

Session Impact and Outcome in Group Psychoeducative Cognitive Behavioural Therapy

Stephen Kellett, Suzanne Clarke and Linda Matthews

Psychological Healthcare, Barnsley, UK

Abstract. The current study investigated the relationship between session impact and outcome in group psychoeducative CBT, conducted in a routine clinical setting. Participants completed a range of outcome measures at screening, start of the group, termination of the group and at the 3-month follow-up of the six-session intervention. At the end of each psychoeducative session, participants completed a group-specific version of the Session Impact Scale. No single psychoeducative session was seen to generate greater impacts than any other session of the six. Clients who experienced a clinically significant reduction in symptoms during the group perceived greater interpersonal impacts in the group. Results suggest that interpersonal aspects such as normalization may be the active ingredient of change in such service delivery settings. The results are discussed in terms of the potential powerful role of non-specific factors in such large groups and directions for further research examining the impact-outcome relationship in group-based CBT.

Keywords: Psychoeducation, impact, access, outcome.

Introduction

In terms of session impact, in “one to one” psychotherapies (regardless of modality), both therapists and clients are able to state how useful sessions have been (Stiles et al., 1994). Session impact has been suggested to strongly mediate the process-outcome relationship (Stiles and Snow, 1984). Alter the mode of service delivery to that of a large-group psychoeducational approach, however, and the impact-outcome question becomes more vexing. Do clients need to perceive high “task impacts” (Reynolds, Taylor and Shapiro, 1993a, b) in order to benefit (i.e. learn how to manage a particular symptom) or does participation in such large-groups provide help and relief via high “interpersonal impacts” (i.e. less marginalization and stigma), or via a combination of both types of impact? Sallis, Trevorrow, Johnson, Hovell and Kaplan (1987) previously suggested that outcomes for large-groups may well be due to communal factors such as normalization and not actually the “technical” aspects of the intervention.

Group psychoeducation essentially entails instruction in models of sound mental health, delivered in a traditional teaching style (Cuijpers, Smit, Voordouw and Kramer, 2005). It has been defined as a “low contact, high volume” approach to psychological treatment (Brown, Elliott and Butler, 2006) and as “one of a range of organizational solutions to the supply/demand

Reprint requests to Stephen Kellett, Consultant Clinical Psychologist, Psychological Healthcare, Keresforth Centre, Barnsley S70 6RS, UK. E-mail: stephen.kellett@barnsleyPCT.nhs.uk

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dilemma” in ensuring prompt access to services (Kellett, Clarke and Matthews, in press). As the style of such service provision is essentially didactic (Cuipers et al., 2005), then there are few opportunities for clarifying/modifying/personalizing therapeutic information that are readily available in one to one or small “psychotherapy” group settings. The effectiveness of such psychoeducational CBT is believed to be heavily dependent on clients being able to accept, understand, use and ultimately apply the materials presented (White, 2000), implying that clients need to perceive high task impacts in order to truly benefit from the approach.

Methods of assessing session impact have been developed as a means of inferring change mechanisms in psychotherapy, with the vast majority of impact research having been conducted by Stiles and his colleagues (Stiles, 1980; Stiles and Snow, 1984; Stiles et al., 1994; Reynolds, Stiles, Barkham and Shapiro, 1996; Stiles, Shapiro and Firth-Cozens, 1988). Two assessment tools have emerged as key and common methods of accessing clients’ post-session perceptions of session usefulness. The Session Evaluation Questionnaire (SEQ; Stiles, 1980) assesses depth and smoothness and associated mood/arousal, whereas the Session Impact Scale (SIS; Elliott and Wexler, 1994) assesses more differentiated task and non-specific interpersonal outcomes. Stiles et al. (1988) and Elliott and Shapiro (1988) found that CBT methods tended to be associated with smoothness, problem definition and solutions, whereas psychodynamic methods tended to be associated with depth, personal insight and awareness.

Little is known about the impact-outcome relationship in group psychoeducational approaches. Reynolds et al. (1993a, b) evaluated the outcomes of stress management training (SMT) for staff from a session impact perspective. Non-specific factors appeared to show a linear trend over time, indicating increased perceptions of group support. Specific task impacts (such as insight and task definition) and non-specific factors (such as support, relief and involvement) were all significantly related to non-job satisfaction at one-month follow-up. Additionally, the slope of the interpersonal impacts perceived in the group were associated with less psychological distress at one and 3-month follow-up.

The aims of the current study were to examine the relationship between impact and outcome in a clinical setting, whilst replicating the main features of the Reynolds et al. (1993a, b) methodology. Despite evidence for the clinical efficacy and clinical effectiveness of such psychoeducational approaches (White, Keenan and Brooks, 1992; White, 1998; Kellett, Newman, Matthews and Swift, 2004; Kellett et al., in press), no research has previously been conducted on possible impact-outcome relationships. The SIS (Elliott and Wexler, 1988) was selected to measure session impact due to the SEQ (Stiles, 1980) having low face validity in a group psychoeducational setting. All data were collected within routine clinical practice (Scheonwold and Hoagwood, 2001), therefore benefiting from high levels of external validity and generalizability.

Method

Participants

All participants in the group were referred by General Practitioners as presenting with symptoms of poor mental health. Within the psychoeducational group approach, the White (2004) “stress control” format has been designed to incorporate an eclectic diagnostic mix of participants. Generalized anxieties were the most prevalent presenting problem (56%), followed by depression (36%), with group participants having an extensive list of co-morbidity

issues, including; OCD, PTSD, anger, and pain. Acceptance criteria were: (a) age 16–80; (b) not currently exhibiting psychotic or substance misuse symptoms; (c) no personality disorder; (d) no other psychological treatment for the duration of the study. Sixty-five clients attended the psychoeducational group, with 73.84 % of clients attending four or more of the six sessions offered. Forty-three complete outcome data sets were available for analysis; ANOVA repeated measures analysis requires complete data sets of both impact and outcome measures, thereby reducing the sample size to 39. The average age of participants was 36 years, with females outnumbering males in the group 2:1. Twenty-five percent of the group attendees were unemployed and 56 % were married/co-habiting.

Design, impact and outcome measures

Participants received an individual assessment, six weekly group sessions and were followed up individually 3-months after completion of the group. Outcome measures were completed at four time points: initial assessment, start of group therapy, termination of the group, and 3-month follow-up. The outcome measures were as follows: General Health Questionnaire (GHQ-12; Goldberg, 1978), Brief Symptom Inventory (BSI; Derogatis, 1993), Beck Depression Inventory (BDI, Beck, Steer and Brown, 1995), and Inventory of Interpersonal Problems (IIP-32; Barkham, Hardy and Startup, 1996). At the end of each group session, participants completed a group session impact measure of items taken from the Session Impact Scale (Elliott and Wexler, 1994). As the original SIS contains items that are unsuitable for evaluating group psychoeducational approaches (for example concerning the “therapeutic relationship”), as in the Reynolds et al. (1993a, b) approach, the current study used the 5 items forming a “task” (alpha in current study = 0.92) scale and a 3 item “interpersonal” impact scale (alpha in current study = 0.91). The Reynolds et al. (1993a, b) studies used an item concerning “feeling involved” (SIS item 9) in their interpersonal scale that was considered to have low face validity in a psychoeducational context and replaced it with an item concerning perceived usefulness of the materials presented. The “total” impact scale (i.e. task and interpersonal impacts) alpha in the current study was 0.95. The SIS used in the study is shown in Appendix 1.

Treatment

The group psychoeducative CBT was delivered using the White (2004) treatment model, which has superseded White and Keenan (1990) and entails providing psychoeducative CBT across the anxiety disorders, with an additional management of depressed mood component. The group was delivered by two clinicians in a community setting, outside of normal office hours, with each session lasting for 2 hours (White, 2000). The six sessions contain the following input: session 1 = introduction to psychoeducation and the CBT model of mental health; session 2 = management of physiology; session 3 = management of mental events; session 4 = management of behaviour; session 5 = management of panic attacks and sleep; and session 6 = models of self-care. At the end of each group session, psychoeducative materials are distributed containing homework exercises and preparation for the next session. Clients are given further psychoeducative material at the final session, in order to prepare for the follow-up period. The groups are not interactive and clients are encouraged to simply attend, listen and complete the exercises indicated. Patients can attend with carers should this facilitate engagement with treatment (White, 2000).

Table 1. Partial correlations between session impact ratings and outcome variables at termination (T3) and follow-up (T4)

| | GHQ-12 | | BDI-II | | BSI-GSI | | BSI-PST | | BSI-PSDI | | IIP-32 | |
|-----------------------|--------|-------|--------|-------|---------|-------|---------|-------|----------|-------|--------|------|
| | T3 | T4 | T3 | T4 | T3 | T4 | T3 | T4 | T3 | T4 | T3 | T4 |
| <i>N</i> = 24 | | | | | | | | | | | | |
| Task impacts | 0.05 | -0.50 | -1.70 | -0.50 | 0.27 | -0.09 | 0.18 | -0.09 | 0.49* | 0.06 | 0.32 | 0.26 |
| Interpersonal impacts | 0.40 | -0.14 | -0.13 | -0.13 | -0.01 | -0.29 | -0.17 | -0.27 | 0.40 | -0.14 | 0.15 | 0.01 |
| Total impacts | 0.24 | -0.10 | -0.16 | -0.04 | 0.16 | -0.21 | 0.02 | -0.19 | 0.48 | -0.04 | 0.27 | 0.15 |

p* < .05.Table 2.** Mean session impact ratings during psychoeducational group CBT

| <i>N</i> = 15 ^a | Session 1 | Session 2 | Session 3 | Session 4 | Session 5 | Session 6 | Univariate for session effect |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------------------|
| | Mean (<i>SD</i>) | Mean (<i>SD</i>) | Mean (<i>SD</i>) | Mean (<i>SD</i>) | Mean (<i>SD</i>) | Mean (<i>SD</i>) | <i>F</i> -value |
| Task impact | 2.72 (0.82) | 3.09 (0.82) | 2.99 (0.71) | 3.02 (0.91) | 3.19 (0.89) | 3.08 (0.81) | 0.96 (<i>p</i> = .45) |
| Interpersonal impact | 3.53 (0.86) | 3.93 (0.77) | 3.68 (0.80) | 3.51 (0.92) | 3.62 (0.90) | 3.87 (0.73) | 1.34 (<i>p</i> = .26) |
| Total impact | 3.10 (0.77) | 3.45 (0.74) | 3.32 (0.67) | 3.24 (0.87) | 3.38 (0.85) | 3.42 (0.73) | 0.83 (<i>p</i> = .53) |

^a*N* score is low here as service users needed to have completed *all* session questionnaires to be included in table figures.

Results

The results section is structured according to the following findings: (1) investigation of associations between perceived impacts and outcomes; (2) analyses of session impact over the duration of the six sessions; and (3) comparison of clinically and non clinically significant outcomes in terms of perceived impacts.

The impact scales (total, task and interpersonal) were averaged across the six sessions of psychoeducational CBT. Data for all participants who completed all the outcome and impact ratings (i.e. attended all the sessions) were used in the following analysis. Table 1 describes four separate partial correlation matrices, in which mean session impacts were correlated with outcome scales at termination and 3-month follow-up, with the pre-group baseline scores as covariates. Total, task and interpersonal impacts were generally not correlated with any of the outcome variables at the termination of the group or at follow-up. The exception to the trend on non-association was that the positive symptom distress index (PSDI) of the BSI was significantly positively correlated with task impacts at the termination of the six-session group.

In order to test whether clients perceive greater impacts over time in the group, due to incremental learning processes, repeated measures ANOVA were applied to the session impact data. Table 2 contains the ANOVA and illustrates that there was no overall session effects in terms of total, task or interpersonal impacts. Clients did not appear to perceive any one of the sessions as more impactful than any of the others and, in particular, there did not appear to be an incremental learning process in terms of task impacts.

Table 3. Comparison of impact ratings in clinical versus non-clinically significant change groups

| | Clinically significant reduction in symptoms (<i>N</i> = 24) Mean (<i>SD</i>) | No clinically significant reduction in symptoms (<i>N</i> = 14) Mean (<i>SD</i>) | ANOVA <i>F</i> -Value |
|----------------------|---|--|--------------------------|
| Task impact | 2.82 (0.65) | 2.37 (0.85) | 3.35 |
| Interpersonal impact | 3.53 (0.86) | 2.91 (0.87) | 4.49* |
| Total impact | 3.14 (0.72) | 2.63(0.81) | 4.08** |

p* < .05; *p* = .051.

In order to examine the relationship between impact and outcome more closely, two groups were created; those clients who had experienced clinically significant change during the group and those who did not benefit in a clinically significant manner. Clinically significant change was calculated using Jacobson's Reliable Change Indicator (RCI; Jacobson and Traux, 1991) on the pre and post-group outcome data. As the focus of the psychoeducational group is symptom management, the positive symptom total (PST) of the BSI was selected as the outcome variable to create the two groups. Table 3 contains the results for the clinically significant reduction PST group compared with a non-clinically significant PST group in terms of total, task and interpersonal impacts. The results suggest that the clinically significant reduction PST group perceived a significantly greater degree of interpersonal impact during the psychoeducational group.

Discussion

This study is the first of its kind to investigate the relationship between session impact and outcome during the delivery of psychoeducational CBT in a large-group setting in routine clinical practice. The findings are interesting in that the analyses in general appeared to display little relationship between session impact and outcome, until a group of clinically significant change clients were identified. Only one correlation between the PSDI and outcome at group termination (T3) was significant, of the 36 correlations performed between impact and outcome. This begs the question that if clients in general are generally not perceiving task or interpersonal impacts, then how are outcomes achieved in such large groups? Clinically, normalization is a powerful therapeutic tool, but the efficacy of normalization within a traditional one to one therapeutic relationship appears limited. Normalization is typically the sole well-meaning mental health professional, telling the solitary client (within a mental health clinic, no less), that their symptoms are normal. To participate in a large psychoeducational group in a community setting enhances and augments the effect of normalization, as participation in the group provides concrete and undisputable evidence of the normalization process, by dint of the sheer number of fellow participants.

The results displayed that there were no between session effects in terms of total, task and interpersonal impacts. The lack of difference between sessions on the task impacts went against the hypothesis that incremental learning in terms of task impacts would take place in the group. The ANOVA results appear to suggest that psychoeducational group CBT tends to have a fairly static task and interpersonal impacts over the duration of the group and that little

incremental learning takes place. This is in contrast with individual one to one CBT where there is evidence of incremental learning over time in terms of task impacts (Reynolds et al., 1996). The group means on the session impacts scales may hide a great degree of individual variation in terms of perceived impact. A client with problems with panic will presumably rate session five (management of panic) as both more impactful than other sessions and also presumably more impactful in comparison to other clients without panic difficulties. Future research can investigate the validity of such hypotheses.

The creation of the clinically significant change group appeared to produce a clearer relationship between impact and outcome. In the group of clients that experienced a clinically significant reduction in symptoms during the group meetings, such clients perceived statistically significantly greater interpersonal impacts than those clients who failed to benefit. The total impact scale was, in addition, very close to being statistically significant. This finding would appear to suggest that those clients who do benefit from the group appear to take more support from the group than those clients who do not benefit. Again, this does beg the question regarding task impact, in that it is possibly participation and normalization that actually counts in such groups and not the technical aspects of the intervention (Sallis et al., 1987). What appears important is to actually perceive and use the interpersonal support available. It is interesting that the White psychoeducational approach does not encourage the sharing of experiences by clients, and therefore the interpersonal impacts perceived all appear to be created largely by proxy.

An issue of concern in the study was the session impact measure employed. Despite the session impact measure being a more appropriate measure for the study than the SEQ, it still required the removal of items specific to traditional one to one type psychological therapy. The SIS was originally developed to measure impact in one to one therapy and an issue is the degree to which the task and interpersonal scales translate into evaluating impact in large psychoeducational groups. It may be the case that for group provision (especially psychoeducational CBT), a specific and new measure of impact may need to be developed, which is more sensitive to both the group and the psychoeducational context. In conclusion, the current paper appears to offer an initial insight into the impact-outcome relationship in group psychoeducative CBT, whilst simultaneously raising the issue of impact and outcome within group CBT as a generally under researched topic area.

References

- Barkham, M., Hardy, G. E. and Startup, M.** (1996). The IIP-32: a short version of the Inventory of Interpersonal Problems. *British Journal of Clinical Psychology*, 35, 21–35.
- Beck, A. T., Steer, R. A. and Brown, G. K.** (1995). *BDI-II Manual*. San Antonio, US: The Psychological Corporation, Harcourt Brace and Co.
- Brown, J. S. L., Elliott, S. A. and Butler, C.** (2006). Can large scale self referral psychoeducational stress workshops improve the psychological health of the population. *Behavioural and Cognitive Psychotherapy*, 34, 165–177.
- Cuijpers, P., Smit, F., Voordouw, I. and Kramer, J.** (2005). Outcome of cognitive behaviour therapy for minor depression in routine clinical practice. *Psychology and Psychotherapy: Theory, Research and Practice*, 78, 179–188.
- Derogatis, L. R.** (1993). *Brief Symptom Inventory (BSI): administration, scoring and procedures manual* (3rd ed.). National Computer Systems, Inc.

- Elliott, R. and Shapiro, D. A.** (1988). Brief structured recall: a more efficient method for studying significant therapy events. *British Journal of Medical Psychology*, *61*, 141–153.
- Elliott, R. and Wexler, M. M.** (1994). Measuring the impact of sessions in process-experimental therapy of depression: the Session Impacts Scale. *Journal of Counseling Psychology*, *41*, 166–174.
- Goldberg, D.** (1978). *Manual of the General Health Questionnaire*. Windsor: NFER-Nelson.
- Jacobson, N. S. and Traux, P.** (1991). Clinical significance: a statistical approach to defining change in psychotherapy research. *Journal of Abnormal Psychology*, *59*, 12–19.
- Kellett, S., Clarke, S. and Matthews, L.** (in press). Delivering group psychoeducational CBT in primary care: comparing outcomes with individual CBT and individual psychodynamic-interpersonal psychotherapy. *British Journal of Clinical Psychology*.
- Kellett, S., Newman, D. W., Matthews, L. and Swift, A.** (2004). Increasing the effectiveness of large-group format CBT via the application of practice-based evidence. *Behavioural and Cognitive Psychotherapy*, *32*, 231–234.
- Reynolds, S., Taylor, E. and Shapiro, D.** (1993a). Session impact and outcome in stress management training. *Journal of Community and Applied Psychology*, *3*, 325–337.
- Reynolds, S., Taylor, E. and Shapiro, D.** (1993b). Session impact in stress management training. *Journal of Occupational and Organizational Psychology*, *66*, 99–113.
- Reynolds, S., Stiles, W. B., Barkham, M. and Shapiro, D. A.** (1996). Acceleration of changes in session impact during contrasting time-limited psychotherapies. *Journal of Consulting and Clinical Psychology*, *64*, 577–586.
- Sallis, J. F., Trevorrow, T. R., Johnson, C. C., Hovell, M. F. and Kaplan, R. M.** (1987). Worksite stress management: a comparison of programmes. *Psychology and Health*, *1*, 237–255.
- Schoenwald, S. K. and Hoagwood, K.** (2001). Effectiveness, transportability and dissemination of interventions: what matters when? *Psychiatric Services*, *52*, 1190–1197.
- Stiles, W. B.** (1980). Measurement of impact in psychotherapy sessions. *Journal of Consulting and Clinical Psychology*, *48*, 176–185.
- Stiles, W. B., Reynolds, S., Hardy, G. E., Rees, A., Barkham, M. and Shapiro, D.** (1994). Evaluation and description of psychotherapy sessions by clients using the session evaluation questionnaire and the session impact questionnaire. *Journal of Counseling Psychology*, *41*, 175–185.
- Stiles, W. B., Shapiro, D. A. and Firth-Cozens, J. A.** (1988). Do sessions of different treatment have different impacts? *Journal of Counseling Psychology*, *35*, 391–396.
- Stiles, W. B., Shapiro, D. A. and Firth-Cozens, J.** (1990). Correlations of session evaluations with treatment outcome. *British Journal of Clinical Psychology*, *29*, 13–21.
- Stiles, W. B. and Snow, J. S.** (1984). Dimensions in psychotherapy session impact across sessions and across clients. *British Journal of Clinical Psychology*, *23*, 59–63.
- White, J.** (1998). Stress control: a large-group therapy for GAD: two-year follow-up. *Behavioural and Cognitive Psychotherapy*, *26*, 237–245.
- White, J.** (2000). *Treating Anxiety and Stress: a group psychoeducational approach using brief CBT*. Chichester: Wiley.
- White, J.** (2004). *Stress Control Manual*. San Antonio, US: Psychological Corporation.
- White, J. and Keenan, M.** (1990). Stress control: a pilot study of large-group therapy for generalized anxiety disorder. *Behavioural Psychotherapy*, *18*, 143–146.
- White, J., Keenan, M. and Brooks, N.** (1992). Stress control: a controlled comparative investigation of large-group therapy for GAD. *Behavioural Psychotherapy*, *20*, 97–113.

APPENDIX 1: QUESTIONNAIRE USED IN THE STUDY

IMPACT OF TODAY'S SESSION

We want to understand how helpful or not today's session has been for you. Please note your experience on the following questions. Ring one number per question.

| | Not at all | Slightly | Somewhat | Pretty much | Very much |
|--|------------|----------|----------|-------------|-----------|
| 1. Realised something new about myself | 1 | 2 | 3 | 4 | 5 |
| 2. Realised something new about somebody else | 1 | 2 | 3 | 4 | 5 |
| 3. Felt more aware of my feelings | 1 | 2 | 3 | 4 | 5 |
| 4. Clearer definition of problems for me to work on | 1 | 2 | 3 | 4 | 5 |
| 5. Made progress towards knowing what to do about problems | 1 | 2 | 3 | 4 | 5 |
| 6. Felt supported | 1 | 2 | 3 | 4 | 5 |
| 7. Felt more comfortable about my problems | 1 | 2 | 3 | 4 | 5 |
| 8. I will be able to use the material from today's session | 1 | 2 | 3 | 4 | 5 |

Note: items 1–7 copyright held by Prof Robert Elliott (1986).