. (1985). The role of self-help assignments in the treatment of depression. In E.E. Beckham & W.R. Leber (Eds.), *Handbook of depression: Treatment, assessment and research.* (pp634-668). Homewood, IL: Dorsey Press.

Burns, D.D., & Nolen-Hoeksema S. (1992). Therapeutic Empathy and recovery from depression in cognitive-behavioural therapy: a structural equational model. *Journal of Consulting and Clinical Psychology, **60(3)**,* 441-449.

Burns, D.D., & Auerbach, A., H. (1992). Does Homework Compliance enhance recovery from depression? *Psychiatric Annals, **22(9)**,* 465-469.

Crosbie, J. (1994). Statistical Analysis of Behavioural Data: What? Where? Why? And how? Manual presented at the Association for Behaviour Analysis: Atlanta, Georgia.

Davis, J. P., Judd, F. K. & Herrman, H. (1997). Depression in adults with intellectual disability. Part 2: a pilot study. *Australian and New Zealand Journal of Psychiatry, **31 (2)**,* 243-251.

Elkin, I., Parloff, M. B., Hadley, S. W., & Autry, J. H. (1985). NIMH Treatment of Depression Collaborative Research Programme. *Archives of General Psychiatry, **42,*** 305-316.

Ellis, J. A. (1988). Memory for future intentions: Investigating pulses and steps. In M. M. Gruneberg, P. E. Morris & R. N. Sykes(Eds.), *Practical Aspects of Memory: Current Research and Issues I.* (pp. 371-376). Chichester, U.K.: Wiley.

Fennel, M. J. & Teasdale, J. D. (1987). Cognitive Therapy for depression: Individual differences and the process of change. *Cognitive Therapy and Research, **11,*** 253-271.

Fennel, M. J. (1995). Depression. In *Cognitive Behaviour Therapy for Psychiatric Problems.* Hawton, K., Salkovkis, P., Kirk, J., & Clark, D. (Eds.), (pp. 169-234): Oxford University Press.

Freeman, A., Pretzer, J., Fleming, B., & Simon, K. M. (1990). *Clinical Applications of Cognitive Therapy.* New York: Plenum.

Gomez-Schwarz, B. (1978). Effective ingredients in psychotherapy: predictions of outcome from process variables. *Journal of Consulting and Clinical Psychology, 46,* 1023-1035.

Kazdin, A. E. (1989). *Behaviour Modification in Applied Settings.*(4th Edition). Brookes-Cole:California.

Kazdin, A. E. (1994). Methodology, design and evaluation, in psychotherapy research. In A. Bergin & S. Garfield (Eds.), *Handbook of psychotherapy and behaviour change* (4th edition, pp. 143-189). New York: John Wiley.

Kendall, C. & Hailley, B. J. (1993). The Relative effectiveness of three reminder letters on making and keeping mammogram appointments. *Behavioral Medicine, **19 (1)**,* 29-34.

Kournay, R.F.C., Garber, J. & Tornusciolo, G. (1990). Improving first appointment attendance rates in child psychiatry outpatient clinics. *Journal Of American Academy of Child and Adolescent Psychiatry, **29 (4)**,* 657-660.

Lundie, E. M. (1998). Homework Compliance in Cognitive Behavioural Treatments for Depression. Unpublished: Glasgow University.

Orlinsky, D. E. , Grawe, K., & Parks, B. K. (1994). Process and outcome In psychotherapy - noch einmal. In S. L. Garfield and A. E. Bergin (Eds.), *Handbook of psychotherapy and behaviour change* (pp. 270-376). New York: Wiley.

Persons, J. B., & Burns, D. D. (1985). Mechanisms of action of cognitive therapy: the relative contributions of technical and interpersonal interventions. *Cognitive Therapy and Research, **9(5)**,* 539-551.

Primakoff, L., Epstein, N., & Covi, L. (1986). Homework compliance: an uncontrolled variable in cognitive therapy outcome research. *Behaviour Therapy, **17**,* 443-446.

Reason, J. (1990). *Human Error.* Cambridge, U.K.: Cambridge University Press.

Riccio, D, C,. Ackil, J. & Burch-Vernon, A. (1992). Forgetting of stimulus attributes: Methodological Implications for Assessing Associative Phenomena. *Psychological Bulletin, **112(3)**,* 433-445.

Shapiro, D. A. & Startup, M. (1990*). Raters Manual for the Sheffield Psychotherapy Rating Scale (Memo 1154).* Sheffield, U.K.: University of Sheffield.

Stern, R. A., Arruda, J. E., Hooper, C. R. & Wolfner, G. D. (1997). Visual analogue mood scales to measure internal mood state in neurologically impaired patients: description and initial validity evidence. *Aphasiology, **11(1)**,* 59-71.

Swenson, T. R. & Parik, G (1988). Interventions for reduced missed initial appointments at a Community Health Centre. *Community Mental Health Journal, **24(3)**,* 205-218.

Teasdale, J. D. (1985). Psychological Treatments for depression: How do they work? *Behaviour Research and Therapy, **23**,* 157-165.

Young, J., Beck, A.T. & Budenz, D. (1983). *Assessment of competence in cognitive behaviour therapy*. Unpublished manuscript, University of Pennsylvania.

Williams, J. M. G. (1996). Memory Processes in Psychotherapy. In P. Salkovskis (Ed) *Frontiers of Cognitive Therapy*, (pp.97-113). Guilford Press: New York.

Single Research Case Study I:

Delayed Onset PTSD After Witnessing Marital Violence:

A Child Case Study

Prepared in accordance with guidelines for submission to "The Journal of Child Psychology and Psychiatry"

Abstract

The research literature describing cases of delayed onset of Post Traumatic Stress Disorder (PTSD) deals mainly with combat veterans or adult survivors of sexual abuse. This study reports the case of an 11 year old boy presenting with post-traumatic stress symptoms related to an incident where he witnessed his father assaulting his mother when he was two years old. A cognitive behavioural treatment approach was used which incorporated the use of an art-workbook specifically designed for use with child survivors of trauma. Drawing appeared to help access repressed memories and these creations then served as a useful stimulus for verbalisation. By the end of treatment there was a significant reduction in post-traumatic symptoms, however, at 10 month follow-up some symptoms had returned. The case is discussed in the context of developmental issues possibly effecting onset and maintenance of post traumatic symptoms.

Single Research Case Study II:

The Use of Repertory Grids to Measure Outcome in a Cognitive Behavioural Treatment of Anger : A Case Study

Prepared in accordance with guidelines for submission to "Legal and Criminological Psychology"

Abstract

Purpose Clinical experience in the secure psychiatric setting for the study suggested that cognitive behavioural treatments for anger were effective in reducing aggressive behaviour, however, this was not always reflected in self-report measures of outcome. Previous research with anger patients has indicated that repertory grid ratings provide valid reliable data for measuring outcome. The purpose of this study was to investigate whether rep-grid ratings would be suitable measures of outcome in a cognitive behavioural treatment of anger.

Method A male participant (CD) was given a standardised twelve session cognitive behavioural treatment programme for anger. Self-report measures of anger (NAS; STAXI), staff ratings of interpersonal sensitivity and hostility (BDPRS), and personal construct repertory grid ratings were obtained pre- and post-treatment and at 3 month follow-up. Pre-treatment rep-grid ratings indicated low self-esteem and construing other people in an unrealistically positive and idealised way.

Results Post-treatment self-report measures indicated no improvement, however, staff ratings suggested moderate gains. At follow-up NAS scores continued to indicate no change, however, STAXI scores indicated significant improvement and staff ratings suggested further positive change. Post-treatment rep-grid ratings indicated more realistic construing of others and improved self-esteem. At follow-up self-esteem had improved further.

Conclusions In this case self-construct repertory grids appeared to be a useful indicator of change in a cognitive behavioural treatment of anger where traditional measures of outcome showed little or no change, possibly because of the participant under-reporting anger pre-treatment.

Single Research Case Study III:

Improving Co-operation with Neuropsychological Assessment:

A Case Study

Prepared in accordance with guidelines for submission to "Brain Injury"

Abstract

Clinical experience suggests that the psychiatric symptoms, mood, and character pathology that often accompany brain injury can limit a patient's optimal participation in a neuropsychological examination, however, there is very little research in this area. This study presents the case of a 27 year old man who suffered cerebral anoxia as a result of a cardiac arrest. An examination at 12 months post-injury concluded that he had significant deficits in executive functioning, but co-operation with the process had been poor. Prior to a second examination at 27 months post-injury, four sessions were devoted to history-taking using therapeutic techniques designed to improve co-operation. Post-intervention a significant reduction in 'inert-apathetic' behaviour was observed. The data gathered during the second examination indicated that deficits in executive functioning were not as severe as previously reported. Further investigation of the measurement of co-operation and methods of improvement are recommended.

Appendix 1:

Small Scale Service Evaluation Project:

Clinical Psychologist's Perspectives on the Psychological Debriefing of Healthcare Staff after the Dunblane Shootings

Appendix 1.1: Notes for Contributors "Journal Of Traumatic Stress"

Instructions to Contributors

1. Manuscripts, in quadruplicate and in English, should be submitted to the Editor:

   Dr. Bonnie L. Green
   Department of Psychiatry
   Georgetown University
   310 Kober-Cogan Hall
   Washington, D.C. 20007

   Authors must submit manuscripts in a form appropriate to blind review (i.e., identifying information should appear *only* on the title page). Manuscripts should use nonsexist language. Three paper formats are accepted. *Regular articles* (usually no longer than 7,500 words, *including* references and tables) are theoretical articles, full research studies, and occasionally reviews. Purely descriptive articles are rarely accepted. *Brief reports* (2,500 words, *including* references and tables) are for case studies that cover a new area, preliminary data on a new problem or population, condensed findings from a study that does not merit a full article, or methodologically oriented papers that replicate findings in new populations or report preliminary data on new instruments. *Commentaries* (1,000 words or less) cover responses to previously published articles or, occasionally, essays on a professional or scientific topic of general interest. Response commentaries, submitted no later than 8 weeks after the original article is published (12 weeks if outside the U.S.), must be content-directed and use tactful language. The original author is given the opportunity to respond to accepted commentaries. *Book/media reviews* are solicited by the Book Review Editor.

2. Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. A statement transferring copyright from the authors (or their employers, if they hold the copyright) to the International Society for Traumatic Stress Studies will be required before the manuscript can be accepted for publication. The Editor will supply the necessary forms for this transfer. Such a written transfer of copyright, which previously was assumed to be implicit in the act of submitting a manuscript, is necessary under the U.S. Copyright Law in order for the publisher to carry through the dissemination of research results and reviews as widely and effectively as possible.

3. Type double-spaced on one side of $8^1/_2 \times 11$ inch or A4 white paper using generous margins on all sides and a font no smaller than 10-point, and submit the original and three copies (including copies of all illustrations and tables).

4. A title page is to be provided and should include the title of the article, author's name (no degrees), author's affiliation, acknowledgments, and suggested running head. The affiliation should comprise the department, institution (usually university or company), city, and state (or nation) and should be typed as a footnote to the author's name. The suggested running head should be less than 80 characters (including spaces) and should comprise the article title or an abbreviated version thereof. Also include the *word count*, the complete mailing address and telephone number for the corresponding author during the review process, and, if different, a name and address to appear in the article footnotes for correspondence after publication.

5. An abstract is to be provided, no longer than 120 words.

6. A list of 4–5 key words is to be provided directly below the abstract. Key words should express the precise content of the manuscript, as they are used for indexing purposes.

7. Illustrations (photographs, drawings, diagrams, and charts) are to be numbered in one consecutive series of Arabic numerals. The captions for illustrations should be typed on a separate sheet of paper. Photographs should be large, glossy prints, showing high contrast. Drawings should be prepared with india ink. Either the original drawings or good-quality photographic prints are acceptable. Identify figures on the back with author's name and number of the illustration.

8. Tables should be numbered (with Arabic numerals) and referred to by number in the text. Each table should be typed on a separate sheet of paper. Center the title above the table, and type explanatory footnotes (indicated by superscript lowercase letters) below the table.

9. List references alphabetically at the end of the paper and refer to them in the text by name and year in parentheses. In the text, all authors' names must be given for the first citation (unless six or more authors), while the first author's name, followed by et al., can be used in subsequent citations. References should include (in this order): last names and initials of *all* authors, year published, title of article, name of publication, volume number, and inclusive pages. The style and punctuation of the references should conform to strict APA style—illustrated by the following examples (however, use indentation below):

   Journal Article
   Friedrich, W. N., Urquiza, A. J., & Beilke, R. L. (1986). Behavior problems in sexually abused young children. *Journal of Pediatric Psychology, 11*, 47-57.

   Book
   Kelly, J. A. (1983). *Treating child-abusive families: Intervention based on skills-training principles*. New York: Plenum Press.

   Contribution to a Book
   Feindler, E. L., & Fremouw, W. J. (1983). Stress inoculation training for adolescent anger problems. In D. Meichenbaum & M. E. Jaremko (Eds.), *Stress reduction and prevention* (pp. 451-485). New York: Plenum Press.

10. Footnotes should be avoided. When their use is absolutely necessary, footnotes should be numbered consecutively using Arabic numerals and should be typed at the bottom of the page to which they refer. Place a line above the footnote, so that it is set off from the text. Use the appropriate superscript numeral for citation in the text.

11. **The journal follows the recommendations of the 1994 *Publication Manual* of the American Psychological Association (Fourth Edition)**, and it is suggested that contributors refer to this publication.

12. After a manuscript has been accepted for publication and after all revisions have been incorporated, manuscripts may be submitted to the Editor's Office on **personal-computer disks.** Label the disk with identifying information—kind of computer used, kind of software and version number, disk format and file name of article, as well as abbreviated journal name, authors' last names, and (if room) paper title. Package the disk in a disk mailer or protective cardboard. **The disk *must* be the one from which the accompanying manuscript (finalized version) was printed out.** The Editor's Office cannot accept a disk without its accompanying, matching hard-copy manuscript. Disks will be used on a case-by-case basis—where efficient and feasible.

13. **The journal makes no page charges.** Reprints are available to authors, and order forms with the current price schedule are sent with proofs.

Appendix 1.2: Participants Information Sheet

Ewan Lundie
Trainee Clinical Psychologist
Department of Psychological Medicine
The Academic Centre
Gartnavel Royal Hospital
Glasgow G12 0XH

July 1996

Dear ,

Thank you for agreeing to be a participant in this research project.

The aim of the project is to evaluate, from a psychologist's perspective, the clinical psychology department's delivery of critical incident stress debriefings in response to the Dunblane shootings.

The emphasis will be on the following areas:

1. clinical psychologist's preparation and training for delivery of the debriefings

2. process factors affecting its delivery

3. suitability - did the debriefs meet the health needs of traumatised personnel?

All information supplied in this questionnaire is confidential. The intention is to report the data without reference to individuals. Where individual responses are considered to be of particular relevance they may be reported, in such instances attempts will be made to ensure that respondents anonymity is not compromised.

Completion of this questionnaire may evoke images, thoughts, and emotions which are distressing and difficult to deal with. Should you be affected in this way, please inform me and we will either stop for a break or discontinue the process completely.

Thank you for your co-operation.

Ewan M. Lundie
Trainee Clinical Psychologist

Appendix 1.3: Participant's Questionnaire

SECTION 1

This section is designed to collect information about the level of preparation you had before delivering the debriefings.

1. *How long had you been practising as a qualified clinical psychologist prior to delivering the debriefings ?*

2. *How would you rate your level of experience in dealing with people suffering from PTSD prior to Dunblane ?*

1. very experienced
2. experienced
3. average
4. inexperienced
5. very inexperienced

3. *Using the same scale, rate your level of experience in dealing with people having difficulty in coming to terms with bereavement prior to Dunblane ?*

4. *Using the same scale, how would you rate your level of experience in delivering any kind of critical incident stress debriefings prior to Dunblane ?*

5 . *Using the same scale, how would you rate your level of experience in delivering the actual type of debriefing used in response to Dunblane. This was the psychological debrief based on the Mitchell (83) and Dyregov (89) models.*

(Hereafter this model will be referred to as the 'C.I.S.D.' model)

6. *Prior to the Dunblane shootings did you have any other preparation for carrying out debriefings such as this, e.g. a training day, workshop, reading an article etc. ?*

7. *Approximately how much time were you able to spend on accommodating the 'C. I. S. D.' model before first delivering it ?*

SECTION 2

This section is designed to gather descriptive information about the debriefings you delivered.

	Debrief 1	Debrief 2	Debrief 3	Debrief 4	Debrief 5
what was your role in the debrief					
length of time elapsed since the shootings					
How long did it take to conduct the debrief					
What was the setting for the debrief					
How many recipients were present					
What were the recipients normal duties					
What was their role in relation to the incident					
Were there any noticeable absentees					

SECTION 3

In this section, I am interested in your subjective opinions on whether certain factors affected the debrief ? Did you experience difficulties during the course of any debrief, and if so, were you able to overcome them ?

1. *Do you think the role that recipients played in relation to the incident was a relevant factor affecting the positive impact of the debrief ?*

(i) proximity - *some were at the scene of the incident itself whereas others were not*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

(ii) exclusion - *some were called upon to make heavy use of existing skills whereas others with the same skills were not used at all*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

2. *Do you think that the length of time elapsed since the shootings was a relevant factor affecting the efficacy of the debrief ?*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

3. *Do you think the number of recipients at a debrief was a relevant factor affecting the positive impact of it ? For example, there were some 1:1 and 1:2 debriefs, as well as small, medium and larger sized groups.*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

4. *Do you think that the debrief setting was a relevant factor affecting the positive impact of it?*

(i) *room size*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

(ii) *proximity to the workplace*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

(iii) *degree of privacy*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

(iv) *the presence or absence of relaxed atmosphere, i.e. was it conducive to venting difficult emotions*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

5. *Do you think that absenteeism/s from the debrief was a relevant factor affecting the positive impact of it ?*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

6. *Do you think the normal employment duties of recipients was a relevant factor affecting the positive impact of the debrief ?*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

7. *Do you think that the work structure of the group of recipients was a relevant factor affecting the positive impact of the debrief ?*

(i) *some groups were hierarchical with an identifiable boss/ leader/ manager present*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

(ii) *some groups consisted of recipients who were more or less all of equal status within the workplace.*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

8. *Do you think that the cohesion of the group prior to the debrief was a relevant factor affecting delivery i.e. some debrief groups may have contained people accustomed to working together in relative harmony, or, pre-existing 'cliques' or 'rifts' may have been evident;*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

9. *Do you think that the heterogeneity of the group prior to the debrief was a relevant factor affecting delivery i.e., some debrief groups were comprised solely of personnel accustomed to working together, others were more disparate, for example, clinical and administrative staff or staff from different workplaces.*

NO-
YES, BUT OVERCAME IT-
YES, COULDN'T OVERCOME IT-

10. *In general, do you think the CISD model was flexible enough to cope with variation in group characteristics and other factors ?"*

NO-

YES-

SECTION 4

In this section I am interested in whether or not certain elements or phases were present in the debriefs you were involved in. Please read the following set of statements and indicate whether you agree, disagree, or are unsure about the statement. If you were involved in more than one debriefing please give an answer representing what typically took place.

1. *"There was a fact finding phase where the participation of individuals in the sequence of events was established"*

agree **disagree** **unsure**

2. *"There was no group discussion to allow people to ventilate their emotions"*

agree **disagree** **unsure**

3. *"At the outset confidentiality was assured"*

agree **disagree** **unsure**

4. *"There was a time when participants were encouraged to focus on their own thoughts and emotions"*

agree **disagree** **unsure**

5. *"At one stage the leader/s openly formulated the problems of individuals in the terms of traditional clinical models of psychopathology"*

agree **disagree** **unsure**

6. *"Educational information was supplied about the types of symptoms that could be experienced"*

agree **disagree** **unsure**

7. *"At some stage individuals were encouraged to help other participants focus on their thoughts and emotions"*

agree **disagree** **unsure**

8. *"At the outset the reasons for the debrief were outlined"*

agree **disagree** **unsure**

9. *"Ways of enhancing existing coping skills were not explored"*

agree **disagree** **unsure**

10. *"There was a disengagement phase where participants were given information about further help should they require it"*

agree **disagree** **unsure**

11. *"During a group discussion there was an opportunity for problematic thoughts to be assessed"*

agree **disagree** **unsure**

12. *"It was stressed that the debriefing was a one off event and not the start of a treatment programme "*

agree **disagree** **unsure**

13. *"At the outset the debrief leader/s, in my opinion, established her/themselves as suitable persons to conduct the debrief"*

agree **disagree** **unsure**

14. *"Participants were not informed that individual reactions, including non-reactions, were a normal consequence of an abnormal event"*

agree **disagree** **unsure**

SECTION 4

In this section I am interested in your subjective opinions on a set of statements covering a variety of factors. Please indicate whether you agree, disagree, or are unsure about the statement. If you were involved in more than one debriefing please give an answer representing your experiences across the range.

1. *"In general, the debriefings provided opportunities for recipients to vent emotions related to the critical incident"*

agree **disagree** **unsure**

2. *"In the period immediately after certain debriefings I was self-critical about specific aspects of my performance in conducting it"*

agree **disagree** **unsure**

3. *"In general, the debriefings did not appear to aid reduction of the impact of the critical incident"*

agree **disagree** **unsure**

4. *"In general, the debriefings provided opportunities for the recipients to enhance group cohesiveness"*

agree **disagree** **unsure**

5. *"Working towards short term goals of support and guidance - in contrast with the typical goals of long term psychological treatments - adversely affected my ability to carry out the debriefings "*

agree **disagree** **unsure**

6. *"Absenteeism/s from debriefings was a relevant factor affecting their effective delivery"*

agree **disagree** **unsure**

7. *"In general, the debriefing did not provide opportunities for recipients to receive emotional reassurance"*

agree **disagree** **unsure**

8. *"At present I am still self-critical about specific aspects of my performance in conducting certain debriefings"*

agree **disagree** **unsure**

9. *"Working with people recently involved in a traumatic incident - in contrast with typically seeing people who's problems have been established over a longer period of time - did not adversely affect my ability to carry out the debriefings "*

agree **disagree** **unsure**

10. *"A thorough understanding of various psychological theories, and the ability to apply these, was necessary to deliver the debriefings effectively"*

agree **disagree** **unsure**

11. *"At present I am not self-critical about my overall performance in conducting the debriefings"*

agree **disagree** **unsure**

12. *"Working with groups in a more spacious setting - in contrast to typically working with one or two persons in the consulting room - adversely effected my ability to carry out the debriefings"*

agree **disagree** **unsure**

13. *"In general, the debriefings appeared to aid the normal recovery process for recipients"*

agree **disagree** **unsure**

14. *"In general, the debriefings did not provide recipients with education and information about typical 'post-incident stress' reactions"*

agree **disagree** **unsure**

15. *"In the period immediately after certain debriefings I was self-critical about my overall performance in conducting it"*

agree **disagree** **unsure**

16. *"A thorough understanding of various psychological theories is necessary to accommodate the C.I.S.D. within a short time span"*

agree **disagree** **unsure**

17. *"Working in a non-directive, preventative role - in contrast to some of the more focused interventions typically used by psychologists - adversely affected my ability to carry out the debriefings"*

agree **disagree** **unsure**

18. *"Overall, the C.I.S.D. appeared to be a good stress prevention method for traumatic incidents"*

agree **disagree** **unsure**

SECTION 6

This final section comprises of a set of open questions about several different aspects of the debriefing process:

1. *Creators of the C.I.S.D. advocate that the model be delivered in a stepwise approach, containing the following phases in the following order:*

1.introduction - 2. fact finding - 3. thoughts and feelings - 4. normalisation - 5. developing coping strategies -6. disengagement.

In general, how closely did you adhere to this stepwise approach?

2. *Based on your own experiences in relation to Dunblane please comment on the following statement:*

"Psychologists with little or no previous experience of the C.I.S.D. model are able to accommodate it to an adequate level within a short time span"

3. *In your opinion, what would be the minimum time span in which psychologists with no prior experience of C.I.S.D.'s could accommodate this model to an adequate level ? Please indicate within the following ranges:*

1-2 hours / 2-4 hours / 4-6 hours / 6-8 hours / 8-12 hours / 12-24 hours / 24-48 hours / 48-72 hours / > 72 hours

4. *Do you think you need any further or ongoing training to allow you to deliver C.I.S.D.'s in the future ?*

5. *Based on your own experiences in relation to Dunblane please comment on the following statement:*

"Adequate delivery of the C.I.S.D. depends upon knowledge and experience of a range of psychological theories and skills as opposed to simply following protocol and including all the important elements in the right order"

6. *What psychological theories and skills did you draw upon and apply whilst conducting the debriefing/s ?*

7. *The aims of the debriefings were:*

(i) to reduce the impact of the critical incident

(ii) to facilitate the normal recovery processes

Overall, do you think the debriefing/s you were involved in were successful in achieving these aims ?

8. *In conclusion, are there any other comments which you would like to make in relation to the*
C.I.S.D. model and your role in delivering it?

Thank you for your contribution to the research project.

Appendix 2:

Major Research Project Literature Review:

The Role of Homework Compliance in Cognitive Behavioural Treatments for Depression

Appendix 2.1: *Notes for Contributors "British Journal of Clinical Psychology"*

British Journal of Clinical Psychology

How to Submit to this Journal

Case studies are normally only published as Brief Reports. Papers are evaluated in terms of their theoretical importance, contributions to knowledge, relevance to the concerns of practising clinical psychologists, and readability. Papers generally appear in order of acceptance except for the priority given to Brief Reports and Comments.

The Editorial Board will reject papers which evidence discriminatory, unethical or unprofessional practices.

Contributions should be prepared in accordance with The British Psychological Society's Style Guide available from mail@bps.org.uk. Contributions should be as concise as clarity permits, and illustrations kept as few as possible. Papers should not normally exceed 5000 words. A structured abstract of up to 250 words should be provided. The title should indicate exactly but as briefly as possible the subject of the article, bearing in mind its use in abstracting and indexing schemes.

The Journal proposes to adopt structured abstracts. Articles containing original scientific research should include a structured abstract with the following headings and information:

Objectives:
State the primary objective of the paper and the major hypothesis tested (if appropriate).
Design:
Describe the design of the study and describe the principal reasoning for the procedures adopted.
Methods:
State the procedures used, including the selection and numbers of participants, the interventions or experimental manipulations, and the primary outcome measures.
Results:
State the main results of the study. Numerical data may be included but should be kept to a minimum.
Conclusions
State the conclusions that can be drawn from the data provided, and their clinical implications (if appropriate).

Review articles should include an abstract which may be structured under the following headings:

Purpose:
State the primary objectives of the review.
Methods:
State the methods used to select studies for the review, the criteria for inclusion, and the way in which the material was analysed.
Results:
State the main results of the review.
Conclusions:
State the conclusions that can be drawn from the review, and their clinical implications if appropriate.

Authors please note: Revisions without a structured abstract will not be considered for publication.

1. Contributions should be typed in double spacing with wide margins and on only one side of each sheet. Sheets should be numbered . The top copy and three good copies should be submitted and a copy retained by the author.

2. Tables should be typed in double spacing on separate sheets. Each should have a self-explanatory title and should be comprehensible without reference to the text. They should be referred to in the text by arabic numerals. Data given should be checked for accuracy and must agree with mentions in the text.

3. Figures, i.e. diagrams graphs or other illustrations, should be on separate sheets, numbered sequentially "Fig. 1", etc., and each identified on the back with the author's name and the title of the paper. They should be carefully drawn , larger than their intended size, suitable for photographic reduction and clear when reduced in size. Special care is needed with symbols: correction at proof stage may not be possible. Captions should be listed on a separate sheet.

4. Bibliographical references in the text should quote the author's name and date of publication thus: MacGregor (1996). They should be listed alphabetically by author at the end of the article according to the following format:

   Moore, R.G. & Blackburn, I.-M. (1993). Sociotropy, autonomy and personal memories in depression . *British Journal of Clinical Psychology*, **32**, 460-462.
   Steptoe, A. & Wardle, J. (1992). Cognitive predictors of health behaviour in contrasting regions of Europe. In C.R. Brewin, A.Steptoe & J. Wardle (Eds), *European Perspectives in Clinical and Health Psychology*, pp. 101-118. Leicester: The British Psychological Society.

Particular care should be taken to ensure that references are accurate and complete.

Appendix 3:

Major Research Project Application for Ethical Approval:

The Effect of Written Prompts on Homework Compliance and Outcome in a Cognitive Behavioural Treatment for Depression

Appendix 3.1: Guidelines for Submission, Greater Glasgow Mental Health Services NHS Trust

GREATER GLASGOW COMMUNITY AND MENTAL HEALTH SERVICES NHS TRUST

SUBMISSION OF RESEARCH PROTOCOLS TO THE RESEARCH ETHICS COMMITTEE

All research protocols for consideration by the Research Ethics Committee of Greater Glasgow Community and Mental Health Services NHS Trust must be submitted on the standard application form, a copy of which is enclosed. Your attention is drawn to the guidance notes to researchers, and it is suggested that you read these prior to completing your application.

The application must be completed even when a separate protocol (for example, prepared by a pharmaceutical company) exists.

If you wish advice on completing your application, or any aspect of the study you are proposing to undertake please contact Mrs Anne McMahon, Medical Director's Office, Trust Headquarters, Gartnavel Royal Hospital.
Tel: 0141-211-3824.

NOTES: This application form must be *typed*, not hand written. All questions must be answered: it is not an acceptable answer to put see *'separate protocol'*; *'not applicable'* is a satisfactory answer where appropriate. Where a separate protocol exists, this should be submitted in addition to the application form.

Appendix 3.2: Participants Information Sheet

Participant's Information Sheet

Introduction

I am in my final year of doctorate training to be a clinical psychologist. As part of my training I am required to do a small research project into an area that may be of interest to other psychologists as well as improving the services we offer patients. My own personal interest is in the area of depression and the treatment that clinical psychologists most commonly offer - cognitive behaviour therapy. This project is all about exploring ways in which we can improve what is already a very effective treatment.

Who will be invited to take part?

To carry out my research I need the assistance of 8-10 participants, aged between 18-65, who are currently suffering from depression. These are people, like yourself, who would first of all be thoroughly assessed to see what their problems were. Then, if it seemed the best course of action, they would be offered cognitive behaviour therapy in a clinic such as this.

What would I have to do?

As usually happens with patients suffering from depression, you will be offered 10-12 sessions of therapy, and, each week/fortnight you will be expected to attend a therapy session and complete a homework assignment. The quality of treatment offered will meet our normal high standards.

The main differences between this project and normal therapy will be as follows:

- Before each session you will be asked to complete a questionnaire, asking how you are feeling and what you think about your treatment.
- After some sessions you may also receive a short letter at home. This will simply remind you in very general terms what your last session was about and what your homework assignment is.
- An audio recording of each session will be made. This will involve a small microphone (attached to a tape recorder) being placed on a coffee table in the room.

What steps are taken to make sure my rights are protected?

Before carrying out research we have to satisfy the NHS Trust offering you treatment (The Greater Glasgow Community and Mental Health Services NHS Trust) that we will, first and foremost, meet your needs as a patient. We have submitted a report to the ethical committee explaining all about the project and they have approved it as being proper and ethical.

As stated already, one of the main differences with your treatment is that we will be gather two extra pieces of information - the questionnaires and the tape recordings. This information will not be used to alter your treatment, we will simply store it for

statistical analysis at a later date. As with all our records, care will be taken to ensure that this information remains confidential. The only people having access to it will be your therapist, his supervisor, and possibly another qualified clinical psychologist. At the end of the project all audio-tape recordings and questionnaires will be destroyed.

In addition, we will make one extra contact with you - the letter. Once again, we want to ensure that your confidentiality is respected. Each letter shall be marked 'private and confidential', in addition, we will check with you that you are confident that your address is one where no unauthorised person will read your mail. Further to this, the message sent to you will contain the relevant instructions for the homework but little in the way of personal information . For example, "*At this week's session we discussed how your thoughts affect your behaviour. Over the next week please keep a record of how you respond to difficult situations, i.e. your thoughts, behaviours and feelings during them*".

What if I don't want to take part, or want to pull out half way through?
In both instances your rights as a patient would not be affected. If you do not want to take part at the outset you will still be offered treatment at this clinic. If you wanted to pull out during the treatment programme (i.e. after I had started treating you) your future treatment by me would not be affected in any way.

Finally, is there anything else you would like to know ?
We have tried to give you all the necessary information without going overboard, however, you may have some further questions. If this is the case, then please do not hesitate to ask at our next meeting, or indeed, at any time during treatment.

Ewan M. Lundie
Trainee Clinical Psychologist

Paul Fleming
Chartered Clinical Psychologist
& Research Supervisor

Appendix 3.3: Participants Consent Form

Participants Consent Form

Participant's Name.....

I have read the attached 'Participant's Information Sheet' which outlines in basic terms what the research project is trying to achieve and my role in it as a participant. I realise that I will be offered 10-12 sessions of cognitive-behaviour therapy and, in addition, the following will take place:

1. Before each session I will be asked to complete a questionnaire, asking how I am feeling and what I think about my treatment.
2. After some sessions I may also have a brief letter sent to my home address. This will simply remind me in very general terms what my session was about and what my homework assignment is.
3. An audio recording will be made of each session.

I understand that my needs as a patient will always come first before the needs of the project. Also, the necessary steps will be taken to ensure that all the information obtained will remain confidential.

I am willing to participate in this project under the terms laid out above and covered in more detail in the 'Participant's Information Sheet':

Signed.....

Date.....

Appendix 3.4: General Practitioner's Information Letter

Department of Psychological Medicine,
Academic Centre,
Gartnavel Royal Hospital,
1055 Great Western Road,
Glasgow G12 OXH.

Tel: 0141-211-3920

GP's address

Date

Dear Dr.,

Re: **D.o.b.**

I am currently running a small scale research project looking at whether the use of written prompts between sessions will improve compliance with treatment protocol and outcome in cognitive behaviour therapy for depression. This project is based at the Department of Clinical Psychology,....., Glasgow, from where I received ..... as a referral. The following is a brief outline of what the project entails.

Introduction

I am in my final year of doctorate training to be a clinical psychologist. As part of my training I am required to do a research project into an area that may be of interest to other psychologists as well as improving the services we offer patients. My own personal interest is in the area of depression and the treatment that clinical psychologists most commonly offer - cognitive behaviour therapy.

Participants

To carry out my research I need the assistance of 8-10 participants, aged between 18-65, who are currently suffering from a major depressive episode (DSM-IV criteria). These individuals are first of all thoroughly assessed to see what their problems are. Then, if it seems the best course of action, they are offered cognitive behaviour therapy in a clinic such as this.

What would participants have to do?
They will be offered 10-12 sessions of cognitive behaviour therapy for depression. As part of this they are expected to attend a therapy session weekly/fortnightly and complete a related homework assignment.

The main differences between this project and normal therapy will be as follows:

- Before each session patient's will be asked to complete a questionnaire, asking how they are feeling and what they think about their treatment.
- After some sessions they may also receive a short letter at home (the experimental written prompt). This will simply remind them, in very general terms, what their last session was about and what their homework assignment is.
- An audio recording of each session will be made. This will involve a small microphone (attached to a tape recorder) being placed on a table in the room.

Has ethical approval been granted?
Before carrying out research we have to satisfy the NHS Trust offering psychological treatment (The Greater Glasgow Community and Mental Health Services NHS Trust) that the needs of the patient are in all circumstances paramount. We have submitted a report to the trust's ethics committee explaining the methodology and they have approved the project.

Could confidentiality of patient information be compromised by participation in this project?
The added information gathered for research purposes (questionnaires and audio-recordings) will not be used to alter an individual's treatment, we will simply store it for statistical analysis at a later date. The only people having access to it will be the therapist/researcher (Ewan Lundie, Trainee Clinical Psychologist), research supervisor (Paul Fleming, Clinical Psychologist), and possibly one other qualified clinical psychologist (for independent rating purposes). Whilst the project is running the data will be stored in a locked cabinet at all times, and, at its completion all recordings and questionnaires will be destroyed.

So far as the prompting letters are concerned, several steps are taken to reduce the risk of confidentiality being compromised. First, letters shall be marked 'private and confidential' when they are sent out to patients. Second, we will check with patients at the outset that they are confident that their address is one where no unauthorised person will read their mail. Third, in the unlikely event that the letter should fall into the wrong hands, we have made plans to minimise the impact of such an event. Letters shall be worded in such a way that the instructions for the homework are clear but the personal information is minimised. For example, *"At this week's session we discussed how your thoughts affect your behaviour. Over the next week please keep a record of how you respond to difficult situations, i.e. your thoughts, behaviours and feelings during them".*

What if a patient doesn't want to take part, or wants to pull out half way through?
In both instances their rights to treatment would not be affected. If they don't want to take part they will still be offered treatment within this clinic, but probably by another

clinician as I am only at .....Clinic one day per week and have to direct most of my efforts towards this project. If someone wanted to pull out during the treatment programme (i.e. after I had started treatment) that individual's future treatment by me would not be affected in any way.

Participant's knowledge of the experimental hypotheses?

Participants serve as their own control in the experimental design. Participants receive written information similar to that already set out in this letter so far, except that we do not explicitly state that it is the effect of the prompting letter that we are interested in as doing so may confound the data. We shall debrief each individual about the purpose of the project around the time that they are completing treatment.

Concluding comments

Should you require further information or are unhappy in any way about ..... participating in such research please do not hesitate to contact me. As mentioned, ... will be given an information sheet outlining the aims of the project and what is required of him/her.

Yours sincerely

Ewan M. Lundie
Trainee Clinical Psychologist

Paul Fleming
Chartered Clinical Psychologist
& Research Supervisor

Appendix 3.5: Written Prompt Letter Template

Psychology Department
GLASGOW

Tel: 0141-

Ewan Lundie/Paul Fleming

Fax: 0141-

DEPARTMENT OF CLINICAL PSYCHOLOGY

1998

Dear,

At this weeks session we discussed ..... Leading on from this your homework assignments in preparation for the next session are:

(1).

(2).

(3).

Remember, the cognitive-behavioural treatment approach that we are taking with you is largely self-help. The aim of treatment is not only to help you overcome the current problems, but also any similar ones that may arise in the future. Completion of homework assignments is a crucial part of that long-term process.

Good luck with your assignment(s), I look forward to discussing the outcome with you when we next meet on .....at ..... am/p.m.

Yours sincerely

EWAN LUNDIE
Trainee Clinical Psychologist

PAUL FLEMING
Supervisor

Appendix 4:

Major Research Project:

The Effect of Written Prompts on Homework Compliance and Outcome in a Cognitive Behavioural Treatment for Depression

Appendix 4.1: Notes for Contributors "British Journal of Clinical Psychology"

British Journal of Clinical Psychology

How to Submit to this Journal

Case studies are normally only published as Brief Reports. Papers are evaluated in terms of their theoretical importance, contributions to knowledge, relevance to the concerns of practising clinical psychologists, and readability. Papers generally appear in order of acceptance except for the priority given to Brief Reports and Comments.

The Editorial Board will reject papers which evidence discriminatory, unethical or unprofessional practices.

Contributions should be prepared in accordance with The British Psychological Society's Style Guide available from mail@bps.org.uk. Contributions should be as concise as clarity permits, and illustrations kept as few as possible. Papers should not normally exceed 5000 words. A structured abstract of up to 250 words should be provided. The title should indicate exactly but as briefly as possible the subject of the article, bearing in mind its use in abstracting and indexing schemes.

The Journal proposes to adopt structured abstracts. Articles containing original scientific research should include a structured abstract with the following headings and information:

Objectives:
State the primary objective of the paper and the major hypothesis tested (if appropriate).
Design:
Describe the design of the study and describe the principal reasoning for the procedures adopted.
Methods:
State the procedures used, including the selection and numbers of participants, the interventions or experimental manipulations, and the primary outcome measures.
Results:
State the main results of the study. Numerical data may be included but should be kept to a minimum.
Conclusions
State the conclusions that can be drawn from the data provided, and their clinical implications (if appropriate).

Review articles should include an abstract which may be structured under the following headings:

Purpose:
State the primary objectives of the review.
Methods:
State the methods used to select studies for the review, the criteria for inclusion, and the way in which the material was analysed.
Results:
State the main results of the review.
Conclusions:
State the conclusions that can be drawn from the review, and their clinical implications if appropriate.

Authors please note: Revisions without a structured abstract will not be considered for publication.

1. Contributions should be typed in double spacing with wide margins and on only one side of each sheet. Sheets should be numbered . The top copy and three good copies should be submitted and a copy retained by the author.

2. Tables should be typed in double spacing on separate sheets. Each should have a self-explanatory title and should be comprehensible without reference to the text. They should be referred to in the text by arabic numerals. Data given should be checked for accuracy and must agree with mentions in the text.

3. Figures, i.e. diagrams graphs or other illustrations, should be on separate sheets, numbered sequentially "Fig. 1", etc., and each identified on the back with the author's name and the title of the paper. They should be carefully drawn , larger than their intended size, suitable for photographic reduction and clear when reduced in size. Special care is needed with symbols: correction at proof stage may not be possible. Captions should be listed on a separate sheet.

4. Bibliographical references in the text should quote the author's name and date of publication thus: MacGregor (1996). They should be listed alphabetically by author at the end of the article according to the following format:

   Moore, R.G. & Blackburn, I.-M. (1993). Sociotropy, autonomy and personal memories in depression . *British Journal of Clinical Psychology*, **32**, 460-462.
   Steptoe, A. & Wardle, J. (1992). Cognitive predictors of health behaviour in contrasting regions of Europe. In C.R. Brewin, A.Steptoe & J. Wardle (Eds), *European Perspectives in Clinical and Health Psychology*, pp. 101-118. Leicester: The British Psychological Society.

   Particular care should be taken to ensure that references are accurate and complete.

Appendix 4.2: Therapist's Questionnaire

Therapist Rating Of Patient Completion Of Self-Help Assignments

Therapist:..... ***Participant no.:*** .....
Date:..... ***Treatment Session No.:***..... ***Date Homework assigned:***.....

Instructions: Patient should not be aware that compliance is being rated. Ideally, these ratings should be made retrospectively whilst listening to recordings of the therapy session. In circumstances where no recording has been made complete Sections A, B, C & D immediately the session ends.

***Section A*: Type and Quantity of Homework Assigned**
Which of the following classifications most accurately categorises the homework assigned:

A. *Increasing Pleasure and Mastery*: Engaging in activities which are likely to be pleasurable or to invoke a sense of mastery.
B. *Scheduling / Structuring Activities*: Engaging in specific activities according to a schedule or structure that has been devised for the purpose of increasing the likelihood that the client will initiate or follow through on those activities.
C. *Self-monitoring*: Keeping a record of feelings, moods, activities, or events.
D. *Recording Thoughts*: Keeping a record of thoughts.
E. *Manipulating Behaviour via cues or consequences*: Arranging for cues (i.e. stimulus control) or consequences (i.e. reward or punishment) for the client's specific thoughts or behaviours in order to increase or decrease the occurrence of those behaviours.
F. *Practising Alternative Behaviours*: Engaging in behaviours that were outside the client's normal repertoire but which had either been planned or practised during therapy (e.g., systematic relaxation, social skills)
G. *Practising Cognitive Techniques*: Employing cognitive techniques that had been taught in therapy (e.g., examining available evidence, searching for alternative explanations)
H. *Increasing Information*: Increasing understanding of problems and how to ameliorate them by accessing sources of information (e.g., visiting library, bibliotherapy).

Total number of tasks assigned: **1 2 3 4 5 6**

***Section B*: Therapist's Self-Rating of Compliance with the Assigning of Homework**
Which of the following statements most accurately reflects the assignment of homework at the previous session?

1. The therapist did not attempt to incorporate homework relevant to Cognitive Therapy.
2. The therapist had significant difficulties in incorporating homework (for example, did not review previous homework, did not explain homework in sufficient detail, assigned inappropriate homework).
3. The therapist reviewed previous homework and assigned 'standard' cognitive therapy homework generally relevant to issues dealt with in session. Homework was explained in sufficient detail.
4. The therapist reviewed previous homework and carefully assigned homework drawn from Cognitive Therapy for the coming week. Assignment seemed 'custom-tailored' to help the patient incorporate new perspectives, test hypotheses, experiment with new behaviours discussed during session, ,and so forth.

Additional Comments:

***Section* C: Assessing the Degree (Quantity) of Patient Compliance**

Which of the following statements most accurately reflects the degree of patient compliance with the homework assigned?

1. The patient did not attempt the assigned homework.
2. The patient attempted the assigned homework but was unable to execute it for reasons such as lack of ability or extenuating circumstances.
3. The patient did homework that was different from that assigned, but that would be considered 'relevant' to Cognitive Therapy and the patient's presenting problems. For example, if a male patient was given an assignment to challenge the idea that he was physically unattractive by writing a history of when friends and/or romantic partners have contradicted this idea. Instead, the patient chose to ask the two women he is currently dating what they think of his attractiveness.
4. The patient did a portion of the assigned homework. Estimate proportion completed:
   0% - 10% - 20% - 30% - 40% - 50% - 60% - 70% - 80% - 90% - 100%
5. The patient did the assigned homework.
6. The patient did more of the assigned homework than was requested.

Additional Comments:

***Section* D: Assessing the Quality of Homework Compliance**

Merely completing an assignment is insufficient for assessing the competency of the effort. Quality of homework compliance is defined here as '*the degree to which the tasks were done correctly*'.

Based on your knowledge of what each category of assignment entails, rate the quality of compliance with each task on the 5 point scale below. These ratings should be made in the context of therapist compliance with the assignment of the homework:

1	2	3	4
Poor	Moderate	Good	Excellent

Task 1:

Task 2:

Task 3:

Task 4:

Task 5:

Task 6:

Additional Comments:

Appendix 4.3: Independent Expert Rater's Questionnaire

Independent Expert Ratings Of Patient Completion Of Self-Help Assignments

Rater:..... ***Participant no.:***.....
Date:..... ***Treatment Session No.:***..... ***Date Homework assigned:***.....

Instructions: Patient should not be aware that compliance is being rated. Ideally, these ratings should be made retrospectively whilst listening to recordings of the therapy session. In circumstances where no recording has been made complete Sections A, B, C & D immediately the session ends.

***Section A*: Type and Quantity of Homework Assigned**
Which of the following classifications most accurately categorises the homework assigned:

A. *Increasing Pleasure and Mastery*: Engaging in activities which are likely to be pleasurable or to invoke a sense of mastery.
B. *Scheduling / Structuring Activities*: Engaging in specific activities according to a schedule or structure that has been devised for the purpose of increasing the likelihood that the client will initiate or follow through on those activities.
C. *Self-monitoring*: Keeping a record of feelings, moods, activities, or events.
D. *Recording Thoughts*: Keeping a record of thoughts.
E. *Manipulating Behaviour via cues or consequences*: Arranging for cues (i.e. stimulus control) or consequences (i.e. reward or punishment) for the client's specific thoughts or behaviours in order to increase or decrease the occurrence of those behaviours.
F. *Practising Alternative Behaviours*: Engaging in behaviours that were outside the client's normal repertoire but which had either been planned or practised during therapy (e.g., systematic relaxation, social skills)
G. *Practising Cognitive Techniques*: Employing cognitive techniques that had been taught in therapy (e.g., examining available evidence, searching for alternative explanations)
H. *Increasing Information*: Increasing understanding of problems and how to ameliorate them by accessing sources of information (e.g., visiting library, bibliotherapy).

Total number of tasks assigned: **1** **2** **3** **4** **5** **6**

***Section B*: Assessing Therapist Compliance with the Assigning of Homework**
Which of the following statements most accurately reflects the assignment of homework at the previous session?

1. The therapist did not attempt to incorporate homework relevant to Cognitive Therapy.
2. The therapist had significant difficulties in incorporating homework (for example, did not review previous homework, did not explain homework in sufficient detail, assigned inappropriate homework).
3. The therapist reviewed previous homework and assigned 'standard' cognitive therapy homework generally relevant to issues dealt with in session. Homework was explained in sufficient detail.
4. The therapist reviewed previous homework and carefully assigned homework drawn from Cognitive Therapy for the coming week. Assignment seemed 'custom-tailored' to help the patient incorporate new perspectives, test hypotheses, experiment with new behaviours discussed during session, ,and so forth.

Additional Comments:

***Section* C: Assessing the Degree (Quantity) of Patient Compliance**

Which of the following statements most accurately reflects the degree of patient compliance with the homework assigned?

1. The patient did not attempt the assigned homework.
2. The patient attempted the assigned homework but was unable to execute it for reasons such as lack of ability or extenuating circumstances.
3. The patient did homework that was different from that assigned, but that would be considered 'relevant' to Cognitive Therapy and the patient's presenting problems. For example, if a male patient was given an assignment to challenge the idea that he was physically unattractive by writing a history of when friends and/or romantic partners have contradicted this idea. Instead, the patient chose to ask the two women he is currently dating what they think of his attractiveness.
4. The patient did a portion of the assigned homework. Estimate proportion completed:
   0% - 10% - 20% - 30% - 40% - 50% - 60% - 70% - 80% - 90% - 100%
5. The patient did the assigned homework.
6. The patient did more of the assigned homework than was requested.

Additional Comments:

***Section* D: Assessing the Quality of Homework Compliance**

Merely completing an assignment is insufficient for assessing the competency of the effort. Quality of homework compliance is defined here as '*the degree to which the tasks were done correctly*'.

Based on your knowledge of what each category of assignment entails, rate the quality of compliance with each task on the 5 point scale below. These ratings should be made in the context of therapist compliance with the assignment of the homework:

1	2	3	4
Poor	Moderate	Good	Excellent

Task 1:

Task 2:

Task 3:

Task 4:

Task 5:

Task 6:

Additional Comments:

Appendix 4.4: Participant's Questionnaire

Participant's Questionnaire

Identification Number:.....
Date:.....
Therapy Session No.:.....

Instructions: Please answer the following questions and then hand this back to the receptionist in the envelope provided. There are no right or wrong answers, it is simply your honest opinion that we are looking for. Do not dwell on the questions for too long as the answer which springs most readily to mind is probably the most accurate. The responses given are confidential and it is only the research supervisor, *not your therapist*, who will be aware of your ratings during your treatment programme.

Section A
Using the visual scale below, rate the extent to which you would be willing to try each of these coping activities if your therapist suggested this today. Do this by placing an '**x**' mark on the line.

Example

0_____100
Definitely Not Definitely

Activities

1. Engaging in activities which are likely to be pleasurable.

0_____100
Definitely Not Definitely

2. Engaging in activities which are likely to give a sense of achievement.

0_____100
Definitely Not Definitely

3. Engaging in specific activities according to a schedule or plan.

0_____100
Definitely Not Definitely

4. Keeping a record of feelings, moods, activities, or events.

0_____100
Definitely Not Definitely

5. Keeping a record of thoughts.

0_____100
Definitely Not Definitely

6. Rewarding myself for having certain thoughts in order to increase the occurrence of those thoughts.

0_____100
Definitely Not Definitely

7. Being hard on myself for having certain thoughts in order to decrease the occurrence of those thoughts.

0_____100
Definitely Not Definitely

8. Rewarding myself for certain behaviours in order to increase the occurrence of those behaviours.

0_____100
Definitely Not Definitely

9. Being hard on myself for certain behaviours in order to decrease the occurrence of those behaviours.

0_____100
Definitely Not Definitely

10. Engaging in behaviours that were outside of what I would normally do, but, which had either been planned or practised during therapy.

0_____100
Definitely Not Definitely

11. Using thought techniques that had been taught in therapy (e.g., examining available evidence, searching for alternative explanations)

0_____100
Definitely Not Definitely

12. Reading about my problems and how to cope with them.

0_____100
Definitely Not Definitely

Additional Comments:

Section B

Using a similar scale, rate the extent to which you think that each of these statements is true today:

Statements

1. "The things my therapist says and does makes me feel that I can trust him."

0_____100
False True

2. "He often does not seem to be genuine."

0_____100
False True

3. "He pretends that he likes me more than he really does."

0_____100
False True

4. "I feel that he really thinks I am worthwhile."

0_____100
False True

5. "He is friendly and warm towards me."

0_____100
False True

6. "He does not really care what happens to me."

0_____100
False True

7. "He usually understands what I am trying to tell him."

0_____100
False True

8. "He understands my words but not the way I feel."

0_____100
False True

9. "He really sympathises with my difficulties."

0_____100
False True

10. "He acts condescending, talks down to me."

0_____100
False True

Additional Comments:

Section C

At the start of treatment you identified three main problems. Rate how you are currently coping in each area compared with when you started treatment using the same type of scale again.

1. Problem number one: ""

0_____50_____100
much worse no change much better

2. Problem number two: ""

0_____50_____100
much worse no change much better

3. Problem number three: ""

0_____50_____100
much worse no change much better

4. Overall, how do you feel you are coping now compared with when you started treatment.

0_____50_____100
much worse no change much better

Additional Comments:

Appendix 4.4: Participant's Post-Treatment Questionnaire

Participant's Post-Treatment Questionnaire

Identification Number:.....
Date:.....
Therapy Session No.:.....

Instructions: This questionnaire contains a series of questions regarding your participation in the research project. There are no right or wrong answers, it is simply your honest opinion we are looking for. Do not dwell on the questions for too long as the answer which springs most readily to mind is probably the most accurate. The responses given are confidential.

Section A: Knowledge of Experimental Hypotheses

1. What do you think the experimenter was trying to investigate?

2. Have you thought this all along or did your views change during treatment?

3. How confident are you that your answer at '1' above is correct?

1. 0-20% 2. 20-40% 3. 40-60% 4. 60-80% 5. 80-100%

Section B: Instrumentation

1. How did you feel about having to fill out a questionnaire before the start of each session?

1. Very positive 2. Quite positive 3. Neutral 4. Quite negative 5. Very negative

2. How aware were you that sessions were being taped?

1. Very much so 2. Quite a lot 3. A moderate amount 4. A little bit 5. Not at all

Do you think this affected your behaviour during the sessions? If so, in what way?

3. How did you feel about letters containing details of a session and homework being sent to your home address?

Very positive 2. Quite positive 3. Neutral 4. Quite negative 5. Very negative

4. Do you think the letters had any effect on the way you behaved between sessions?

1. Not at all 2. A little bit 3. A moderate amount 4. Quite a lot 5. Very much so

5. Do you think the letters had any effect on the way you felt between sessions?

1. Not at all 2. A little bit 3. A moderate amount 4. Quite a lot 5. Very much so

Section C: Subject Role

1. During treatment, how aware were you of being a participant in a research project:

1. Not at all 2. A little bit 3. A moderate amount 4. Quite a lot 5. Very much so

Do you think this affected your behaviour during the sessions? If so, in what way?

Do you think this affected your behaviour in the time between the sessions? If so, in what way?

2. Did you ever feel used or manipulated at any time during treatment?

1. Very much so 2. Quite a lot 3. A moderate amount 4. A little bit 5. Not at all

3. Overall, do you think that being a participant in a research project had an effect on whether you got better or not?

1. Very much so 2. Quite a lot 3. A moderate amount 4. A little bit 5. Not at all

Section D: Subject Pressure

1. During treatment, did you feel that your role as a participant in a research project placed you under any pressure to succeed in therapy?

1. Not at all 2. A little bit 3. A moderate amount 4. Quite a lot 5. Very much so

Do you think this affected your behaviour during the sessions? If so, in what way?

Do you think this affected your behaviour in the time between the sessions? If so, in what way?

2. During treatment, did you feel that your role as a participant in a research project placed you under any pressure to remain in treatment?

1. Very much so 2. Quite a lot 3. A moderate amount 4. A little bit 5. Not at all

Do you think this affected your behaviour during the sessions? If so, in what way?

Do you think this affected your behaviour in the time between the sessions? If so, in what way?

3. During treatment, did you feel that your role as a participant in a research project placed you under any pressure to complete homework assignments?

1. Not at all 2. A little bit 3. A moderate amount 4. Quite a lot 5. Very much so

Do you think this affected your behaviour during the sessions? If so, in what way?

Do you think this affected your behaviour in the time between the sessions? If so, in what way?

Debrief & Thank for Participation in Project

Appendix 4.6 Development, Administration and Scoring of Measures

Therapist

The Sheffield Psychotherapy Rating Scale (Shapiro & Startup, 1990) categorises eight types of assignment typically used in cognitive-behavioural treatments for depression (see Appendix 4.2, section A). At the end of each session the therapist recorded the assignments recommended and classified each using categories from this scale.

Young, Beck & Budenz (1983) developed an item for assessing therapist compliance with the assignment of homework (see Appendix 4.2, section B) this was used by the therapist to self-rate compliance at the close of each session.

Primakoff, Epstein & Covi (1986) made recommendations for assessing quantity and quality of patient compliance with homework. The six point scale for measuring quantity of compliance ranges from no compliance to doing more than that assigned. This scale was used. Recommendations for assessing quality of compliance include precise definitions for the requirements of each assignment and an example given uses an 11 point scale. This degree of specificity was beyond the scope of this project. Instead the basic principles of Primakoff et al. were taken into account and each item was scored on a four point semantic scale. For the purposes of parametric data analysis and graphic presentation overall scores of quantity and quality were calculated on a range from 0-100 for each item. For quantity: no compliance = 0, partial compliance = 50, and full compliance = 100. For quality: poor compliance = 0, moderate compliance = 33.3, good compliance = 66.6, and excellent compliance = 100. Quantity and quality of compliance were scored on session-by-session basis. If there was more than one

item to be scored for a session then a mean was calculated and the patient assigned separate global scores for quantity and quality (see Appendix 4.2, section C and D).

The Hamilton Depression Rating Scale (Hamilton, 1960) is a 17 item therapist rating scale that measures the symptoms of depression. Severity of depression is indicated by the range that the score falls within: no depression (0-7), mild (8-12), mild-to-moderate (13-17), moderate (18-29), and severe (30-52). This was administered every third session.

Independent Expert Rater

The Cognitive Therapy Rating Scale was devised by Young, Beck (1980) to evaluate therapist's competence in implementing the cognitive therapy protocol of Beck, Rush, Shaw & Emery, (1979). It contains 11 items divided into two sub-scales: General Skills and Specific Cognitive Therapy Skills. Audio-recordings were made of all treatment sessions and, in line with the recommendations (Vallis, Shaw & Dobson, 1986), these were rated by an independent expert rater.

Participants

The Beck Depression Inventory (BDI-II, Beck, Steer & Brown, 1996) is a 21 item self-report scale that measures the symptoms of depression. Severity of depression is indicated by the range that the score falls within: minimal (0-13), mild (14-19), moderate (20-28), and severe (29-63). This was administered every third session.

The 'Willingness' scale is a 12 item sub-scale of the Self-Help Inventory devised by Burns, Shaw & Crocker (1987) which asks depressed patients to rate how willing they would be to try cognitive or behavioural coping activities if their therapist suggested it. The item wording was retained but it was converted into visual analogue scale (VAS) format for this study with anchoring statements of 'definitely' and 'definitely not' (see Appendix 4.4, section A). Each of the 12 items were scored on a range of 1-10 and this was then converted into a global score on a 0-100 range. This was administered prior to each session and is referred to elsewhere in this text as a score for 'motivation'.

The 'Empathy Scale' (persons & Burns, 1995) is a ten item questionnaire that asks patients to rate how warm, caring and empathic their therapists are. In its original form it is a four point Likert scale. For the purposes of this study the scale was adapted into a VAS with anchoring statements of 'true' and 'false' (see Appendix 4.4, section B). The scores obtained were converted into a global score employing the same method to convert willingness scale scores. This was administered prior to every session.

Battle, Imber, Hoehn-Saric, et al, (1966) developed an individually tailored 'target complaints' procedure which requires patients to define their major problems on intake and then subsequently rate them at termination and follow-up. Beutler & Hamblin (1986) propose that both general and specific outcome measures consistently contribute to a general outcome variable of change similar to that found in intellectual assessment ('g'). Three target complaint items and an item designed measure global improvement in coping ability were presented in on a session-to-session basis in VAS format. Previous studies using this method to assess mood have found it to have acceptable levels of discriminant validity (Beckham, 1995; Stern, Arruda, Hooper, et al., 1997;

Davis, Judd & Herrman, 1997). All VAS's used had a 100 point scale, anchor points were 'much worse' and 'much better' with a mid-point of 'the same' (see Appendix 4.4, part C), this is in line with recommendations made by Beutler & Hamblin (1986). For the purposes of statistical analysis the three target complaint ratings were aggregated for each session and converted into a scoring range of -100 to 100, a similar conversion was carried out to calculate a sessional global rating. For the purposes of graphic presentation alongside the BDI-II and HDRS scores the improvement in global coping score was converted into a scoring range of 0-50. A score of 50 indicated no progress, or relapse to feeling worse than the start of treatment; lower scores indicated improvement.

A semi-structured questionnaire was administered at the conclusion of the treatment programme but prior to debriefing patients about the research hypotheses. It was devised specifically for this project. The primary aim was to screen for demand characteristic variables based on the person's perception of their role as 'participants' and ecological influences caused by research instrumentation such as the questionnaire, the tape recorder, and the prompt letter. This was based on measures devised by Anderson & Strupp (1996). A secondary aim was to gather qualitative information about the effects of the prompt letter. Three items were carefully worded and ordered in the hope that they themselves would not evoke demand characteristics (see Appendix 4.5).

Appendix 4.7: Participant's Pre-Treatment 'Memo'

Cognitive Behaviour Therapy for Depression:
General Characteristics

Cognitive behaviour therapy is an active, directive, time-limited, structured treatment approach. It is based on the theory that an individual's feelings and behaviours are largely determined by the way in which he or she thinks about themselves, their dealings with others, and their role in society. It is:

- based on a coherent model of emotional health (outlined above) rather than a rag-bag of techniques with no unifying theory.
- based on a sound collaboration between the therapist and patient, with the patient explicitly given the status of an equal partner in a team approach to problem-solving.
- brief and time-limited, patients are encouraged to develop independent self-help skills rather than treatment continuing indefinitely over a lengthy period.
- structured and directive - sessions follow a set pattern where an agenda is set, topics are prioritised and discussed, and self-help assignments (homework) is agreed on the basis of what was discussed during the session.
- problem-oriented and focused on factors maintaining difficulties rather than on their origins.
- reliant on a process of the patient asking their own questions and making their own discoveries with minimal assistance from the therapist rather than on persuasion, lecturing, or debate from the therapist.
- based on scientific methods, with the patients learning to view their own thoughts and beliefs as theories (or ideas) whose accuracy is open to being tested.
- educational, presenting cognitive behavioural techniques as skills to be carried into the patient's own world through homework assignments.

Cognitive behaviour therapy can be thought of as a type of 'problem-solving'. Patients arrive with a number of different problems, including the depression itself. Depressive thinking can prevent them from solving these. Tackling negative thoughts is therefore a means to an end, not an end in itself: the goal of therapy is to find solutions to the patients problems using 'cognitive-behavioural' strategies, not merely to help the patient 'think more rationally'. The first target is relief from their symptoms. In the longer term, the same strategies are used to solve life-problems (such as relationship difficulties) and to prevent, or at least lessen the effects of, future episodes of depression.

In most settings a maximum of twenty one hour sessions is offered, either weekly or fortnightly. In practice, the number of sessions varies considerably. Some people respond well after only half a dozen well-structured educational sessions, whereas most require at least 10-12 sessions. Whatever the number and frequency of the sessions, patients should be aware from the outset that they are expected to develop independent self-help skills, and that the therapist will not be available indefinitely.

N.B. if you have any questions you would like to raise or points you would like to discuss after reading this handout then please do not hesitate to raise them with your therapist at your next treatment session.

Appendix 4.8: Typical Example of Prompting Letter

Dear ,

At this weeks session we discussed: (i) a recent incident where someone was verbally aggressively towards you - you seemed to cope well at the time by using distraction techniques, and then later by reviewing the evidence and expressing your emotions to your partner; (ii) a welcome development in your relationship with someone close to you - in the past it seemed as if this person would often upset you on purpose but now you feel you are happier with the way you interact and recently this person has taken to making unexpected caring gestures towards you; and (iii) the decision to commit yourself to a more serious relationship with your partner - this time around you seem to be more confident that you can deal with the issues of trust and rejection that have been central themes surrounding the breakdown of relationships in the past. Leading on from this your homework assignments in preparation for the next session are:

(1) To read the final handout from the 3 part series explaining the role of negative thoughts in depression.

(2) To complete a diary of situations, thoughts and rational answers linked to this handout.

(3) To continue to challenge your negative thoughts.

Remember, the cognitive-behavioural treatment approach that we are taking with you is largely self-help. The aim of treatment is not only to help you overcome the current problems, but also any similar ones that may arise in the future. Completion of homework assignments is a crucial part of that long-term process.

Good luck with your assignments, I look forward to discussing the outcome with you when we next meet on …….. at …… a.m..

Yours sincerely

EWAN LUNDIE
Trainee Clinical Psychologist

PAUL FLEMING
Supervisor