The University Of Sheffield.

A Systematic Review of the Efficacy and Clinical Effectiveness of Group Analysis and Analytic/Dynamic Group Psychotherapy

December 2009

Produced by:

Centre for Psychological Services Research, School of Health and Related Research, University of Sheffield, UK

This review was commissioned by the Institute of Group Analysis, London (IGA) in conjunction with The Group Analytic Society (GAS).

The views and opinions expressed herein represent those of the authors and do not necessarily reflect those of the IGA or GAS.

About the authors:

Chris Blackmore * (*Principal Investigator, Research Associate, Centre for Psychological Services Research, University of Sheffield*)- Electronic literature searching, data extraction, data analysis, report writing

Claire Beecroft (*Information Specialist, University of Sheffield*)- Electronic literature searching, data extraction, data analysis, report writing

Professor Glenys Parry (*Professor of Applied Psychological Therapies, Centre for Psychological Services Research, University of Sheffield*)- Data extraction, data analysis, specialist advice, report writing.

Andrew Booth (*Systematic Review Specialist, University of Sheffield*)- Specialist methodological advice, report writing

Professor Digby Tantam (*Clinical Professor of Psychotherapy, University of Sheffield, Group Analyst*)- Data extraction, specialist advice, report writing

Eleni Chambers (*User Researcher, University of Sheffield*)- Data extraction, specialist advice, report writing

Emma Simpson (*Research Associate, University of Sheffield*)- Data extraction

Elizabeth Roberts (*Social Worker, Sheffield City Council, Neighbourhood and Community Care Directorate, on secondment to the University of Sheffield*)- Data extraction

Dave Saxon (*Research Associate, Centre for Psychological Services Research, University of Sheffield*)- Statistical support

* Corresponding author

Declared competing interests of the authors: none

Acknowledgements

Expert Panel

The following members of the IGA/GAS Expert Panel provided advice on the search strategy of the review and comments on the draft report:

- Paul Calaminus, Service Director, Borough of Southwark, South London and Maudsley Foundation Trust, London, UK
- Alison Faulkner, Mental Health service user and researcher, UK
- David Kennard, Clinical Psychologist and Group Analyst, member of the IGA and Deputy Chair of the Expert Panel. Formerly Head of Psychological Services at The Retreat, York, UK
- Prof Steinar Lorentzen, Associate professor, PhD, University of Oslo, Institute for Psychiatry, and Researcher, Oslo University Hospital, Aker, Norway
- Dr Steve Pilling, Director of Centre for Outcomes, Research & Effectiveness (CORE), UCL and Group Analyst, London, UK
- Dr Jenny Potter, Project Lead for the IGA and GAS, Chair of the Expert Panel. Consultant Psychiatrist in Psychotherapy, Adamson Centre, St Thomas' Hospital, South London and Maudsley Foundation Trust, London, UK
- Dr David Taylor, Consultant Psychotherapist and Psychoanalyst, Clinical Director, Tavistock Adult Depression Study, Tavistock Clinic, London, UK

David Kennard and Steinar Lorentzen also assisted with sifting of research studies.

ScHARR

The following members of ScHARR staff provided support to the review team: Ruth Wong, Maxine Johnson.

Contents

List of abbreviations

Technical terms and abbreviations are used throughout this report. The meaning is usually clear from the context, but a glossary is provided for the non-specialist reader. In some cases, usage differs in the literature, but the term is used consistently throughout this review. All abbreviations that have been used in this report are listed here unless the abbreviation is well known (e.g. NHS), or it has been used only once, or it is a non-standard abbreviation used only in figures/tables/appendices in which case the abbreviation is defined in the figure legend or at the end of the table.

A/D Analytic/Dynamic
BDI Beck Depression Inventory
BPD Borderline Personality Disorder
BSI Brief Symptom Inventory
CaCo Case controls
CC Chief complaints
CCINS Crown-Crisp Index for neurotic symptoms
CBT Cognitive behaviour therapy
CGI Clinical Global Impression of Severity Scale
CGI-BD Clinical Global Impression Scale for bipolar disorder
CPSAS Clark's Personal and Social Adjustment Scale
CSA-Q Child sex abuse questionnaire
CTS Conflict Tactics Scale
CVA Change in Vocational Attitude
DIP-Q Personality Disorder Symptoms
DSM-IV Diagnostic and Statistical Manual of Mental Disorders- IV
EDI-2 Eating Disorder Inventory-2
ES Effect size
GA Group Analysis
GAD Generalised anxiety disorder
GAF Global Assessment of Functioning
GHQ General Health Questionnaire
GES Group Evaluation Scale
GHQ General Health Questionnaire
GLQ Global Life Quality
GOM Global outcome measure
GSI Global Severity Index
HADS Hospital Anxiety and Depression Scale
HAD-A HADS Anxiety
HAD-D HADS Depression
HAM-D/HRSD Hamilton Rating Scale for Depression
ICD-10 International Classification of Diseases- 10th Edition
IDSWCS Inventory of dispositional and situational ways of coping with stress
IGPC Impact of group psychotherapy on change
IIP Inventory of Interpersonal Problems
IPT Interpersonal Therapy
ITT Intention-to-treat
LSI-DMS Life Style index and defence mechanisms scale
LSQ Life style questionnaire
MAACL Multiple Affect Adjective Checklist
MMPI Minnesota Multiphasic Personality Inventory
MS-PTSD Mississippi Scale for PTSD
NS Not significant
OAS Overt Aggression Scale
Obs Observational
PdP Psychodynamic Psychotherapy
PaP Psychoanalytic Psychotherapy
PTSD Post traumatic stress disorder
QLS Quality of life scale
RCT Randomised controlled trial
RCQ Registration Chart Questionnaire
SAS State Anger Scale
SocAS Social Adjustment Scale
SCL-90-R Symptom Check List
SCW Subjective Control at Work
SD Standard deviation
SF- GCQ Short form of Group Climate Questionnaire
Sign Significant
SSTI Spielberger State and Trait Inventory
STFT Short-term Focussed Therapy
TAU Treatment as usual
TRIG Texas Revised Inventory of Grief
TS Treatment Satisfaction
TSQ Tinnitus severity questionnaire
VAS Visual Analogue Scale
VC Vocational Concerns
WLC Wait list control

A Systematic Review of the Efficacy and Clinical Effectiveness of Group Analysis and Analytic/Dynamic Group Psychotherapy

Executive summary

Aims of the review

The main aim of the review is to assess the evidence for the efficacy and effectiveness of Group Analysis (GA) and Analytic/Dynamic (A/D) Group Psychotherapy. Factors that influence the outcome of group therapy are also reviewed. Information is presented on the types of clients using GA and A/D groups, the size of groups, and duration of therapy.

Methods

After initial scoping searches of the PsycINFO database, the review team conducted a sensitive search of seven electronic databases including Medline, EMBASE, CINAHL, the Cochrane Database of Systematic Reviews (CDSR), the Central Register of Controlled Trials, Health Technology Assessments (HTA) Database and the Database of Abstracts of Reviews of Effects (DARE), using key terms approved by a specialist advisory group ('Expert Panel') appointed by the Institute of Group Analysis, London (IGA) and the Group Analytic Society (GAS). The key terms included 'group analysis', 'group dynamic psychotherapy' and 'psychoanalytic groups'. Studies were selected if their results were published in English between 2001 and 2008 where an evaluation of GA or A/D group psychotherapy was described that included a control or comparison group. The criteria adopted meant that randomised controlled trials, cohort studies, 'before and after' studies, qualitative studies and systematic reviews were included; studies with other designs were not. Findings from studies before 2001 were captured by synthesizing evidence from systematic reviews of primary research which included them. Reference lists from included studies were followed up and contact was made with key authors in the field. As the studies identified were heterogeneous, findings from both primary and secondary studies were combined in narrative syntheses.

Findings

Number of studies

We identified 37 primary studies and 23 reviews which met the inclusion criteria.

Of the 37 primary studies, data were not extracted from three papers[17,24,27] which focussed on moderating, secondary variables (such as group climate, self-efficacy or treatment duration.) One of these was a preliminary brief report[17] with incomplete

data reporting. These three studies were included in our review of the impact of moderating variables (see 3.7).

Of the 34 remaining primary studies, 5 (15%) were randomised controlled trials (RCT), a further 2 (6%) were randomised controlled trials where group therapy was only one element in a complex treatment (RCT-partial), 5 (15%) employed case controls mainly using a 'matched' or 'wait-list' comparison group (CaCo), 21 (62%) were observational studies (Obs), and 1 (3%) was qualitative (Qual).

Of the 23 reviews, two were excluded because they only covered papers already included in our systematic review, one was excluded because it included just one group-based intervention, and one was excluded because it was not a review *per se* but was, instead, a specialist re-analysis of a previous meta-analysis. Nineteen relevant reviews which included studies published before 2001 were identified and summarised in a 'review of reviews'.

Efficacy and Clinical effectiveness[i]

Randomised controlled trials

Five randomised controlled trials gave the following results:

- Piper *et al.,* 2001[25] found patients with complicated grief improved in both psychodynamic and supportive group treatment; there was no significant difference between therapy types.
- Blay *et al.,* 2002[4] found brief psychodynamic group treatment gave clinically and statistically significantly greater benefit than usual clinical care for a mixed diagnosis group at the end of 8 weeks treatment, but at follow up (9-30 weeks post randomisation) there was no significant difference.
- Lanza *et al.,* 2002[13] compared psychodynamic group therapy with group cognitive behaviour therapy for reducing aggression and violence in male veterans with a history of assault. With a small sample size (n=10) the degree of improvement was not statistically significant for either therapy and there was no significant difference in outcome between the psychodynamic group and the CBT control, although the rate of improvement was better in the psychodynamic group.
- Tasca *et al.,* 2006[30] found binge-eating patients gained similar benefit from psychodynamic interpersonal therapy and group cognitive behaviour therapy, both being superior to no-treatment controls at the end of therapy: follow up data on the no-treatment control group were not available;
- Lau *et al.,* 2007[14] compared modified group analysis with systemic group therapy and found the latter somewhat more effective, although both groups showed a treatment response.

These results provide evidence for the efficacy and clinical effectiveness of group therapy approaches in a range of clinical problems, but not for specific benefits of any particular theoretical approach.

[i] These terms are used to distinguish the effects of a therapy in controlled conditions (such as a research trial) from the effects in routine clinical practice. Efficacious therapy has been shown to be beneficial in scientific studies meeting stringent criteria but it may not be clinically effective when translated into routine practice. Clinically effective therapy shows benefit in routine care, but these results are not scientifically attributable to the therapy itself.

Other controlled studies

The other controlled studies gave support for the use of group psychotherapy in a variety of conditions.

Analysis of the 'outcome predictors, mediators and moderators' identified by included studies suggests that there may be important effects of age, sex, self-efficacy, duration and psychological mindedness on outcomes and that attachment style and interpersonal distress influence group attendance. These effects have been reported for specific client groups and may not generalise to others; they may also be mediated by group climate and individual factors. The quality of object relations- the lifelong pattern of interpersonal relationships - seems to be an important moderator of the impact of treatment type on outcome. Those with high quality of object relations had better outcomes from interpretive group therapy than from supportive group therapy whereas those with poorer quality of object relations were helped more by supportive group therapy. Predictors of outcome for long term analytic group therapy are likely to be different from those for short-term groups.

Observational studies

The observational studies also showed consistently promising results across a variety of settings, conditions and measures.

Benefits identified by these studies tend to derive from treatments of longer duration than is typically the case in RCTs, which tend to use shorter, manualised treatments. Furthermore, observational studies may employ different measures of change or assess qualitative changes and these may not be identified in more formal designs because researchers are not investigating them. It should be noted that the results of observational studies are based on pre-post outcomes and may be misleading as there are no controls or randomisation. There is no way of attributing the changes found to the effects of the group intervention rather than to confounding factors such as 'spontaneous' improvement, selection bias, reporting bias etc .

Review of reviews

A review of reviews was undertaken which confirmed that group therapies in general are more effective than wait list or standard care controls. Where a specific comparison was made between group therapy and individual therapy, there was typically no advantage to group therapy, although there are exceptions to this finding. Most of these comparisons are examined through meta-analysis rather than through 'head-to-head' trials with adequate statistical power and cost-effectiveness analysis. In general, the type of group therapy does not predict outcome.

Conclusions

The studies examined, including earlier reviews, consistently support the use of Group Psychotherapy as an effective approach, across diverse conditions, participant groups and settings. In addition, there may be important effects of age, sex, self-efficacy, psychological mindedness and the quality of object relations on outcomes;

attachment style and interpersonal distress have an important bearing on group attendance. However, the number of empirical studies, in particular of high quality RCTs, into the effectiveness of Group Analysis and Analytic/Dynamic Group Psychotherapy is small.

The methodological quality of the studies identified was variable. Unpublished outcome measures with unknown psychometric properties were too often used, and the variety of outcome measures made it impossible to conduct meta-analysis. In respect of reporting, the terminology used to describe the therapeutic interventions was often ill-defined. Key words were omitted from titles and abstracts thus making it difficult to capture these studies via electronic searches. These problems presented significant methodological challenges to the review.

The relatively low numbers of currently available studies on GA and A/D group Psychotherapy presents both a challenge and an opportunity to the therapeutic community to undertake research into these group approaches in order to consolidate these conclusions.

Recommendations for further research

To increase the amount and the quality of the evidence base for GA and A/D group psychotherapy there is an urgent need for more high-quality studies, employing both qualitative and quantitative methods.

Areas where evidence is currently lacking include:

- the types of patients for whom GA and A/D group therapies are most effective;
- the different indications for group versus individual psychotherapy and the comparative cost-effectiveness of the two treatment modes;
- the aspects of heterogeneity versus homogeneity of group membership that impact on outcome;
- equivalence or non-inferiority trials of GA and A/D group therapies compared with CBT group therapies;
- a study of group members' experience or a review of service users' personal testimony.

If possible, further research should be undertaken to address these areas. To increase the awareness and use of research, and to facilitate systematic reviews, the reporting of research in GA and A/D group psychotherapy requires improvement. Specifically, we recommend the use of structured abstracts, clear definitions of different types of group intervention and agreed keywords for use in titles and abstracts and consistent use of a set of outcome measures. The research committees of the IGA and GAS, after consultation with other relevant bodies, could develop these recommendations further by producing good practice guidelines for the conduct and publication of research examining GA and A/D group psychotherapy.

1- Aims and background

1.1 Aims of the review

The overall aim of the review was to assess the efficacy and clinical effectiveness of Group Analysis and Analytic/Dynamic (A/D) Group Psychotherapy

More specifically the aims of the review were to:

- evaluate the evidence on the clientele who use Group Analysis and A/D Group Psychotherapy
- evaluate the evidence on the numbers of clients using GA and A/D groups, i.e. size of groups, numbers of patients/clients, duration of therapy

1.2 Background

The review was commissioned in order to provide a comprehensive summary to IGA/GAS members of the evidence base for group psychotherapy, and to point the way forward for further research.

1.3 Definitions of Group Analysis and Analytic/Dynamic Psychotherapy

In developing an evidence base, it is essential to have a readily applicable definition, or set of operational criteria, of what constitutes group analytic psychotherapy. The absence of both of these posed significant challenges for this review. In the event, broad operational criteria were used: therapy delivered in groups, and an explicit reference to an interpretative or analytic procedure. An audit of the literature search suggests that relevant studies may, even so, have been missed because, for example, they included interpersonal therapy, with no further detail.

Four approaches have been taken to defining modalities of group therapy in the past: self-description by the authors, training by an organisation recognised as a training organisation in the modality, process measures that are specific to the modality, and outcome measures that are specific to the modality.

Few studies described themselves as group analytic, or used 'group analytic' as key words. Although training organisations are recognisable as providing an accredited group analytic training, the provenance of study authors is not always given. Adopting this criterion might therefore exclude studies that are, in fact, group analytic. Group analysts may also work in non-group analytic ways and so some studies that are not group analytic may be wrongly included.

Group analysis is described as a form of psychotherapy by the group, of the group, including the conductor. Although this is a statement of method that is distinctive, it is not easy to operationalise. One important effort to do so was made by Kennard et al. (2000[73]) who compiled responses to scenarios made by members of the Group Analytic Society to provide a characterization of group-analytic interventions. The

results of their study might be the basis for a process definition of group analytic therapy where there is sufficient detail of the group method used in published evaluations of outcome. Our literature review suggests that currently this is rarely the case.

The outcomes of group analytic therapy also apply to other longer-term psychotherapy interventions. None of these methods aims primarily at improvement in symptoms, but regrettably there does not seem to be an accepted outcome measure that might be reliably used for longer-term therapies. Improvement in life satisfaction or in the quality of relationships is often confounded by opposing outcomes: for example, that people feel able to end unsatisfactory relationships or even that there is a period of increased anxiety and unease before a new and more satisfactory life adjustment is found. The relationship between therapy and outcomes may be attenuated in longer-term therapy since there are often life changes during therapy which may or may not be related to the therapy and which themselves have an effect on life satisfaction.

Should the IGA/GAS wish to foster future studies of the outcome of group analytic therapy, it would help researchers to have guidelines about what constitutes group analytic therapies, what group processes are indicators that a group analytic method is being used, what processes should be reported in any evaluations and, finally, which outcomes, if any, are characteristic of the group approach.

2- Methods

2.1 Original (Scoping) Search strategy

Initial scoping searches were undertaken on the PsycINFO database using key terms approved by a specialist advisory group ('Expert Panel') appointed by the Institute of Group Analysis, London (IGA) and the Group Analytic Society (GAS). The key terms included 'group analysis', 'group dynamic psychotherapy' and 'psychoanalytic groups'. Studies were selected if their results were published in English between 2001 and 2008 or if they were systematic reviews; and if an evaluation of GA or A/D group psychotherapy was described that included an additional control or comparison group. Randomised controlled trials (RCTs), cohort studies, 'before and after' studies, qualitative studies and systematic reviews were included; studies with other designs were not. Reference lists from included studies were followed up and contact was made with key authors in the field. As significant heterogeneity between the studies was found, both primary and secondary studies were combined in narrative syntheses.

Potential subject headings identified from PsycINFO to be used in the search are identified in Appendix I, together with scope notes (brief definitions of each term) if available. Once the search strategy was agreed with the expert panel further searches were conducted on Medline, EMBASE, CINAHL, the Cochrane Database of Systematic Reviews (CDSR), the Central Register of Controlled Trials, Health Technology Assessments (HTA) Database and the Database of Abstracts of Reviews of Effects (DARE).

Two search strategies were developed to describe the scope of 'dynamic/analytic group psychotherapy':

i. a sensitive search (which aimed to find every possible paper on the topic, while inevitably finding many irrelevant ones)
ii. a specific search (which aimed to find fewer, more focused and relevant articles, while inevitably missing some)

The resulting search history is shown in Appendix IIa. Lines 1–20 show the sensitive strategy which retrieved 40,522 results. It was based on a combination of free text terms and subject headings which covered, as far as possible, all the terms used to describe group analytic therapy. Lines 21–29 show the specific strategy which retrieved 2,390 results and was based entirely on free-text terms focused around analytic/dynamic group psychotherapy.

The review team decided to use two strategies to manage the quantity of literature:

1. To use a 'review of reviews' approach to cover materials published before 2001
2. To use a 'Descriptive Mapping' process to explore issues relating to the quality of the evidence and its scope

2.2 Final Search Strategy

i. Rationale for 'review of reviews'

The scoping searches revealed numerous systematic reviews and meta-analyses providing coverage of earlier material. As our own systematic review was of primary research from 2001 onwards, a review of systematic reviews that included studies published prior to 2001 was conducted in order to obtain a picture of the literature up to 2001. Many of these reviews were necessarily published since 2001, and some also included research from post-2001, but the review team felt that it was necessary to include all published systematic reviews to ensure that a comprehensive overview of the pre-2001 literature could be obtained.

Rather than repeating searches for studies already included in previous reviews (although re-analysis and appraisal of previously identified studies might be valuable), the team summarised systematic reviews published before 2001 to construct a 'baseline' for the field at that point in time. This enabled the review team to document where the evidence was pointing at this time and then subsequently to see how the evidence since 2001 had confirmed, overturned or modified these results or where there was an evidence gap in 2001. Numerous examples of this 'review of reviews' approach appear in the literature, e.g. Blay et al (2002)[4]. The 'review of reviews' is reported in section 3.1. A cut-off date of 2001 was used for sifting the literature with the expectation that significant earlier items would be identified via supplementary searches.

ii. Mapping

When faced with an expansive volume of literature the EPPICentre (The Evidence for Policy and Practice Information and Co-ordinating Centre, part of the Social Science Research Unit at the Institute of Education, University of London) conduct a two-stage mapping process which involves speedily coding articles for their defining characteristics (such as the sifting criteria mentioned earlier) and then completing a full data extraction for an agreed subset of these articles. A review team thus produces a 'systematic descriptive map' prior to a final decision on scope which is negotiated with their commissioners:

> 'The production of a descriptive map facilitates further user involvement in a review. If a large number of studies have been identified on the map, it can be presented to user groups to engage their help in setting criteria to identify a smaller set of studies for in-depth review'.[65]

In this way the commissioners receive both a full map and a more circumscribed review. In addition they have a way of identifying and taking forward future review priorities. So, within the time frame of the project, it might be possible to code all of the papers in the database for an agreed time-frame (i.e. 1990 onwards) using the A-E sifting system (see APPENDIX IV). The Reference Manager database could then be 'tagged' with this information, meaning that the commissioners would have a large 'map' of the literature with which to commission and inform future research. The systematic review produced by Sheffield, however, would still focus on the 2001-literature.

The review team began by revising the original scoping search strategy by applying effectiveness filters, removing searches for 'counselling' and adopting an overall approach that emphasised sensitivity (as recommended by the Cochrane Handbook)[71]. The resultant final search strategy (for the PsycINFO database) is included as Appendix IIb. The search was slightly modified for use in other databases. Search results were downloaded to a reference management database and coded to identify from which database they had been retrieved from and by which reviewer they had been added to the database. This search generated 14004 references which the review team initially sifted on the basis of the title. This process substantially reduced the number of potentially relevant citations to 2,415.

The review team devised decision rules to implement the descriptive mapping approach (see Appendix V). In Autumn 2008, they sifted through the 2,415 citations using the agreed decision rules. 2036 studies were excluded at this stage. Full text of 379 papers published from 2001 onwards and judged as potentially relevant was either downloaded or obtained from other sources.

The review team read through the full texts as an additional sift to remove further 'out of scope' studies where the abstracts of papers failed to provide sufficient information. The team simultaneously 'coded' excluded papers using the sift criteria to populate the 'mapping' database outlined above. Three hundred and twenty-seven papers were excluded at this stage leaving 60 full papers (37 primary research studies and 23 reviews) for validity assessment and data extraction. This list of included studies was distributed to the expert panel for verification and for additional suggestions of potentially eligible studies not retrieved by the search strategy.

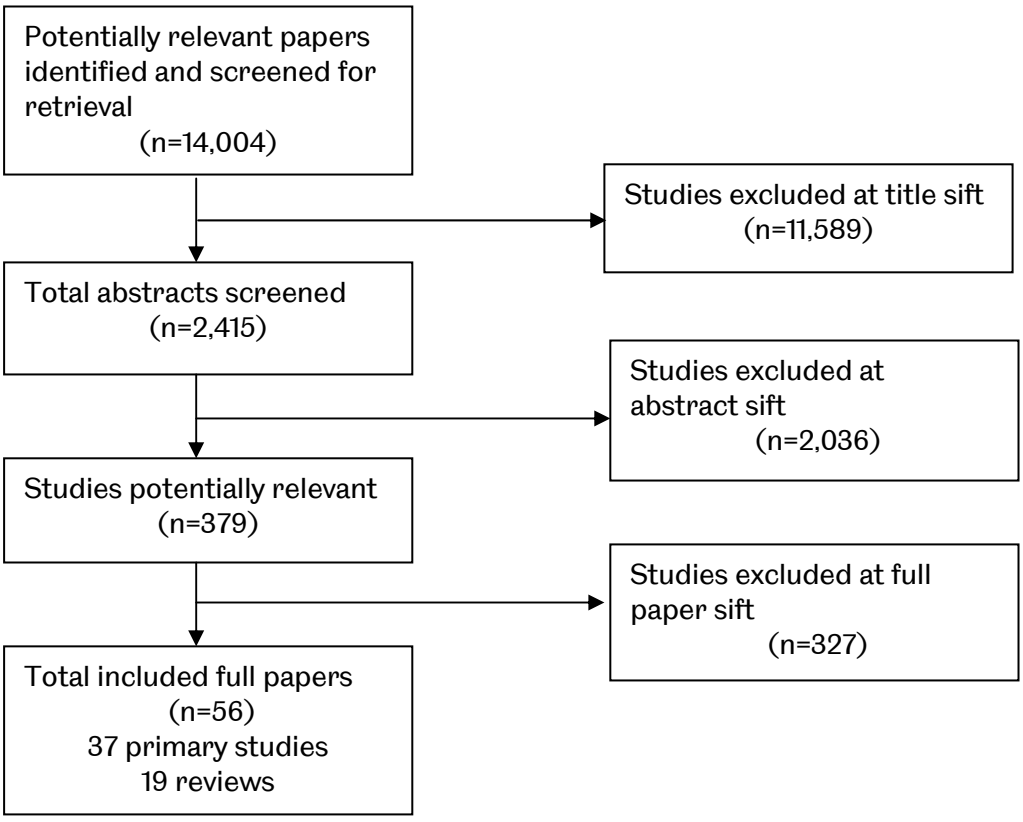


Figure 1- Summary of study selection and exclusion

iii. Validity assessment

All RCT studies (see Appendix IX) and reviews (see Appendix VIII) were appraised for study quality during the process of data extraction. In addition, one qualitative study was appraised using a specific tailored checklist (see Appendix VII).

2.3 Data Extraction

As a prelude to data extraction and quality assessment, the team devised a 'mini Data Extraction Form' to facilitate a first sweep through the articles (see Appendix VIa). This had two main purposes:

i. It allowed the team to identify the study design of each paper so that data extraction could be performed in a hierarchical fashion, (i.e. RCTs first, then cohort studies, etc).

ii. It helped the team to explore the feasibility of meta-analysis and provided early data on study characteristics to answer such review questions as 'for what conditions are analytic/dynamic therapies used?'

The mini data extraction identified articles to be excluded, resulting in a total of 37 articles, and 19 reviews.

Once all articles had been processed using the mini data extraction forms, it became apparent which articles needed to go forward for full data extraction. In keeping with the hierarchical approach employed above, non-comparative studies were not formally critically appraised but were included in a descriptive section of this report. A single qualitative report was data extracted and key themes were identified.

2.3 Methodological limitations and challenges

A major challenge for the research team was to develop a search strategy that would be sufficiently sensitive to pick up the majority of relevant studies, but that would not simultaneously retrieve an unmanageable number of irrelevant results. This was complicated by the lack of clearly defined terminology and key words to describe analytic/dynamic group psychotherapy. Many studies simply describe themselves, in either their title or abstract, as studying 'group therapy' or a 'group intervention', with the specific treatment orientation only being revealed much (if at all) later in the full text of the paper. As most electronic databases only search within titles, abstracts and keywords of papers, but not full text, searching the literature proved a significant challenge given the many thousands of published papers about group therapies, most not being analytic/dynamic in orientation, and some not relating to psychotherapy of any kind.

Additionally, terms such as 'group' and 'therapy' appear in most controlled studies on any topic. Given the scope of the review was so broad, it was not possible to limit the search using terms to describe the nature of the patients or outcomes to be investigated. The final search strategy represents the optimal balance of sensitivity and specificity that the review team was able to achieve. However, it is possible that some studies that did not describe their therapeutic orientation in sufficient detail in their abstract, title or keywords may have been missed. The challenges of searching

the group psychotherapy literature have been detailed in a paper by Watson and Richardson, 1999[92].

A further limitation of the scope and search strategy of the current review is that the focus on outcomes and research evidence may result in neglect of the views and experiences of service users, that is, group members. Only one of the studies included significant focus on service users' perspectives, namely the qualitative paper by Macdonald *et al.,* 2003[22].

The use of search methods that include grey literature, including service user testimony, would be one way to balance the emphasis on outcome with a user-centred perspective on process.

3- Findings

3.1 Review of reviews

Systematic searches for reviews, which included GA or A/D group psychotherapies analysis prior to 2001, were conducted as an alternative to searching and extracting data for all original studies published prior to this date. These searches yielded 23 reviews, of which four were excluded; two were excluded because they only covered papers already included in our systematic review (Kanas 2006[73]; Ogrodniczuk 2006[86]); Dennis & Hodnett (2007[64]) was excluded because it included just one group-based intervention, thus it was not possible to draw conclusions from this single piece of research; and Wampold (2002[91]) was excluded because it was not a review *per se* but was, instead, a specialist re-analysis of a previous meta-analysis. The results of this re-analysis have been used in interpreting the findings below.

Characteristics and conclusions from the 19 reviews identified are given in Table 1. It must first be noted that most reviews only included psychodynamic or analytic group therapy amongst many other interventions (in some cases, other group approaches; in other reviews, any form of therapy). Verheul & Herbrink's paper (2007[54]) includes 3 studies under "evidence for group psychotherapy"- Wilberg et al. (2003[36]), Budman et al. (1996[60]) and Monsen et al (1995a[80], 1995b[81]). Monsen et al's studies are on individual rather than group psychodynamic psychotherapy.

Only one article specifically addressed psychodynamic group therapy (Weiss, 2006[56]) specifically for obese, eating disordered adults. However, this review was not systematic and did not focus on outcomes; rather it was theoretically and clinically oriented. Only one review summarised research in group analytic treatment, including both outcome studies and process research, and acknowledged the problem of differentiating between group-analytic and other psychodynamic studies (Lorentzen, 2006[49]).

The reviews that included psychodynamic/analytic group therapy often did not report on this in such a way that any data or conclusions could be drawn specifically for analytic/dynamic group therapy. Where it was possible to identify which subset of studies were analytic/dynamic, this has been indicated in the table.

Our interpretation of the results of these reviews can be summarised as follows. Group therapies have been used in a wide range of conditions including anxiety and mood disorders, late-life depression, infertility, adjustment to personal loss, substance abuse, schizophrenia, bipolar disorder, post traumatic stress disorder, eating disorders and personality disorders. They have also been used across the lifespan and in differing health care settings, including inpatients, day hospitals and outpatient settings. The overall finding is that group therapies in general are more effective than waiting list or standard care controls; for example, the systematic review and meta-analysis by Kösters et al (2006[48]) reported a between-groups effect size of 0.31 in controlled studies. This would translate into 150 more patients having a successful outcome from group intervention compared with standard care for every 1000 patients treated. However, there is typically no advantage reported to group therapy compared with individual therapy where a specific comparison is made, although there are exceptions to this finding. Furthermore, most of these

comparisons are effected through meta-analysis rather than through 'head-to-head' trials with adequate statistical power and cost-effectiveness analysis.

Most reviews which examined the effect of treatment orientation did not find any significant difference between the outcomes of groups as a result of therapy type, thus implying that this benefit of group therapy would apply to A/D groups as much as to supportive, problem-solving or cognitive behavioural groups, a conclusion confirmed by Lorentzen's (2006[49]) more focussed review in relation to the pre-2001 studies of group analytic therapy he summarised.

Two reviews suggested a marginal benefit of cognitive behavioural group therapy in depression (Guimon, 2004[45] and McDermut et al., 2001[51]). In our view evidence for difference in outcomes between these approaches a) does not appear to be clinically significant and b) may be an artefact of researcher allegiance and inclusion of so-called 'psychodynamic' therapies which are not genuine treatments. For example, in one of the studies which reported a differential outcome (Covi & Lipman 1987[63]) there was a strong allegiance to CBT group therapy. Furthermore the control condition, a 'traditional group therapy', did not meet criteria for a *bona fide* psychodynamic group therapy for depression (Wampold, 2002[91]). It is therefore most likely that outcomes for well-conducted groups using theoretically coherent methods and properly trained therapists are similar across theoretical orientations.

Table 1: Characteristics of 19 reviews identified

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Barlow (2000[38])	Reviews of all methods of gp psychotherapy.	27		Various comparisons including, most often, CBT	All conditions	The efficacy of gp psychotherapy has been established in the empirical literature. CBT has dominated gp psychotherapy research. In recent years, interpersonal models have fared less well in total number of models under scrutiny.
Burlingame (2003[39])	Gp psychotherapy. (A/D studies not extractable separately, no refs given & no therapy orientation comparison reported)	111		1. Active v wait-list 2. active v alternative treatment 3. pre- to post-treatment improvement rates	All conditions	1. members of homogenous do better than het. gps; outpatients do better than inpatients; mixed gender gps do better than all-male or all-female 2. mixed gender gps do better than all-male 3. most conditions showed improvement except outpatient, substance abuse, thought disorder, criminal behaviour; those with depression and eating disorder showed best results.
Cuijpers et al. (2006[40])	Psychological treatments (A/D studies not extractable)	25		Various comparisons inc individual, gp and bibliotherapy format, CBT and other approaches	Late-life depression	Psychological treatments are effective in the treatment of depression in older adults; no differences were found between individual, gp or bibliotherapy format, or between CBT and other types of psychological treatment

[ii] Number of studies within review concerning analytic or dynamic group therapy, where data are available.

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
De Liz (2005[41])	Compares gp psychotherapy with individual/couple psychotherapy, inc one study using gp psychoanalytic therapy	22	1	Routine care/waitlist controls	Infertile patients.	Gp and individual/couple psychotherapy led to a decrease in feelings of anxiety. Upon termination of psychotherapy, a reduction of depressive symptoms in patients was greater after 6 months. Psychotherapy accompanying IVF treatment yielded similar conception success rates to psychological interventions administered to patients not in specific medical care. No sign difference between individual/couples therapy and gp therapy.
DeRubeis (1998[42])	Reviews all methods of psychotherapy including 'gp' but unable to extract dynamic gp studies, (mentions one with dynamic as a comparison).	Not stated, but 100+ references.		Various comparisons including CBT, drug therapy, wait list control, etc.	11 conditions including substance abuse, depression, obsessive-compulsive disorder, schizophrenia, PTSD, panic disorder, agoraphobia, social phobia and generalised anxiety disorder.	There are promising psychological treatments for every adult disorder covered in this review. Most of the treatments--but not all--are behavioral or cognitive-behavioral in nature. However, there has been increased interest in the use of clinical trial methodologies to test other treatment approaches (e.g., psychodynamic), and the authors encourage further efforts to test them. Found one large psychodynamic study that showed it to be as or nearly as effective as CBT for depression and another which found psychodynamic therapy to less effective that CBT. The most promising psychosocial treatments for opiate dependence have been supportive-expressive psychodynamic therapy (SE) and CBT.
Engels & Vermey (1997[43])	Non-medical treatments (A/D studies not extractable)	4		Various comparisons including individual v gp	Depression in Elders	Individual therapy for the elderly is more successful than gp therapy (because of success of individual cognitive and behavioural treatments).

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Fonagy et al. (2005[44])	Psychodynamic psychotherapies	Not stated, but c 200 references	3	Various comparisons including short-term v long-term psychodynamic psychotherapy	Major depression, anxiety disorders, eating disorders, substance misuse, personality disorders	In most areas where systematic investigation has been carried out, outcomes for psychoanalytic psychotherapy are comparable to those obtained by other therapeutic methods. For PD, outcome of psychoanalytic psychotherapy is in certain respect better than that of alternative treatments.
Guimon (2004[45])	Gp therapy	29	4	Various comparisons including, CBT, interpersonal therapy, psychoeducational gps	Schizophrenia, depression, substance abuse, borderline PD	Dynamic gp therapy improved compliance with medication in bipolar patients. Favourable results have been found with treatments based on gp dynamic psychotherapy in a day hospital. Dynamic understanding of patients with schizophrenia could be very helpful. Brief gp psychotherapy is more effective with CBT and inter-personal than dynamically-oriented techniques. Gp therapy as effective as ind. therapy for "managing emotions" in PD.

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Hoag & Burlingame (1997[46])	Child and adolescent- all gp treatments (A/D studies not extractable)	56		29 variables to test for differential effectiveness including orientation of the treatment	Children and adolescents- disruptive behaviour, anxiety/fear, adjustment to divorce, cognitive skills/ performance, social skills/ adjustment, self-concept/ self-esteem, depression, locus of control	Children and adolescents treated in gp treatment improved sign more than wait-list or placebo controls; similar estimate for previous meta-analysis on adult gp psychotherapy.
Huxley (2000[47])	Various psychosocial interventions including coping skills, gestalt, psychoeducation, psychoanalytic- delivered on a gp and individual basis. (A/D studies not extractable)	70, of which 26 were gp-based.		Various comparisons including standard care and other psychological therapies.	Schizophrenia	Benefits in symptoms as well as social and vocational functioning were associated with psychosocial treatments. Family therapy demonstrated the most promising findings and traditional social skills treatment yielded the least robust results. Adjunctive psychosocial treatments augment the benefits of pharmacotherapy and enhance functioning in psychotic disorders. Although these positive results have led to increased enthusiasm about psychosocial treatments for schizophrenia, questions remain about comparative benefits of specific treatment methods and additional benefits of multiple treatments. One study found sign improvement in symptoms with dynamic over behavioral family therapy but no differences in social functioning with dynamic versus behavioral family treatment. When comparing the gp interventions, some demonstrated benefits in symptoms or social functioning. No single gp therapy orientation emerged as superior.

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Kösters et al. (2006[48])	Gp psychotherapy including CBT, psychodynamic, gestalt and 'unknown' therapy orientations.	70	18	Various comparisons including waitlist controls, standard care and other therapies.	Inpatients with a variety of conditions including: schizophrenia, anxiety mood disorder, personality disorder, PTSD, drug abuse, eating disorders and dementia.	Beneficial effects were found for inpatient gp therapy in controlled studies as well as in the studies with pre-post-data. Differences in the homogeneity of patient improvement effect sizes were found across different diagnostic categories. Furthermore, greater improvement was exhibited in mood disorder patients when compared to mixed, psychosomatic, post traumatic stress disorder (PTSD), and schizophrenic patients replicating recent findings from meta-analyses of outpatient gp treatment. A comparison between controlled studies and pre-post-measure studies indicated no improvement for waitlist patients which contradicts previous reports.
Lorentzen (2006[49])	Group analytic	14	14	Most studies uncontrolled; comparisons included day hospital, psychodrama, eclectic group, standard care	Outpatients & day patients with variety of disorders, including personality disorders	Improvements in several areas of psychological functioning and symptom change were reported. The author explores reasons for the small body of empirical research in the field.
Mackin & Araen (2005[50])	Evidence-based psychotherapeutic interventions-brief psychodynamic therapy (A/D studies not extractable)	25		Various comparisons including, CBT, interpersonal therapy, reminiscence therapy, combined antidepressant medication and psychotherapy	Geriatric depression	Brief dynamic therapy (BDT) is an effective intervention for treating major depression in older adults. However, not clear if this paper is examining only gp BDT or individual as well. No sign difference shown in outcomes of BDT compared with other treatment modalities.

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
McDermut et al. (2001[51])	Gp psychotherapy- CBT (52), psychodynamic and interpersonal (8), Social support (3), Nondirective (5), Other (4)	48	8	Treated participants compared to untreated controls	Depression- gp v individual treatment, Cog and beh v Psychodyn	Gp psychotherapy is an efficacious form of treatment for unipolar, non-psychotic depression. No sign diff between individual and gp therapy. Slight advantage for efficacy of CBT over psychodynamic
Pinquart & Sorensen (2001[52])	Psychotherapeutic interventions with older adults (A/D studies not extractable)	122		CBT, reminiscence, psychodynamic, relaxation, supportive interventions, control enhancement, psychoeducational treatments, activity treatments, training of cognitive abilities	Older adults	Sign improvement with psychodynamic therapy. Psychodynamic therapy promoted larger changes in self-rated depression than cognitive training. Both CBT and psychodynamic therapy were more effective than supportive treatments in improving clinician-rated depression.
Swartz & Frank (2001[53])	Psychotherapy for bipolar depression- CBT, psychodynamic, psychoeducational, interpersonal; individual, family, marital and gp	24	2	Various comparisons including, CBT, psychodynamic, psychoeducational, interpersonal	Bipolar depression	Inconclusive on efficacy of psychodynamic gp therapy compared to other modalities.

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Verheul & Herbrink (2007[54])	Efficacy of modalities of psychotherapy for PD	39	2	Gp psychotherapy, out-patient individual psychotherapy, day hospital psychotherapy, in-patient psychotherapy.	PD	Long-term psychodynamic gp psychotherapy in out-patient setting is an effective treatment for people with various cluster A, B, C and not otherwise specified personality disorders. Long-term psychodynamic gp psychotherapy in out-patient setting is an effective follow-up treatment after day hospital or in-patient psychotherapy for patients with various cluster A, B, C and not otherwise specified personality disorders.
Weiss et al. (2004[55])	Gp therapy	24	3	1. Gp therapy v no gp therapy 2. gp therapy v individual therapy 3. gp therapy plus ind therapy v gp therapy alone 4. gp therapy plus ind therapy v ind therapy alone 5. gp therapy v another gp therapy with different orientation 6. more gp therapy v less gp therapy	Substance abuse	1. Gp therapies examined were not clearly analytic/dynamic in nature 2. " 3. " 4. " 5. Pomerleau: Behavioural v traditional psychodynamic therapy- fewer patients dropped out of behavioural therapy, and showed greater reductions in alcohol consumption; but more patients who completed trad treatment remained abstinent. Ito: CBT v process gps- no difference in alcohol use. Joanning: family systems v gp process v family drug education- family systems most effective in reducing drug use amongst adolescents. Overall- no support for the idea that a particular type of gp intervention is more effective than another type. 6. Gp therapies examined were not clearly analytic/dynamic in nature

Study	Treatment Orientation	No. of studies	No. A/D grp[ii]	Comparison	Sample	Conclusions
Weiss (2006[56])	Psychodynamic gp psychotherapy	5	5	Various comparisons including, CBT, interpersonal therapy, psychoeducational gps	Obese disordered-eating adults	Psychodynamically based psychotherapy, augmented in many cases by individual psychoanalytically based psychotherapy, is critical for this gp of patients

3.2 Data Synthesis and summary

Data were tabulated according to the design of each study. A narrative commentary was provided for each group of studies by design. The heterogeneity of the populations studied (different treatment groups), the interventions (different intensities, regimes and therapist characteristics) and the outcomes (see tabulation of outcomes) meant that a meta-analysis would not have been valid. However effect sizes from interventions are presented in tabular form where available.

i. Research studies

Design

Of the 37 primary studies, data were not extracted from three papers[17,24,27] which focussed on moderating, secondary variables (such as group climate, self-efficacy or treatment duration. One of these was a preliminary brief report[17] with incomplete data reporting. These three studies were included in our review of the impact of moderating variables (see 3.7).

Of the 34 studies:

- 5 (14%) were RCTs (see section 3.2)
- 2 (6%) were RCTs where group therapy was only part of the treatment (RCT-partial) (see section 3.3)
- 5 (15%) were case controls mainly using a 'matched' or 'wait-list' comparison group (CaCo) (see section 3.3)
- 21 (62%) were Observational (Obs) (see section 3.4)
- 1 (3 %) was Qualitative (Qual) (see section 3.5)

Health care setting

Four studies (12%) were conducted with participants as inpatients, 26 (77%) were conducted with participants as outpatients, 2 (6%) were conducted with participants as both inpatients and outpatients and 2 (6%) were conducted with partially hospitalized participants (see APPENDIX X).

Country

Studies were conducted in a wide range of countries- 26 out of 34 (76 %) from within Europe, 7 (21%) from USA or Canada and 1 (3%) from South America (see APPENDIX XI).

Outcome measures

The most commonly used outcome measures were SCL-R-90 (n=7, 21 %), GAF (n=6, 18%), GSI (n=5, 15%), IIP (n=5, 15%) and BDI (n=4, 12%) (see APPENDIX XVIII).

ii. Range of populations

Number of participants

An average of 53.1 participants were included in the analysis of the 'treatment' group (median=37.0, SD=55.5). An average of 33.7 were included in the comparator

condition/control group (median y=26.0, SD=32.3), and an average of 27.5 included in a 'wait list control' group (median y=n/a, SD=13.4) (see Appendix XII).

Age of participants
The range of participants' ages was given as between 18 and 65 years of age, and the average, calculated from only those studies which reported an average figure, was 36.6 years (median y=35.5, SD=5.5) (see Appendix XIII).

Gender
Of the 34 included studies, 5 (15%) were conducted with all-female groups, 5 (15%) were conducted with an all-male group, and 21 (62%) were conducted with mixed groups.

Presenting problem or diagnosis
Presenting problem or diagnosis addressed by group treatments included Personality Disorder (3 studies, 9%), Eating Disorders (3 studies, 9%), Post traumatic stress disorder (2 studies, 6%), Abusive relationships (2 studies, 6%), Schizophrenia (2 studies, 6%), Complicated grief (2 studies, 6%) and Childhood Sexual Abuse (6 studies, 18%). 22 studies (65%) were classed as heterogenous, and 12 studies as homogenous (35%) (see Appendix XIV).

iii. Treatment details

Orientation of group treatment
Seventeen studies (50%) used a group treatment described as 'psychodynamic', 4 studies (12%) used a group treatment described as 'psychoanalytic' and 9 studies (27%) used a group treatment described as 'Group Analysis'. Four studies (12%) used other descriptions of treatment orientation (see Appendix XV).

Length of study follow-up
The average time to end of study follow-up was 17.3 months (median y=11.0, SD=21.0) (see Appendix XVI).

Duration of group treatment
The average number of group treatment sessions was 84.4 (median y=43.0, SD=92.0). The average duration of therapy was 14.4 months (median y=6.5, SD=17.0). The average number of hours in therapy was 128.7 hours (median y=70.5, SD=144.2). For all three of these measures, the large difference between mean and median can be explained by the presence of a small number of outliers at the upper end of the interval, i.e. a few studies with very long treatment duration which have inflated the overall mean duration (see Appendix XVII).

3.3 Randomised controlled trials

i. Table 2- Study characteristics

Author, date	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Blay *et al.,* 2002[4]	Inpatient, Brazil	N=80 (40+40) 84 recruited	20-60 yrs	Mixed	Affective, anxiety, adjustment, somatoform & sexual problems.	25-26 mths post-randomis[n]- in practice 9-30 mnths	Brief gp PdP (Sifneos)	2 sessions/ wk over 8 wks = 16 x 90 min sessions	GHQ-12 case (≥ *4)* vs non-case (≤ *3)*	Yes
Lanza *et al.,* 2002[13]	Inpatient, USA	PPG=4 CBG=6	≥ *18* yrs	Male	Men who had assaulted someone in previous 6mths	6 mths	Gp PdP developed by PI	Wkly 90 min gp for 6 mths- 26 sessions	OAS	Yes
Lau *et al.,* 2007[14]	Outpatient, Denmark	ITT n=52 Analytic n=54 Systemic completer n=40 Analytic n=46 Systemic	≥ *18* yrs	Women	Long term effects of ≥ *1* incident of reported sexual abuse committed by biological relative or non-biological family member	Not clear but questionnaires collected at end of therapy; gp A = 12 mths, gp B = 5 mths	Modified GA + 1hr meeting without therapist	2.25 hrs (=1 session) for 12 mths	GSI; DIP-Q; CSA-Q; Flash-backs; GAF; SCL-90R; RCQ; GLQ	SCL-90, GSI

Author, date	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Piper *et al.*, 2001[25]	Outpatient, Canada	ITT analysis not reported; Completer analysis n=53 interpretive n=54 supportive	43 yrs	Mixed	73.8% Axis I disorder (54.2% major depression); 55.1% Axis II disorder (26.2% avoidant), (13.1% dependent), (9.3% borderline)	Not given exactly but pre-post is 12 wks, end of therapy measures, no follow up	Interpretive therapy with psychodynamic orientation	12 wkly sessions. no details given of gp duration per session	Grief symptom scales	No
Tasca *et al.*, 2006[30] (RCT)	Outpatient specialist eating disorder clinic, Canada	End of treatment: GPIP=37 GCBT=37 WL control=37 6 mth post T follow-up: GPIP=35 GCBT=32 12 month post T follow-up: GPIP=37 GCBT=37	42.75 yrs	Mixed	Binge eating at least 2 days/wk over past 6 mths	Not reported. By inference approx 18 mths.	Gp PdP (interpersonal therapy)	1 pre-therapy session + 16 gp therapy sessions (freq + duration not stated); 17 wks	No. of days binge eating in past wk	Yes, done in this study

ii. Table 3- Treatment outcomes and between-group effect sizes

Author, date, (outcome measure)	Group	Sample size	Mean	Standard deviation	Cohen's 'd' Effect Size unless otherwise stated (95% CI)
Blay *et al.,* 2002[4] (GHQ)	Treatment- BGDP	43	4.61	3.54	0.48 (0.04, 0.91)
	Control- TAU (outpatient)	41	6.24	3.29	
Lanza *et al.,* 2002[13] (OAS) *	Treatment- PPG	4	2.41	3.90	0.74 † (-0.57, 2.04)
	Control- CBG	6	0.05	2.06	
Lau *et al.,* 2007[14] (GSI)	Treatment- AGP	40	1.63	0.77	-0.88 (-1.31, -0.43,)
	Control- SGP	46	0.99	0.69	
Piper *et al.,* 2001[25] (pathological grief)	Treatment- IT	47	5.4	5	0.02 (-0.38, 0.42)
	Control- ST	47	5.3	5.2	
Tasca *et al.,* 2006[30] (days binged)	Treatment- GDIP	37	1.11	1.9	-0.36 (-0.82, 0.1)
	Control- GCBT	37	0.57	0.93	
	Treatment- GDIP	37	1.11	1.9	1.26 (0.75, 1.74)
	Control- WLC	37	3.58	2.03	

* High scores are favourable
† Hedges' 'g' used due to small sample size

Note: Measures: GHQ = General Health Questionnaire; OAS = Overt Aggression Scale; GSI = Global Severity Index
Group descriptors: BGDP = Brief group dynamic psychotherapy; PPG = Psychodynamic Psychotherapy group; CBG = Cognitive-behaviour group; AGP = Analytic group psychotherapy; SGP = Systemic group psychotherapy; IT = Interpretive therapy; ST = Supportive therapy; GDIP = Group Psychodynamic Interpersonal Psychotherapy; GCBT = Group cognitive behavioural therapy; WLC = Wait list control;

As proposed by Cohen (1988[62]), Effect Size (ES) = (experimental group mean-control group mean) divided by the standard deviation of the group:

- An effect size (ES) value of **0.2** represents a **small** statistical and clinical difference between two groups
- An effect size (ES) value of **0.5** represents a **moderate** statistical and clinical difference between two groups
- An effect size (ES) value of **0.8** represents a **large** statistical and clinical difference between two groups

Effect sizes are shown above for the primary outcome measures quoted for each study. A full list of effect sizes or all reported outcome measures is shown in Appendix IX. Effect sizes are based on pooled SD, and Cohen's 'd' (1988[62]) was used except for Lanza *et al.,* 2002[13] where, due to low sample size, Hedges 'g' (1985[70])was used.

'Numbers needed to treat' (NNT) is the number of participants who need to be treated in order to produce one additional good outcome. It was not possible to calculate NNT because there was not sufficient information reported in the articles (except for Blay *et al.,* 2002[4], where the NNT was given as 4).

iii. Table 4- Quality ratings of RCTs

The 5 RCTs were rated using quality ratings for RCTs (see Appendix VIII for quality ratings list):

	Quality rating	Piper *et al.*, 2001[25]	Blay *et al.*, 2002[4]	Lanza *et al.*, 2002[13]	Tasca *et al.*, 2006[30]	Lau *et al.*, 2007[14]
1.	Clear objectives & outcomes specified *a priori*	1	2	0	2	0
2.	Sample size adequate	1	2	0	1	1
3.	Trial duration	1	2	2	2	1
4.	Power calculation stated *a priori*	0	1	0	0	0
5.	Integrity of randomised allocation	1	2	0	1	2
6.	Concealment of allocation	0	2	0	2	2
7.	Treatments clearly described	2	2	1	1	2
8.	Manualised treatment*	2	0	0	0	0
9.	Representative subjects and source	1	1	1	1	1
10.	Inclusion criteria with formal diagnoses	1	1	1	1	1
11.	Exclusion criteria & no of exclusions/refusals	1	0	1	1	2
12.	Sample demographics & clinical characteristics	2	1	1	2	2
13.	Blinding of assessor & integrity of blinding tested	0	1	0	1	1
14.	Compliance with experimental procedures,	2	0	2	2	2
15.	Details on side effects/unwanted effects recorded	0	0	0	0	0
16.	Information on withdrawals; number and reasons.	0	0	0	1	2
17.	Psychometrically sound outcome measures	1	2	1	2	1
18.	Comparability on prognostic variables, and stats	2	1	0	2	2
19.	Inclusion of withdrawals (intention to treat)	0	2	0	0	0
20.	Presentation of results	1	2	1	1	2
21.	Appropriate statistical analysis	1	2	1	2	2
22.	Conclusions justified	1	1	1	1	2
23.	Declaration of interests	0	2	0	0	0
24.	Allegiance to therapy stated *	0	0	0	0	0
25.	Duration of follow up after therapy *	0	2	0	2	0
26.	Co-interventions avoided or equal *	2	1	2	2	2
27.	Record concurrent drug use *	2	2	2	2	2
28.	Credibility of treatments & expectancy *	1	0	1	1	1
29.	Consecutive subjects recruited *	0	0	0	0	0
30.	Presented results include data for re-analysis *	2	2	2	2	2
	TOTAL SCORE (%)	28 (43.3)	36 (60)	20 (33.3)	35 (58.3)	35 (58.3)

A version of the quality criteria of the Cochrane Collaboration Depression and Anxiety group[83] has been amended to be more appropriate for psychological therapies trials,

where some quality criteria (e.g. double blinding) are inappropriate[75] . This suggests one trial of noticeably poorer quality than the other four of moderate to good quality.

iv. Narrative summary

The search located five RCTs published since 2001. These represented differing forms of psychodynamic and group analytic therapy for diverse presenting problems; people with complicated grief, a mixture of depression, anxiety & somatoform disorders, violence, binge-eating, and long-term effects of childhood sexual abuse. The trials used a range of different outcome measures and they were based in different countries, in various health care settings. For these reasons it is not possible to pool their results statistically through meta-analytic procedures.

Trials range from poor to good methodological quality (see Table 4). For example, some trials did not conceal allocation or had non-replicable inclusion characteristics. Health technology assessment methods emphasise the importance of pre-specifying a primary outcome measure, whereas these trials typically measure a range of outcome variables across domains and although in some cases it is possible to infer the primary measure, there is low confidence that this was pre-specified by protocol. We have selected as primary the outcome measure closest to the primary inclusion criterion. Although some trials reported that data were analysed by 'intention to treat', which is important because of the bias introduced by differential attrition between groups, in fact this was not done 'as randomised' but in terms of those starting treatment. The effects of researcher allegiance are neither addressed nor discussed and although allegiance does not necessarily equate to bias (Leykin & DeRubeis, 2009[76]), there is evidence to suggest that enthusiasts for a particular approach are more likely to obtain positive results than those in equipoise (Luborsky et al 1999[77]). Only one trial analysis took account of the group factor, i.e. observations are statistically non-independent for members of the same group. Ignoring the group effect is likely to inflate the effect found for the type of therapy and is an important methodological issue for group therapy research[57, 74].

Results presented in table 3 show effect sizes for the primary outcomes across these studies. Effect sizes for all outcomes are presented in APPENDIX IX. The findings comparing psychodynamic or analytic group therapy with control treatments can be briefly summarised as follows:

- Piper *et al.,* 2001[25] found patients with complicated grief improved in both psychodynamic and supportive group treatment; there was no significant difference between therapy types.
- Blay *et al.,* 2002[4] found brief psychodynamic group treatment gave clinically and statistically significantly greater benefit than usual clinical care for a mixed diagnosis group at the end of 8 weeks treatment, but at follow up (9-30 weeks post randomisation) there was no significant difference.
- Lanza *et al.,* 2002[13] compared psychodynamic group therapy with group cognitive behaviour therapy for reducing aggression and violence in male veterans with a history of assault. With a small sample size (n=10) the degree of improvement was not statistically significant for either therapy and there was no significant difference in outcome between the psychodynamic group and the CBT control, although the rate of improvement was better in the psychodynamic group.
- Tasca *et al.,* 2006[30] found binge-eating patients gained similar benefit from psychodynamic interpersonal therapy and group cognitive behaviour therapy, both

being superior to no-treatment controls at the end of therapy: follow up data on the no-treatment control group were not available;
- Lau *et al.,* 2007[14] compared modified group analysis with systemic group therapy and found the latter somewhat more effective, although both groups showed a treatment response.

This pattern of results provides evidence for the efficacy and effectiveness of group therapy approaches in a range of clinical problems, but no evidence that benefits are specific to psychodynamic group therapy or group analytic therapy. This should be viewed in light of the insensitivity of most research designs to address questions of this degree of discrimination. Given this caveat, it is not possible to speculate whether psychodynamic or group analytic approaches have equivalent effectiveness compared with other methods, as these trials were not designed to have the statistical power to test for the equivalence or non-inferiority of psychodynamic group therapies.

The finding that different forms of therapy are broadly effective but similarly so (often termed the 'Dodo bird' verdict) is common, but leaves open the possibility of an 'aptitude-treatment interaction'; that is, one method of treatment is superior for a particular type of client. It is also possible that specific treatment effects are moderated by other generic factors. This is addressed in section 3.7 under 'Outcome predictors, mediators and moderators'.

3.4 Other controlled trials

i. Table 5- Other controlled study characteristics

Author, date, (Study type)	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Bateman & Fonagy, 2001[1] (RCT-partial)	Partial hospitaliz-ation, UK	19 patients in partial hospitalization gp, 19 patients treated with standard psychiatric care	Not given	Not given	BPD	18 mths	Ind & gp PaP	GA therapy twice a wk (180 hrs over 18 mths)	SCL-90-R; BDI; SSTI; SocAS; IIP	Yes
Bateman & Fonagy, 2008[2] (RCT-partial)	Partial hospitaliz-ation, UK	Mentalization-Based Treatment by Partial hospitalization/Gp Therapy= 22 TAU= 19	Not given	Not given	BPD	18 mths	Outpatient mentalizing gp psychotherapy including expressive therapy	Twice-wkly for 18 mths	No. of suicide attempts over 5-yr post-discharge follow-up period	No
Beutel *et al.,* 2006[3] (CaCo)	Inpatient, Germany	144 (135)	50+	Mixed	Occupational stress	Data recorded at baseline and tx terminatio n	PdP- focal gp work	Av. duration 46 days- gps met twice wkly for 4 wks, 90 min sessions	CVA; SCW; VC; TS; SF- GCQ; GES	GES and SF-GCQ valida ted

Author, date, (Study type)	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Ciano *et al.,* 2002[7] (CaCo)	Outpatient, Italy	6 (5)	45.2 (control- 43.8)	Female	Binge-eating disorder	Assessed pre- and post-therapy, at 6 mths and at 12 mths	Gp PaP	14 x 90 min sessions over 28 wk period	EDI-2	Yes
Gonzalez *et al.,* 2007[11] (CaCo)	Outpatient, USA	Unclear: Intervention gp 8 completed therapy, 3 dropped out; 2 lost to follow-up 'in parent study' Control gp 2 lost to follow-up. 3 drop-outs not included in analysis; statistical analysis used all control gp, rather than matched pair analysis; implies 8 intervention and 11 control in analysis, unclear if patients lost to follow-up had usable data, or if 2 lost to follow-up in intervention gp were drop-outs or completers	21+	Mixed	Bipolar disorder,	30 mths (12 mths after end of 18 mths' treatment)	Psycho-education followed by gp PdP	Wkly 90min sessions for 16 mths, then biwkly for 2 mths; Psychoed for 5 sessions then gp PdP	GAF; CGI-BD	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Kipnes *et al.,* 2002[12] (CaCo)	Outpatient, Canada	N=254. 12 therapeutic gps, each with matched pair assigned to WLC. Assume that 127 participants in each condition	Not given	Mixed	Complicated grief	Initial 12 sessions of therapy, over 12 wk period. 6 mnth follow-up session	PdP	12 sessions over 12 wks. Time-limited, (time not given)	GSISCL-90-R; BDI	Yes
Zöger *et al.,* 2008[37] (CaCo)	Outpatient, Sweden	37 in psychotherapy grp, 38 in placebo grp	46.3 (control- 44.5)	Mixed	High risk for severe/disabling tinnitus	3 mths' follow-up	PdP	8 x 1.5 hour wkly sessions, 7-8 members over 3 mnths	TSQ VAS	Yes

ii. Table 6- Treatment outcomes

Author, date, outcome measure	Sample size	Outcome
Bateman & Fonagy, 2001[1] (SCL-90-R, BDI, STTI, SAS)	38	SCL-90-R- sign decrease in scores (F=30.2, df=1, 33, p<0.001) BDI- sign decrease in depression scores, and powerful overall gp diff (F=32.6, df=1, 35, p<0.001) STTI- sign decrease in state anxiety across both gps (Wilks's lambda=0.70, F=2.5, df=5, 29, p<0.05) SAS- social adjustment problems improved during follow-up- sign gp main effect (F=25.2, df=1, 36, p<0.001); sign interaction between gp and time factors (Wilks's lambda=0.86, F= 6.0, df=1, 36, p<0.02) IIP- substantial gp main effect (F=92.3, df=1, 37, p<0.01). The between-subject and repeated measures factor interaction was also sign (Wilks's lambda=0.87, F=5.4, df=1, 37, p<0.03)
Bateman & Fonagy, 2008[2]	41	46% of the patients made ≥ *1* suicide attempt (one successfully), but only 23% did so in the mentalization-based treatment (MBT) gp, contrasted with 74% of the TAU gp. There was a sign difference (Mann-Whitney U test) in total no. of suicide attempts over follow-up period. Sign differences between the gps were apparent during the MBT gp therapy period and remained sign in all three postdischarge periods. The mean no. of emergency room visits and hospital days highly signly favored the MBT gp, as did the continuing treatment profile; emergency room visits were sign reduced in all periods of treatment and postdischarge. The % hospitalized was sign lower during the last two postdischarge periods. During MBT gp therapy, all of the experimental gp but only 31% of the TAU gp received therapy (2=21, df=1, p<0.01). Over the 5-year postdischarge period, both gps received around 6 mths of psychological therapy (n.s.). For all other treatments, the treatment as usual gp received sign more input postdischarge— 3.6 yrs of psychiatric outpatient treatment and 2.7 yrs of assertive community support, compared with 2 yrs and 5 mths, respectively, for the MBT gp. In terms of available services used throughout the period of the study the differences favored the TAU gp only in the initial treatment period (MBT by partial hospitalization) and were signly less for the MBT gp for all three postdischarge periods. Differences also marked in terms of medication- TAU gp had an average of over 3 yrs taking antipsychotic medication, whereas the MBT gp had less than 2 mths. Somewhat smaller but still substantial differences were apparent in antidepressant and mood stabilizer use. TAU gp spent nearly 2 yrs taking three or more psychoactive medications, compared to an average of 2 mths for the MBT gp. Around 50% of TAU patients but none of MBT gp were taking three or more classes of psychoactive medication during MBT gp therapy and the three postdischarge periods. At the end of the follow-up period, 13% of the MBT patients met diagnostic criteria for BPD, compared with 87% of the TAU gp. The contrast between mean total scores for the Zanarini Rating Scale for BPD yielded a large

Author, date, outcome measure	Sample size	Outcome
		effect size favoring the MBT gp, albeit with a wide confidence interval. Multivariate analysis of variance across the four symptom clusters also reflected the better outcome for the MBT gp (Wilks's lambda=0.55, F=6.4, df=4, 32, p=0.001). The largest differences favoring MBT were in terms of impulsivity and interpersonal functioning. There was over a 6-point difference in the GAF scores between the two gps, yielding a clinically sign moderate effect size of 0.8 (95% CI=–1.9 to 3.4). 46% of MBT gp compared to 11% of TAU gp had GAF scores above 60. Of importance, vocational status favored the MBT gp, who were employed for nearly three times as long as TAU gp. There was a gradual increase in the percent of MBT patients in employment or education in the three postdischarge periods
Beutel *et al.,* 2006[3] CVA; SCW; VC; TS; SF- GCQ; GES	144 (135)	4 most frequent therapist interventions were: encouraging the patient to communicate (21%), promoting interactions among gp members (%16), promoting insights through interpretation and drawing links between work, family and gp interaction (11%) and explaining the rationale of the treatment approach (8%) Marginal (non-sign) change in subjective control (p= 0.67) Improvement in subjective work prognosis and work-related concerns for all participants but no sign diff between intervention and control gps Patients in interventions were more satisfied than controls with treatment re. vocational perspectives, colleagues, supervisors and coping with work demands, but the diffs were not statistically sign. Mean ratings of gp climate- sign improvements in intervention gp- continuous increase in engagement and corresponding decrease of avoidance + conflict over 4 wks of treatment Majority of focal gp patients reported substantial benefits. More men than women could now handle stressful work situations. Slightly higher benefit for those employed and those not wanting a pension. Those with long-term work disability reported less benefit than those with no or short-term work disability. All p-values non-sign. Engagement associated with greater benefit from gp participation on the GES (non-sign p-value) and greater satisfaction regarding work issues, vocational perspectives and coping with workload (all non-sign p-values). Higher conflict scores correlated with greater vocational concerns. Avoidance was negatively correlated with gp experience. It was also related to more vocation concerns, more pessimism about returning to work and less satisfaction with treatment regarding vocational perspectives (all non-sign p-values).
Ciano *et al.,* 2002[7] (freq of BED)	6 (5)	Intervention gp pre to post treatment: at end of treatment, 4 patients considered free of eating disorders; 1 still had BED; 1 had eating disorder not otherwise specified; sign reduction in frequency of binge episodes pretreatment 3.2/week, posttreatment 0.4/week p=0.026, nonsign decrease in bulimia (10.6 to 4.3) Intervention gp 12 months follow-up: 4 patients considered free of eating disorders; 2 had eating disorder not otherwise specified. sign reduction in frequency of binge episodes p=0.039

Author, date, outcome measure	Sample size	Outcome
		bulimia score reduced from baseline (nonsign) Control gp pre to post treatment: at end of treatment, 4 patients considered free of eating disorders; 1 had eating disorder not otherwise specified. Sign reduction in frequency of binge episodes pretreatment 2.1/week, posttreatment 0.2/week p=0.039 Control gp 12 months follow-up: 4 patients considered free of eating disorders; 1 had BED nonsign reduction in frequency of binge episodes p=0.059 bulimia score reduced from baseline (nonsign)
Gonzalez *et al.*, 2007[11] (GAF, CGI)	Unclear	Post therapy and 1 year follow up: gp members sign less depressive symptomatology and less likely to be in any mood episode compared to controls. No. of days well per week improved significantly (no sign improvement in control). GAF nonsign between gps p=0.65 CGI nonsign between gps p=0.15
Kipnes *et al.*, 2002[12] (GSI, BDI)	Not given-assume 127 participants in each grp	At 6 months found that both the GSISLC-90-R and the BDI showed that improvements made through therapy were maintained, or had continued to improve
Zöger *et al.*, 2008[37] (TSS, HADS)	75	No benefits for tinnitus via TSS Sign improvement on HADS at 3 months' follow-up (p<0.01) for psychotherapy gp; HADS subscale for anxiety (but not depression) was reduced

iii. Narrative summary

The Bateman and Fonagy (2001[1], 2008[2]) articles describe an intervention, 'Psychoanalytically Oriented Partial Hospitalization', which includes 'Mentalization-Based Group Treatment' among many other elements including occupational and individual consultations and a strong therapeutic milieu. The data on individual and group psychotherapy could not be extracted separately, so although the results are encouraging, it is not possible to isolate the specific contribution of group psychotherapy to any change in participants' well-being. However, the effectiveness of these approaches may include the group effect, the view taken by NICE guidelines on borderline personality disorder (2009[82]).

Beutel *et al.,* (2006[3]) showed that psychodynamic focal group treatment for psychosomatic inpatients gave particular benefits for improvement in group climate; a variety of other improvements were shown, but were not significantly higher than a control group.

Ciano *et al.,* (2002[7]) is a study with low numbers which compared group analytic and psychoeducational therapies for binge-eating disorders. The two approaches were approximately equally effective in terms of reducing binge-eating episodes, the group analytic approach also produced an interesting improvement in personality traits.

Gonzalez *et al.* (2007[11]) showed that psychodynamic group psychotherapy was effective in reducing depressive symptomatology and mood episodes for bipolar disorder.

Kipnes *et al,* (2002[12]) found that short-term psychodynamic groups had significant benefit for those experiencing complicated grief, and used this result to posit a new understanding of how group cohesion impacts on group psychotherapy.

Zöger *et al.* (2008[37]) looked at the impact of group psychotherapy on severe tinnitus; whilst the group approach did not significantly reduce the tinnitus, it did significantly reduce anxiety.

The studies provide good support for the use of group psychotherapy in a variety of conditions. Several studies found that the major benefit was in terms of group climate, personality traits and group cohesion, what might be termed 'Outcome predictors, mediators and moderators' (see section 3.7). These benefits may not be given time to accrue in shorter, manualised approaches, or may not be identified because researchers are not actively investigating them.

3.5 Observational studies

i. Table 7- Observational study characteristics

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Britvic *et al.,* 2007[5] (Obs)	Outpatient, Croatia	70 at final follow-up	39.5	Male	PTSD due to military service	Data collected at baseline and end of 40 wk programme	Sociotherapeutic, psychoeducative & dynamic group approach (trauma-focused)	60 mins, once a week for up to 40 wks	MS-PTSD, CCINS, IDSWCS, QLS, BDI	Yes
Britvic *et al.,* 2006[6] (Obs)	Outpatient, Croatia	55 at 2 yrs, 41 at 5 yrs	43.0	Male	PTSD due to military service	Data collected at baseline, after 2ys and after 5 yrs	PdP	90 mins, once a week for up to 5 yrs	Clinician-Administered PTSE Scale, CCINS, LSQ.	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Cogan & Porcerelli, 2003[8] (Obs)	Outpatient, USA	59	33.6 men, 34.4 women	Mixed	Partner abuse (physical)	Data collected pre and post gp therapy (8 wks). Further data collected at 32 + 48 sessions (of ind therapy)	GA	Closed gps, time-limited to 16 sessions lasting 2 hrs, twice a wk	CTS MAACL SAS	Yes
Conway *et al.,* 2003[9] (Obs)	Outpatient, UK	30	35	Mixed	Neurosis and minor emotional disorders, Personality Disorder,	12 wks, last data collection on last day of therapy	GA	Therapeutic programme for 12 wks. Members attended from 10-3pm Mon-Thur. 90 min sessions 2x a day	IIP-32	Yes
de Chavez, 2000[10] (Obs)	Inpatient and outpatient	32	34 (35)	Mixed	Schizophrenia	n/a	Gp therapy (Yalom)	At least 5 sessions	Card (Q) sort	Yes
Lorentzen *et al.,* 2002[15] (Obs)	Outpatient, Norway	69	36 (21-54)	Mixed	67 Axis I disorder; 47 Axis II disorder	Participants measured pre & post treatment and 1 yr after end therapy	GA	Ongoing- av. duration 32.5 mnths. 3 gps of 8-10, meeting for 1.5 hrs/wk	SCR-90; IIP	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Lorentzen *et al.,* 2004 'Predictors of change...'[16] (Obs)	Outpatient, Norway	69	36 (21-54)	Mixed	67 Axis I disorder; 47 Axis II disorder	Not given	GA	32.5 months; Patients consecutively placed in 1 of 3 ongoing gps of 6-8 members	DMS-III-R; CC; IIP; SCL-90-R; GOM; IGPC	Yes
Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18](Obs)	Outpatient, Norway	12	33.5 (21-54)	Mixed	10 Axis I disorder; 8 Axis II disorder	Not given	GA	60 mths 6-8 participants, wkly for 90 mins	IIP; SCL-90-R (GSI)	Yes
Lotz & Jensen, 2006[19] (Obs)	Out-patient, Denmark	139	36.2 (20-67)	Mixed	Anxiety (37%), depression (14%), neurotic states (11 %) PD (38%)	39 sessions (not clear how long in time)	PdP	39 sessions (length of each session and time-frame not given)	SCL-90-R	Yes
Lundqvist *et al.,* 2001[20] (Obs)	Outpatient, Sweden	22	32 (20-54)	Female	Childhood sexual abuse involving a family member	Data collected soon after last gp session	PdP	2 yrs	SCL-90 GSI	Yes
Lundqvist *et al.,* 2006[21] (Obs)	Outpatient, Sweden	Post-therapy: 42 in treatment gp; 10 in wait list gp; 18 in short-	34 (20-54)	Female	Childhood sexual abuse	Last follow-up 12 mths after end of therapy	PdP	2 yrs 46 sessions	SCL-90	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
		term focussed therapy gp 12-month follow up: 20 in treatment gp; 0 in wait list gp; 15 in short-term focussed therapy gp								
Morrison & Treliving, 2002[23] (Obs)	Outpatient, UK	17- 5 new to gp, so only completed baseline questionnaire	18+	Male	Childhood sexual abuse	Not given	PdP	Ongoing 13 (classed as 'treated') attended the gp for between 6 and 31 mths (mean 17 mths); Long-term, Slow-open	SCL 90-R	Yes
Ryan *et al.*, 2005[26] (Obs)	Outpatient, UK	48 completed therapy 22 gp therapy; 26 individual therapy	21-46 (24-61)	Female	Childhood sexual abuse	After therapy and follow-up data were collected at 4 mths and 8 mths	Focal, integrative psychotherapy	12 gp sessions, wkly except for holidays Short term	BSI	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Sharpe *et al.*, 2001[28] (Obs)	Outpatient, UK	10 with pre and post therapy data 7 with follow-up data	21-55	Male	Childhood sexual abuse	6 mths after end of therapy	GA	Offered 6 mths with option to extend by 6 mths; gps ran for 28 mths, wkly 1.5 hour sessions; Slow-open	BDI	Yes
Sigman & Hassan, 2006[29] (Obs)	Inpatient and outpatient, Canada	10	Not given	Mixed	Condition with psychotic experience	7-yrs total (two participants came to the gp after this time – one for 2.5 yrs, one for 6.5 yrs)	IPT	Data from 308 wkly sessions (45 mins) between Jan 1999- Dec 2005	Therapists recorded + classified behaviours in gp	No

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Terlidou *et al.,* 2004[31] (Obs)	Outpatient, Greece	39	Not given	Mixed	Mood disorder (61.5%), anxiety (23.1%), schiz (7.7%), somatoform (5.1%), adjustment (2.6%)	6 months	GA	Met once a wk for 1.5 hrs. 69.2% in therapy for 5-7 yrs (mean 5.9 yrs); mixed gp of 5–12, inc. conductor + co-conductor, slow-open	MMPI	Yes
Tschuschke & Anbeh, 2007[32] (Obs)	Outpatient, Germany	244	18-69	Mixed	Clients of therapists involved in the PAGE study	Last data collection post therapy	Gp PaP + GA	Av. 81 sessions over c. 2 yrs; PdP- max 50 sessions, GA- av. 101 sessions over c. 2.5 yr	GAF	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Valbak, 2001[33] (Obs)	Outpatient, Denmark	19 patients assessed, 10 maintained gp attendance for over 6 mths	23.1 (20.5-27.3)	Female	Bulimia	1.5 mths after leaving gp	GA	Slow open-1.5 hrs/wk; Duration 0.8-4.8 yrs (av. 3.1 yrs). Av. no of sessions-100; Av. % of sessions missed by patients-25.3%	GLQ RCQ CPSAS SCL-90-R	Yes
Vlastelica *et al.*, 2005[34] (Obs)	Outpatient, Croatia	20	31.2 (25-40)	Mixed	Anxiety disorder or BPD	4 yrs	GA	Once a wk (3 gps) for 4 yrs	LSI-DMS MMPI	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Wennberg *et al.,* 2004[35] (Obs)	Outpatient Sweden	94: 41 prematurely terminated gp therapy, 53 completed	39 (20-69)	Mixed	Substance abuse problems	Data collected pre and post therapy (duration varied)		Client in therapy for ≥ 6 sessions after decision to end the therapy. Completers- median duration c. 2 yrs , Dropouts- median duration c. 1.5 yrs Semi-open gps (4–8 members)	SCL –90	Yes
Wilberg *et al.,* 2003[36] (Obs)	Outpatient, Norway	187	34	Mixed	Gps diagnostically heterogenous – various PDs or axis 1 disorders only	For gp PdP, time from discharge to end of outpatient therapy		Outpatient gp therapy 1.5 hr session, wkly (max 3.5 yrs). Av. stay in gp therapy- 24.4 mths; 8% patients	GAF	Yes

Author, date, (Study type)	Health care setting (inpatient/outpatient)country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
								ended therapy within 6 mths; 23% patients ended therapy within 12 mths; 45 % 2 yrs+ therapy Co-therapist basis		
Macdonald *et al.,* 2003[22] (Qual)	Outpatient, UK	9	34	mixed	Learning disability	Not given	Group PdP	Not given	Qualitative-positive and negative themes	N/a

ii. Table 8- Treatment outcomes

Author, date (outcome measure)	Sample size	Outcome
Britvic *et al.,* 2007[5] (Obs)	77	Increase in problem-oriented ways of coping with stress (t= -2.073, p =0.042) and coping by avoidance (t= -2.803, p=0.007). BDI scores at the end of treatment were significantly lower than at the beginning (t= 4.563, p= 0.000). There were no significant changes in symptoms of PTSD (t=1.730, p= 0.088), neurotic symptoms and scores on the QLS (t= -1.825, p= 0.072)
Britvic *et al.,* 2006[6] (Obs)	66	Therapy reduced the intensity of PTSD (difference in score at end of 5 year treatment compared to baseline was 9.103, p=0.001) but no significant difference in scores on Crown-Crisp or Life Style questionnaire
Cogan & Porcerelli, 2003[8]	59	Verbal aggression decreased with gp therapy in both male and female gps. Physical violence increased slightly in men, but decreased in women during gp therapy. Dysthymia decreased sharply after gp therapy in both men and women. State anger decreased slightly for men and remained stable among women over the course of therapy
Conway *et al.,* 2003[9] (IIP-32)	30	IIP-32, mean (SD) Pre-therapy 1.94 (.53); Post-therapy 1.78 (.42). Change in score (Pre-therapy mean rating minus post-therapy mean rating) 0.16 (95%CI –0.03 to 0.34) paired samples t-test t=1.75, df=29, p = 0.090 Outcome effect size (Change score divided by pre-therapy standard deviation) = 0.30 1 patient considered to have improved to a clinically sign extent
de Chavez, 2000[10]	32	No sign differences seen in 12 therapeutic factors; no sign relationship of therapeutic factors with no. of hospitalizations or no. of gp sessions Instillation of hope, cohesiveness and altruism most important therapeutic factors for inpatients; Instillation of hope, self-understanding and universality most important for outpatients
Lorentzen *et al.,* 2002[15] (GAF, GSI, IIP)	69	GAF: mean score was 57.4 pre-therapy and 66.8 post-therapy (ES 1.84) At follow up it was 71.3 (compared to post-therapy, ES is 0.59). From pre-therapy to post-therapy, 28% recovered, 51% improved, 20% unchanged and 1% deteriorated From Pre-therapy to follow up, 61% recovered, 25% improved, 14% unchanged and 0% deteriorated Paired t-test result was 15.29 from pre-therapy to post therapy and 6.63 from post-therapy to follow-up GSI: mean score was 1.13 pre-therapy and .74 post-therapy (ES .80) At follow up it was .63 (compared to post-therapy, ES is .12). From pre-therapy to post-therapy, 22% recovered, 35% improved, 37% unchanged and 6% deteriorated

Author, date (outcome measure)	Sample size	Outcome
		From Pre-therapy to follow up, 34% recovered, 27% improved, 39% unchanged and 0% deteriorated. Paired t-test result was 6.30 from pre-therapy to post therapy and 1.22 from post-therapy to follow-up. IIP: mean score was 1.5 pre-therapy and 1.2 post-therapy (ES .54) At follow up it was 1.0 (compared to post-therapy, ES is .27). From pre-therapy to post-therapy, 25% recovered, 25% improved, 42% unchanged and 8% deteriorated From Pre-therapy to follow up, 38% recovered, 24% improved, 38% unchanged and 0% deteriorated Paired t-test result was 3.61 from pre-therapy to post therapy and 2.59 from post-therapy to follow-up
Lorentzen *et al.,* 2004 'Predictors of change...'[16]	69	Treatment duration up to 2.5 years was strong positive predictor; presence of PD, chronicity, high initial severity of symptoms not associated with less favourable outcome; marital status not a positive predictor, expectancy of a better outcome only positively related to 1 of the outcome variables. Interpersonal problems on subscale of "coldness" might be a negative predictor in long-term therapy
Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18]	12	Sign improvement during first 2 years in symptoms and interpersonal problems. Increase in alliance ratings by patients and therapist during first 2 years; sign correlation between therapist ratings of early alliance and positive symptomatic outcome, but did not predict interpersonal change. Patients' alliance ratings and early cohesion ratings did not predict change. Highest concordance between patient and therapist alliance ratings was between 16 and 30 sessions. Measures of therapeutic alliance and cohesion seem to address different elements in the group process.
Lotz & Jensen, 2006[19] (SCL-90-R, MCMI-II)	139	*Overall* symptoms reduced over the therapy, though symptoms remained- suggested that further treatment was necessary; predictions included high level diagnosis and high level focus to be associated with more favourable outcomes on the SCL-90-R. This was not found. Neurotic patients with low level focus and PD patients with high level focus has most favourable symptomatic outcome. Subsequently used MCMI-II (Million Clinical Multiaxial Inventory II). Measures 10 mild and 3 severe PDs. This was apparently not decided pre-test. Improvements in depression and anxiety were not related to diagnosis or focus
Lundqvist *et al.,* 2001[20](GSI)	22	mean and standard deviation, sign from paired t test: GSI pre1.38 ± 0.8 post 0.96 ± 0.8 p<0.01 Psychoticism pre 1.04 ± 0.8 post 0.51 ± 0.6 p<0.01 Obsessive-compulsive pre1.49 ± 1.0 post 0.97 ± 0.9 p<0.01 Interpersonal sensitivity pre1.54 ± 1.1 post 1.09 ± 0.9 p<0.05 Depression pre 1.84 ± 0.9 post 1.35 ± 1.1 p<0.05 Anxiety pre 1.51 ± 0.9 post 1.02 ± 1.0 p<0.05 Paranoid ideation pre 1.47 ± 1.0 post 1.02 ± 1.0 p<0.05 Somatisisation pre1.20 ± 1.0 post 1.03 ± 1.0 nonsign Hostility pre 1.11 ± 0.8 post 0.79 ± 0.9 nonsign Phobic anxiety pre 0.80 ± 0.9 post 0.51 ± 0.7 nonsign

Author, date (outcome measure)	Sample size	Outcome
		"No statistically sign diffs were found between the gps concerning treatment diffs or at pretest, posttest, and follow-up, using Kruskal–Wallis Test with only paired data sets." treatment gp – pre to post therapy: statistically sign reductions for the study gp in the total score GSI and in 8 of the 9 subscales; most evident reductions in GSI, obsessive–compulsive, depression, paranoid ideation, and psychoticism ($p < .001$); ES for total score GSI was 0.59
Lundqvist *et al.,* 2006[21] (GSI)	Post-therapy: 42 (10) (18) 12-mth follow up: 20 (0) (15)	pre to 12month follow-up: statistically sign reductions for the study gp in the total score GSI and in in 8 of the 9 subscales. ES for total score GSI was large, 1.06. GSI total mean (SD) pre 1.58 ± .73 post 1.10 ± .86 p< 0.001, follow-up 1.11 ± .68 p<0.01 Somatisation pre 1.62 ± .80 post 1.17 ± .98 p<0.01 follow-up 1.07 ± .75 p<0.01 Obsessive- compulsive pre1.62 ± .80 post 1.10 ± .94 p<0.001 follow-up 1.07 ± .83 p<0.01 Interpersonal sensitivity pre1.77 ± .92 post1.26 ± 1.02 p<0.01 follow-up 1.26 ± .90 p<0.01 Depression pre 2.15 ± .86 post 1.45 ± 1.06 p<0.001 follow-up 1.46 ± .90 p<0.01 Anxiety pre1.68 ± .89 post1.15 ± .99 p<0.01 follow-up 1.11 ± .79 p<0.01 Hostility pre1.16 ± .81 post .79 ± .92 p<0.01 followup.92 ± .80 ns Phobic anxiety pre1.05 ± 1.04 post .70 ± .86 ns followup.72 ± .75 p<0.05 Paranoid ideation pre1.53 ± .87 post1.11 ± .95 p<0.001 followup1.13 ± .82 p<0.05 Psychoticism pre1.20 ± .78 post .66 ± .69 p<0.001 followup.81 ± .71 p<0.01 Short-term gp – pre to post: statistically sign reductions for four of the nine subscales ($p < .05$), depression, anxiety, hostility, psychoticism and ES for total score GSI was 0.54. pre to 12months: statistically sign reductions for the total GSI and for five of the nine subscales. GSI total, somatisation, obsessive-compulsive, depression, anxiety, paranoid ideation ES of total GSI reduction was 0.74. [scores available Table 2 of reference] Waiting-list gp – pre to post -no statistically sign diffs. [scores available Table 2 of reference]

Morrison & Treliving, 2002[23] (GSI, PSDI)	13 (4)	In the treatment gp (n=13), sign improvement for GSI ($p = 0.001$) Pre mean 62.5 (SD 8.7), Post 49.2 (10.4);
		Positive Symptom Distress Index (PSDI) ($p = 0.001$) Pre 59.6 (9.8) Post 46.1 (10.6);
		interpersonal sensitivity ($p = 0.001$) pre 59.2 (7.8) post 48.6 (9.7);
		depression ($p = 0.001$) pre 60.3 (7.0) post 47.0 (9.5);
		psychoticism ($p = 0.001$) pre 63.7 (7.7) post 49.1 (9.2);
		obsessionality ($p = 0.01$) pre 56.7 (8.7) post 48.1 (9.1);
		paranoid ideation ($p = 0.05$) pre 60.8 (9.3) post 52.8 (7.1);
		somatization ($p = 0.05$) pre 61.1 (9.5) post 55 (10.7).

Author, date (outcome measure)	Sample size	Outcome
		Non-sign for anxiety, hostility, phobic anxiety, positive symptom total; for the "controls" (n=4), non-sign across all scores
Ryan *et al.,* 2005[26] (BSI)	22 (26)	Nonsign between groups; sign improvement pre to post therapy p<0.01; at 8-month follow-up, the patients who had undertaken group psychotherapy showed a statistically significant deterioration on BSI from posttherapy p<.05
Sharpe *et al.,* 2001[28] (BDI)	10	Sign decrease from pre to post therapy (n=10), mean decrease 10.8 (95%CI 4.2 - 17.4) p=0.005 Decrease not maintained at follow-up (n=7), p=0.494, mean pre 26, post 15.2, 6month follow up 25.6
Sigman & Hassan, 2006[29]	10	Improvements made were sustained over the course of gp therapy. Trends in individuals to engage in more emotionally meaningful interactions in group – no follow up given.
Terlidou *et al.,* 2004[31](MMPI)	39	Statistically sign diffs were observed in 9 of the 11 scales of MMPI, that were studied; overall reduction of symptoms and psychopathology- in particular, decrease in concern with illness, depressive emotions, conversion of psychological conflicts into physical complaints, antisocial behaviour, paranoid processes, compulsions, obsessions, and, paradoxical and unusual thoughts or behaviours. Nonsign for honest attitude to test, or hyperactivity
Tschuschke & Anbeh, 2007[32]	244	NOTE results are combined for all therapy gps, no separate data for type of therapy sign improvement (n=244), effect size 1.5, p<0.000, mean score pre therapy 56.2 (9.7), post therapy 71.7 (11) clinically substantially improved 61.9% patients No interaction between prior treatment/not and outcome of gp therapy; patients with PD diagnosis had a comparable treatment outcome as patients with a symptom diagnosis only The more sessions a patient joined the better the outcome, sign positive rank correlation between the outcome rank of an individual and the amount of gp sessions (R =+0:24, p < 0:001, n = 240). Preliminary data, after 11-14 sessions, of 184 patients in gp analytic therapy – nonsign trend toward improvement
Valbak, 2001[33] (RCQ, GLQ, SCL-90, CPSAS)	10	Patients sign and clinically changed: RCQ- 6/9; GLQ- 8/10; SCL-90 5/8; CPSAS- 4/6; 9/10 bulimic patients achieved recovery
Vlastelica *et al.,* 2005[34] (MMPI)	20	Lowering of defensive activities was found (no diff between 3 gps) MMPI- in 7 out of 8 clinical scales, reduction in pathology
Wennberg *et al.,* 2004[35] (SCL–90)	94	Subjects ending the therapy prematurely reported higher levels of phobic anxiety (F1,91 = 7.9; p < 0.01), other symptom measures nonsign
Wilberg *et al.,* 2003[36] (GAF)	187	Sign improvement in GAF- slightly greater for patients without PD than for those with PD GAF (n=187) mean (SD) at discharge 52.1 (7.4), end of outpatient therapy 57.5 (9.6) t=8.11 df 186, p=0.000, effect size 0.63. Reliable change 33% improved, 6% deteriorated. No sign correlations between duration of outpatient gp therapy and GAF at end of therapy, when controlled for GAF, GSI and CIP at discharge (start of outpatient therapy). No. of PD criteria negatively predicted outcome

iii. Narrative summary

The observational studies showed consistently promising results across a variety of settings, conditions and measures. Several studies looked at group psychotherapeutic work with people who have experienced childhood sexual abuse. In studies with female survivors, Lundqvist *et al.,* 2001[20] found that women's psychiatric symptoms were reduced, whilst their social interaction and adjustment improved. Lundqvist *et al.,* 2006[21] found that psychological and PTSD symptoms were significantly reduced after treatment; and sense of coherence increased. Ryan *et al.,* 2005[26] found that both individual and group patients showed highly statistically and clinically significant improvements after treatment. These gains were maintained at follow-up with the exception of one measure that indicated a significant decline from posttreatment levels for the group patients. In studies with male survivors, Morrison & Treliving, 2002[23] found significant improvement in global scores, interpersonal sensitivity, depression and psychoticism in those who engaged for at least 6 months. Sharpe *et al.,* 2001[28] found significant improvement pre to post therapy at 8-month follow-up, although the patients who had undertaken group psychotherapy showed a statistically significant deterioration from post-therapy.

Two studies investigated group psychotherapy with participants with a diagnosis of schizophrenia. de Chavez, 2000[10] investigated therapeutic factors and found that "Instillation of hope" was the most important factor in inpatient and outpatient groups. Sigman & Hassan, 2006[29] found a trend for individuals in long-term therapy to engage in more emotionally meaningful interactions in the group, although no follow up is reported.

Two studies investigated group psychotherapy with war veterans experiencing symptoms of post-traumatic stress disorder. Britvic *et al.,* 2007[5] looked at dynamic group therapy as part of a programme including three types of group therapy, so it is not possible to state whether the findings are a direct result of the dynamic group, one of the other two groups or the sum effect of all three together. Britvic *et al.,* 2006[6] found that long term psychodynamic group psychotherapy reduced the intensity of PTSD although there was no improvement shown in a measure of neurotic symptoms or a life style questionnaire.

A variety of other conditions were investigated. Valbak, 2001[33], in a study of group psychotherapy for eating disorders, found that 9 out of 10 bulimic patients achieved recovery from bulimic behaviour and from several different areas of psychological functioning. In a study on group approaches to personality disorders, Wilberg *et al.,* 2003[36] found significant improvements in functioning, these were slightly greater for patients without PD than for those with PD. Cogan & Porcerelli, 2003[8] found group therapy to be effective for reducing and managing anger in those who had experienced abusive relationships.

The remaining studies focused on the efficacy of group psychotherapy with more heterogenous groups. Conway *et al.,* 2003[9] found that brief time-intensive multi-modal therapy yielded decreased symptoms and improved mental health.

Other studies looked at longer term therapies. Lorentzen *et al.,* 2002[15] found that patients improved significantly on all measures with up to 30 months of analytic group psychotherapy; Lorentzen *et al.,* 2004[16] found that a treatment duration of up

to 2.5 years was a strong positive predictor; Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18] found significant improvements during the first 2 years in terms of symptoms and interpersonal problems, and a significant correlation between therapist ratings of early alliance and positive symptomatic outcome. Terlidou *et al.,* 2004[31] found a significant decrease in clinical symptomatology, improved social adaptation, emotional expressions, and ability to establish personal relationships. Tschuschke & Anbeh, 2007[32] found that patients benefit early in group therapeutic treatments, and to similar extents in different conceptual approaches. Vlastelica *et al.,* 2005[34] found lowering of defensive activities and reduction in pathology. Wennberg *et al.,* 2004[35] found that subjects ending therapy prematurely reported higher levels of phobic anxiety. Several of these longer term studies suggest that outcome moderators were important. These benefits may not be given time to accrue in shorter, manualised approaches, or may not be identified because researchers are not actively investigating them.

The relatively small number of studies, and their use of a variety of outcome measures, makes comparisons difficult. In addition, a couple of studies present the outcome measure with the most favourable results as the primary outcome or elected to use a test midway through the study as a consequence of initial results. This inevitably lowers the quality of studies and weakens confidence in the results.

In summary, the observational studies suggest significant benefits of group psychotherapy approaches. It is particularly important that the positive effects which are specific to long term GA or A/D group psychotherapy are investigated. It should be noted that the results of observational studies are based on pre-post outcomes which are likely to be misleading as there is no control group and no way to attribute changes to the group intervention. One way to improve evidence for clinical utility (rather than efficacy) is replication, e.g. the outcome of group psychotherapy with people with a diagnosis of schizophrenia; for evidence of specific efficacy, observational studies will be supplemented with controlled trials where changes can be reliably attributed to GA or A/D group psychotherapy.

3.6 Qualitative study

i. Table 9- Qualitative study characteristics

Author, date, (Study type)	Health care setting (inpatient/outpatient), country	Number of participants in analysis (if controlled study, number in each treatment condition)	Age of participants (mean or range)	Gender	Condition	Length of study follow-up (recruitment to last data collection)	Treatment orientation details	Duration of therapy (include no. of sessions, length of therapy)	1° outcome measure (description, e.g. BDI, HADS)	1° outcome measure validated?
Macdonald *et al.*, 2003[22] (Qual)	Outpatient, UK	9	34	mixed	Learning disability	Not given	Group PdP	Not given	Qualitative-positive and negative themes	N/a

ii. Narrative summary

One qualitative research study (Macdonald et al, 2003[22]) met the inclusion criteria and was analysed and a thematic analysis was conducted (see figure 2). This study examined two psychodynamic groups for people with learning disabilities provided by an inner city service. There was significant heterogeneity between the two groups with four learning disabled clients from a sexual offenders' group and five from a women's group. Whilst the group with four sexual offenders could be considered homogenous, the women's group did not specify a common condition or problem beyond gender and learning disability. This may therefore have been a fairly diverse group which could relate to the comment reported below of difficulty in relating to material that other group members brought.

The methods of presentation of the original study, i.e. relating to positive and negative aspects of the treatment, were not sufficiently informative for the purposes of this review. It was thought to be more helpful to characterise the elements of the therapeutic interaction according to their specific components e.g. the intervention itself, the group composition, the therapist effects, etc.

Characteristics of the intervention

Respondents indicated that they thought that the fact that the intervention was a 'talking therapy' was positive and they valued having protected time and a protective environment within which to talk:

> [Do you think that the group has helped you with anything that you have found difficult?] Yeah, I want to come here [inaudible] to talk about it. (P4, 54).

> [How was it helpful for you?] It was very helpful. [Yeah. Do you know why?] It makes you come out a bit more. [Yeah, express yourself ?] Mm. (P1, 41).

They felt that it was valuable to be able to revisit difficult experiences and to be able to talk about them. They also described a relative advantage of the group setting over other situations and opportunities:

> [And is that something that's easier to talk about in the group?] It's alright in the group but not with social workers. [You can't talk to social workers about it?] No. [And why's that?] Because they laugh at yer. Going round to them two, they're alright. I get on with them so much. (P2, 49)

On the other hand participants also reported adverse effects from the intervention with evidence that some may find having to talk in a group distressing.

> [It sounds like you don't find it helpful talking about that in the group?] I don't. Everybody knows about it in there. And that winds me up. (P4, 20).

Furthermore others reported that it could be distressing having to witness other people's distress:

> [You've been feeling low.] Yeah. [How's it helpful having people with similar problems in the group?] It might make things worse, I don't know, but I've got to go somewhere, and I suppose I've got to try. (P8, 200).

Therapist Effects

The therapists were generally considered helpful and participants described how they appeared to value the individual group members and their contributions. Therapists were seen to perform a valuable role where they encouraged participants to talk. There was also evidence that therapists could begin to be seen in a friendlier more informal light with some indication of an attachment with the therapist starting to be formed:

> I like [therapists] very much. Sometimes I get mixed up, I call [name of one therapist name of other therapist] and [name of other therapist name of first therapist] sometimes. I mix them up. Muck about.I call [one therapist other therapist] and [other therapist, first therapist], and they laugh about it. [Do you do it deliberately?] I do it deliberately, yeah. (P5, 18).

Where a therapist was too task-focused rather than person-focused this was seen as detrimental to the effects of the intervention:

> [Do [therapists] do anything else that's unhelpful?] Sometimes she moans at [name] sometimes. . . . Yeah about her family. I said to her `You shouldn't do that because you're making her upset', you know. I don't think she wants to answer any questions, which is right.

Participants also reported acting unfavourably where the therapist was associated with maternal authority.

Outcomes of Intervention

Within the specific context of the sexual offenders group the opinion was expressed that the group might help the participant to resist the urge to re-offend:

> Well, if I don't talk about it, right. It's going to right, what's the word, I'm probably going to do something stupid, like go up to a kid and touch them where I shouldn't touch them. . . . If I don't talk about it I probably will do it, but I know, touch wood, I know touch wood I wouldn't do it. (P5, 3).

However there was some evidence that the participants might be resistant to benefits to be gained from the group processes.

Composition of the Group

The composition of the group was the most reported theme from this small-scale qualitative research study. Individual members valued being listened to and being understood by fellow group members. The group was seen as being inclusive and providing a contrasting environment to that experienced elsewhere. For the women it was felt to be valuable to be away from the influence of their mothers. The homogeneity of the group was seen as an important aspect of its success:

> When I listen to [name of group member] and the other new girl, I can't remember her name, they've got a similar kind of family to mine, and their mothers are very similar to mine. It reminds me as they talk, tell her story, I can see myself with my mum, you know, I can picture it. So similar. It does make me want to cry. I get tears in my eyes. I try not to show it. (P6, 100).

In contrast, where there was heterogeneity of group members, this was seen to have a negative effect.

> [Do you feel that other people in the group have similar or different problems?] Well, they have different problems I suppose from my problem. [Have any of them had similar problems as well?] No. (P5, 85).

The individual group members also felt exposed through their participation in the group to the negative behaviours of other group members including conflict between other group members. They also expressed disappointment when other group members disengaged from the group with this being seen as a sign of a lack of commitment to the group:

> [Can you tell me about the last group last week?] We had to write letters because everybody is disappearing. Disappearing us. There's two people who's gone. There's another girl who used to be with us. [Sighs]. . . . But I can't believe we have to write letters to them. [. . .] Because like they didn't want to come back here.

Other negative aspects of the group were reported included sleeping during the group and generally not enjoying the group.

Other Factors

Environmental factors also had an effect on the group's perceived success. These included such aspects as external noise. Minimising the impingement of such environmental factors is usually part of dynamic administration, so would be the responsibility of the group leader or therapist.

One benefit from the group was that some individuals perceived that they were able to achieve greater self-efficacy by offering help and assistance to other group members suggesting an improved coping ability:

> I felt sorry for her so I gave her some sweets . . . , and um, I had a sort out and I gave her a bikini, cos I didn't want it no more, and she cheered up. So I'm glad I did that. [How did it make you feel to help?] Good. (P6, 125).

Conclusions from qualitative research study

It is clearly impossible to draw firm conclusions from one small qualitative study, although the findings have the potential to inform the results from the quantitative studies. In this particular case, the homogeneity of the group appeared to be implicated in its success and this seems to be a counter-example to the group analytic assumption that heterogeneous groups are the most effective (excluding some conditions, e.g. schizophrenia). In addition to the mirroring that patients in this study describe as being helpful, the process of engaging with difference, in particular the unwanted projected aspects of the self, is seen as initially difficult, but ultimately particularly relevant to producing change. Further research could explore which aspects of homogeneity versus heterogeneity are linked to positive outcomes.

Therapist effects are also important, requiring further investigation of positive and negative behaviours. In particular it may be important to be able to identify those individuals for whom the general experience of talking in a group is felt to be more positive than negative and to try to be able to identify those individuals who may have a disruptive effect on the group's cohesion.

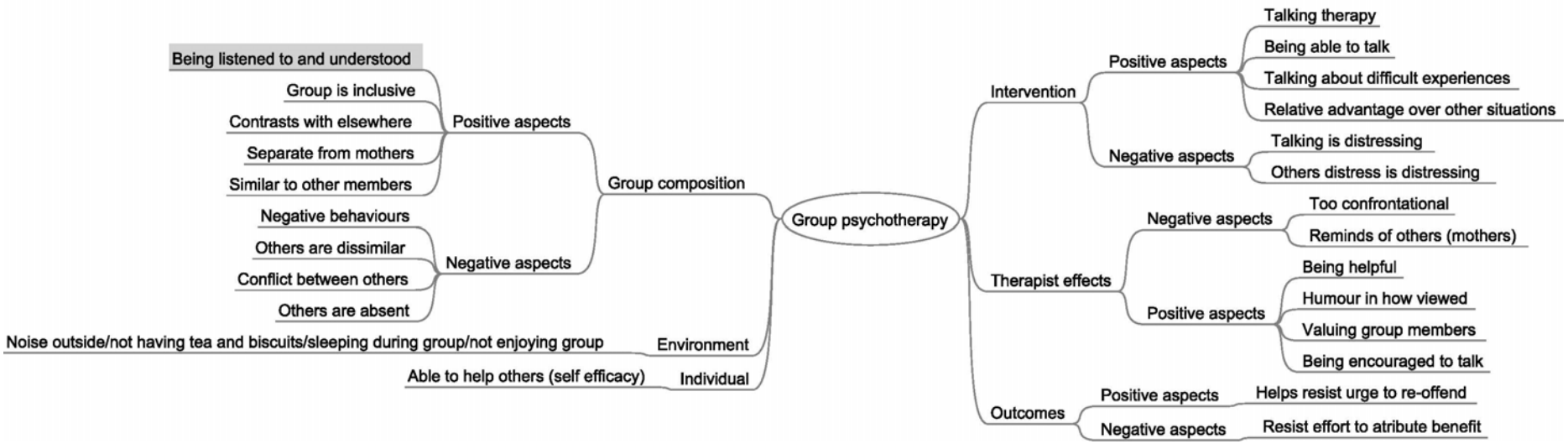


Fig 2- Mindmap of themes from Macdonald *et al.*, 2003[22]

3.7 Outcome predictors, mediators and moderators

Several studies examined the relationship between patient characteristics or treatment type and outcome, and the role of mediating or moderating variables. For example, whether or not someone is likely to benefit from a particular form of treatment may depend on socio-demographic characteristics such as gender and age or on personal characteristics such as attachment style or psychological-mindedness, or on perceived group characteristics such as group cohesion, conflict or engagement. Predictors alter treatment response irrespective of treatment condition whereas moderators differentially influence outcome within different treatment conditions.

A moderating variable is thought to influence the process by which the prior characteristic is related to outcome, whereas a mediator is seen as the factor through which the prior characteristic has its effect. This is best illustrated diagrammatically:

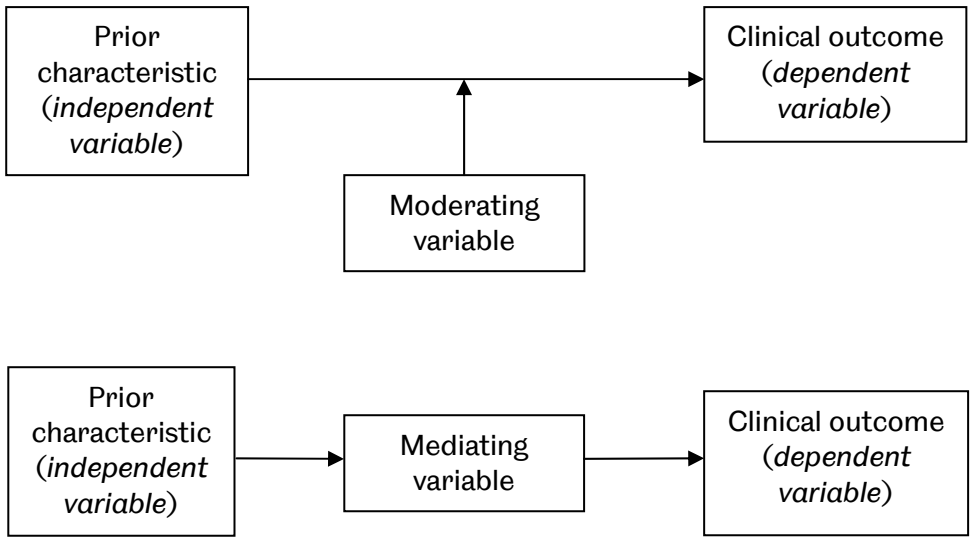


Figure 3- Influence of moderating and mediating variables

In practice, the distinction between these is rarely tested empirically and the terms are often used interchangeably.

Studies of moderating factors are often exploratory. They typically use data collected for a primary purpose (e.g. to compare efficacy of different treatments) and then conduct secondary analyses to find out which variables predict outcome and which could be seen as mediators. There is a risk of Type I errors from exploratory data analysis rather than analyses planned *a priori.* Furthermore, the statistical models used to test for the influence of these factors are often rather complex, involving for example, fitting different types of growth curves, interpreting statistical interactions in repeated measures analysis of variance with a range of outcome measures, or fitting hierarchical regression models. Where sample sizes are relatively small, such multivariate analyses can lead to findings that are neither robust nor stable. For this

reason, findings in this section must be treated with caution and the replication of these findings through studies designed from the outset to examine specific hypotheses is particularly important.

Despite this, the importance of examining the influence of client characteristics and group process on outcome is difficult to overestimate, given that efficacy trials only examine outcomes averaged across groups; a process that can obscure clinically vital interactions. It is absolutely possible that a form of group therapy that on average achieves only small or moderate effects is, for a particular subgroup of patients, extremely effective or equally, may be contraindicated. It is equally important to know whether a particular aspect of group process, for example, management of conflict, is predictive of whether or not people benefit.

Table 10 below summarises eleven studies that examine moderating variables. It is noted that six of these studies originate from the same research group and five are sub-analyses of data from the same RCT.

Overall, the evidence suggests that there may be important effects of age, sex, self-efficacy, treatment duration and psychological mindedness on clinical outcomes and effects of attachment style and interpersonal distress on group attendance. These effects have been reported for specific client groups and may not generalise to others. Predictors of change in long term groups are likely to be different from those for short term groups (Lorentzen & Høglend, 2004[16]).

Effects may be moderated by group climate (e.g. cohesion) and individual factors; for example men may do less well in mixed sex groups where they are in the minority, because they find it difficult to commit to the process and resolve interpersonal issues (Ogrodniczuk *et al.,* 2006[86]).

A notable finding was that the quality of object relations [iii] is an important moderator of the impact of treatment type on outcome (Piper *et al.,* 2001[25]). Those with high quality of object relations had better outcomes from interpretive group therapy than from supportive and this may be a useful selection criterion for loss groups.

Lorentzen & Høglend (2008[17]), in a preliminary brief report, suggest that patients with more severe pathology (in terms of depression, other psychiatric symptoms, personality disorders and poor interpersonal functioning) require longer in group therapy to achieve improvements in interpersonal functioning.

[iii] 'Object relations' refers to the development of mind as one grows in relation to real others in the environment, and hence also to one's internalized images of others. Object relationships are initially formed through interaction with early caregivers and although may be altered through experience, continue to exert a strong influence throughout life, becoming a template for later relationships.

Table 10: Moderators and outcomes

Ref ID	Group types (n)	Condition/ disorder	Moderator & outcome	Findings	Caveats
Kipnes (2002[12])	Psychodynamic (154)	Depression, social isolation, loneliness, complicated grief.	Effect of cohesion on outcome	No significant predictive value to cohesion identified.	
Lorentzen & Høglend (2004[16])	Long term psychoanalytic group (n=69)	Mood & anxiety disorders (mainly) & interpersonal problems	Predictors: demographics, diagnosis, severity, chronicity, expectancy, treatment duration. Outcomes: GAF, GSI, IIP, improvement, complaints	Treatment duration was a good predictor of better outcome. Marital status, PD, chronicity & severity were not, different from findings in short term group therapy.	*A priori* hypothesis testing, plus an exploratory analysis. Risk of Type I error in multivariate analysis?
Lorentzen & Høglend (2008[17])	'Slow open' group analytic therapy	Mixed psychiatric symptomatology & interpersonal problems	Pre-treatment severity interacting with treatment duration to predict interpersonal outcome	Eight out of 16 pre-therapy patient characteristics interacted with treatment duration in predicting post-therapy outcome on interpersonal functioning and target interpersonal problems.	Preliminary brief report (letter to the Editor). Multiple tests. Details not available include sample size, treatment duration, n of drop outs & treatment completers.
Lorentzen, Sexton & Høglend (2004[18])	Long term (5 year) group analysis (n=12 for 2 year analysis)	Mixed psychiatric symptomatology & interpersonal problems	Does therapeutic alliance & cohesion predict rate of change?	Therapist ratings of alliance & level of agreement between therapist & client independently predicted rate of change in symptoms but not interpersonal problems over two years. Cohesion was not associated with symptomatic or interpersonal change.	Exploratory study. Small sample for these statistical methods. Predictors were of slope of growth curve rather than outcome.

Ref ID	Group types (n)	Condition/ disorder	Moderator & outcome	Findings	Caveats
Ogrodniczuk (2003[24])	Interpretive (53) Supportive (54)	Complicated grief	Effect of group climate (engagement, avoidance & conflict) on outcome.	Engagement after session 4 and engagement averaged over therapy directly associated with improvement. Early engagement only linked to good outcome in low conflict. Avoidance & conflict did not change over therapy. Avoidance associated with good outcome when conflict is high but not when low. Interpretive group has higher levels of conflict & avoidance.	Group climate measures are completed & analysed at the level of the individual so may not be tapping group factors. Pattern of findings could be spurious, danger of over-interpreting patterns in the data *post hoc*. Correlational study does not allow causal inference
Ogrodniczuk (2006[86])	Interpretive (23) Supportive (24)	Complicated grief plus major depression	Effect of gender, individual commitment & compatibility on grief & clinical outcomes (e.g avoidance, depression, anxiety)	Men had poorer outcomes than women in both types of group therapy. They showed less commitment & were less compatible with other group members. Gender effect partially mediated by commitment & compatibility.	Small sample size, particularly of men (n=11), make it hard to generalize these findings. Gender effect may relate only to men in mixed-sex groups where they are in the minority.
Ogrodniczuk (2006[87])	Interpretive (68) Supportive (71)	Complicated grief	Effect of age on session attendance. Is cohesion a mediator?	Older age predicts better attendance in supportive but not interpretive therapy. This effect mediated by cohesion.	*Post hoc* rather than *a priori* hypotheses; could be an element of data dredging. Correlational study does not allow causal inference.
Ogrodniczuk (2006[88])	Interpretive (34) Supportive (38)	Complicated grief plus personality disorder	Effect of interpersonal distress on session attendance. Is cohesion a mediator?	Interpersonal distress strongly predicts higher attendance in supportive but not interpretive therapy. This effect mediated by cohesion.	*Post hoc* rather than *a priori* hypotheses; could be an element of data dredging. Correlational study does not allow causal inference.
Piper *et al.,* (2001[25])	Interpretive (53) Supportive (54)	Complicated grief	Quality of object relations Psychological mindedness moderating the effect of treatment type	PM was a predictor of outcome for both treatment types. For grief symptoms, significant interaction between QOR, high QOR patient improved more in interpretive.	Some risk of type I error with multiple outcome variables uncorrected for multiple tests.

Ref ID	Group types (n)	Condition/ disorder	Moderator & outcome	Findings	Caveats
Sandahl (2004[27])	Short term psychodynamic (25) Short term CBT (24)	Alcohol dependence	Effect of self-efficacy on drinking pattern at follow up. Is this effect mediated by coping & control?	Self efficacy predicts outcome in both groups, but neither therapy increased this, nor coping. Contrary to expectations, psychodynamic therapy group increased levels of control, not the CBT group.	The measure of control was psychometrically unreliable.
Tasca (2006[30])	Group psychodynamic-interpersonal (33) Group CBT (32)	Binge-eating disorder in women	Is relationship between anxious attachment and outcome mediated by group climate (engagement, avoidance, conflict)?	GCBT members reported lower levels of conflict than GPIP. Growth in engagement tended to be linear in GCBT & cubic (fluctuating) in GPIP. Conflict decreased steadily in both types of group. Whether the relationship between high 'need for approval' scores and positive change in days binged may be mediated by growth in engagement depended on which test used	Findings dependent on complex statistics based on a number of assumptions. May be more parsimonious explanations of the data, e.g that approval- seeking patients more likely to report engagement and exaggerate the no. of binge-free days. Despite hypothesis-testing format, not clear that these were genuinely *a priori*.

4- Conclusions

4.1 Summary of findings

Number of studies

We identified 37 primary studies and 23 reviews which met the inclusion criteria.

Of the 37 primary studies, data were not extracted from three papers because they reported on moderating, secondary variables (group climate and self-efficacy) without reference to outcomes. Of the 34 remaining primary studies, 5 (15%) were randomised controlled trials (RCT), a further 2 (6%) were randomised controlled trials where group therapy was only one element in a complex treatment (RCT-partial), 5 (15%) employed case controls mainly using a 'matched' or 'wait-list' comparison group (CaCo), 21 (62%) were observational studies (Obs), and 1 (3%) was qualitative (Qual).

Of the 23 reviews, two were excluded because they only covered papers already included in our systematic review, one was excluded because it included just one group-based intervention, and one was excluded because it was not a review *per se* but was, instead, a specialist re-analysis of a previous meta-analysis. Nineteen relevant reviews which included studies published before 2001 were identified and summarised in a 'review of reviews'.

Efficacy and Clinical effectiveness

Of the five RCTs, Piper *et al.,* 2001[25] found no significant difference between psychodynamic and supportive group treatment in the treatment of complicated grief; Blay *et al.,* 2002[4] found brief psychodynamic group treatment gave clinically and statistically significantly greater benefit than usual clinical care for a mixed diagnosis group at the end of 8 weeks treatment, but at follow up (9-30 weeks post randomisation) there was no significant difference; Lanza *et al.,* 2002[13] compared psychodynamic group therapy with group cognitive behaviour therapy for reducing aggression and violence in male veterans with a history of assault, finding no significant difference in outcome between the psychodynamic group and the CBT control; Tasca *et al.,* 2006[30] found binge-eating patients gained similar benefit from psychodynamic interpersonal therapy and group cognitive behaviour therapy, both being superior to no-treatment controls at the end of therapy: follow up data on the no-treatment control group were not available; Lau *et al.,* 2007[14] compared modified group analysis with systemic group therapy and found the latter somewhat more effective, although both groups showed a treatment response.

This pattern of results provides evidence for the effectiveness of group therapy approaches in a range of clinical problems, but no evidence that benefits are specific to GA or A/D group psychotherapy. Moreover, it is not possible to speculate whether psychodynamic or group analytic approaches have equivalent effectiveness compared with other methods, as these trials were designed to test for the

superiority of the psychodynamic/analytic therapy rather than for equivalence or non-inferiority.

The non-RCTs give good support for the use of group psychotherapy in a variety of conditions. Several studies explored the factors influencing clinical outcome in terms of group climate, personality traits and group cohesion:, what might be termed 'Outcome predictors, mediators and moderators' (see section 3.7).

The observational studies give good support for the use of group psychotherapy in a variety of conditions. These benefits may not be given time to accrue in shorter, manualised approaches, or may not be identified because researchers are not actively investigating them. Because of design and resource issues, RCTs tend to require short treatments which are manualised and have short follow-up periods. Their design therefore skews the pattern of potential results. On the other hand it is more feasible to run observational studies for longer periods. These studies have the advantage of external validity, whereas randomised trials, in defending against threats to internal validity (such as allocation bias) often sacrifice relevance to clinical practice. However, self-selection, the lack of randomisation and the absence of a control group may overstate the reported improvements as it is not possible to attribute the changes to the group intervention.

Other findings

From the single qualitative study[21], it appeared that:

- the homogeneity of the group was related to its success
- therapist effects were important factors in the outcome
- there are individuals for whom the general experience of talking in a group is felt to be more positive than negative
- there are individuals who may have a disruptive effect on the group's cohesion

It was not possible to find conclusive support for these hypotheses from reports of the published quantitative studies, but it would be beneficial to explore them further - both qualitatively with other treatment groups and quantitatively by further experimental studies.

Analysis of the 'outcome predictors, mediators and moderators' found in included studies suggests that there may be important effects of age, sex, self-efficacy, duration and psychological mindedness on outcomes and effects of attachment style and interpersonal distress on group attendance. These effects have been reported for specific client groups and may not generalise to others; they may also be mediated by group climate and individual factors. The quality of object relations- the lifelong pattern of interpersonal relationships - seems to be an important moderator of the impact of treatment type on outcome. Predictors of outcome for long term analytic group therapy are likely to be different from those for short-term groups.

A review of reviews confirmed that group therapies in general are more effective than wait list or standard care controls. There is typically no advantage reported to group therapy compared with individual therapy where a specific comparison is made, although there are exceptions to this finding. Most of these comparisons are

through meta-analysis rather than through 'head-to-head' trials with adequate statistical power and cost-effectiveness analysis.

4.2 User Perspectives

The research team included a user researcher consultant who acted both in an advisory capacity and as a researcher in the review. Additionally, the Expert Panel established by IGA included an independent survivor consultant. The user researcher was involved at an early stage of the investigation to enable her involvement in the application process and she worked collaboratively with the team, providing a user perspective throughout the review. This was in line with good practice as suggested by INVOLVE (Hanley et al. 2004[68]).

User involvement in systematic reviews is not well advanced compared to involvement in other research methodologies and there are few examples of good practice of which to draw on (Braye & Preston-Shoot 2005[59]; Fleischmann 2009[66]; Ghersi 2002[67]; Social Care Institute for Excellence 2007[90]). This investigation has raised several issues of relevance to systematic reviews that have been previously highlighted in the literature.

The views of service users were not captured by the majority of the articles included in the review, the exception being the qualitative paper by Macdonald *et al.,* 2003[22] which is presented in detail pp 53-56 where service user perspectives were the focus of the research.

The nature of outcome measures was raised. It has been observed that users often prefer outcome measures that emphasise quality of life or coping strategies rather than those related solely to symptom reduction (Naylor et al. 2007[85]). This investigation considered this issue from the outset and took a broad approach, resulting in the inclusion of studies that used a diverse range of measures of efficacy and effectiveness.

Another important theme concerns the need from a user perspective to include grey literature that is seldom considered in systematic reviews (Fleischmann 2009[66]; Rose 2009[89]). This was the aim from the outset, however, resource constraints meant it was not possible to realise this. Any future research needs to address this.

4.3 Limitations of the evidence base

The overall aim of the review, to assess the efficacy of Group Analysis and Analytic/Dynamic (A/D) Group Psychotherapy, was made difficult by:

- the difficulties in identifying appropriate studies due to the lack of clearly defined terminology to describe analytic/dynamic group psychotherapy
- the varying quality of studies retrieved by the search strategy
- the relatively low number of RCTs retrieved by the search strategy
- the variety of different outcome measures used in studies, particularly RCTs

In his introduction to a study published in Group Analysis in 2003, Conway described the lack of empirical research in group analytic/dynamic psychotherapy and the barriers to developing such research methods which are present within some areas of the analytic/dynamic psychotherapy community: 'scepticism and mistrust of researchers and research methodologies, concerns about losing professional identity, lack of scientific education among therapists, and the slow, time-consuming nature of research' [7]. Conway cautioned the analytic psychotherapy community about the risks of not conducting such research- 'Lack of outcome research... raises concerns about the longer-term survival of group analysis... (as) such evidence may be required not only to secure a share of limited funding, but also to lobby for the inclusion of group analysis in clinical protocols guiding treatment choice in NHS psychotherapy provision'[9] (our parentheses).

It is troubling to note that our review, published six years after Conway's study, finds little sign of improvement in the volume of high-quality clinical research that is being conducted. The NICE guidelines on therapies for depression conclude that while short term psychodynamic therapy may be useful in patients who have complex comorbidities, 'there is insufficient evidence to determine whether there is a clinically significant difference between psychodynamic psychotherapy and CBT on a range of outcomes including reducing depression symptoms by the end of treatment... reducing depression symptoms by six months after treatment... reducing depression symptoms by one year after treatment,... reducing the likelihood of still being depressed at the end of treatment.' (2007[83]) (our parentheses). None of the included studies on psychodynamic therapy examined group therapy. While some group psychotherapy interventions are included in the guideline, analytic/dynamic therapy is not among them, due to an insufficient evidence base. The 2009 update to these guidelines weakened the recommendation further by stating that people with mild to moderate depression should only be offered short-term psychodynamic psychotherapy if they have declined "an antidepressant, CBT, IPT, behavioural activation and behavioural couples therapy", and that the clinician should "discuss with the person the uncertainty of the effectiveness of counselling and psychodynamic psychotherapy in treating depression" (2009[84]). These guidelines have overlooked analytic/dynamic group psychotherapies entirely, while CBT-based interventions continue to dominate the recommended psychological therapies.

This dominance of CBT must in part be explained by the abundance of empirical research that has been conducted to assess its effectiveness. In his review of individual and group psychological treatments published in 1998, DeRubeis notes that 'Whereas adherents of behavioral and cognitive-behavioral therapy have traditionally valued– and therefore conducted– "nomothetic" outcome research, their counterparts in the psychodynamic research and practice community have tended to place less value on clinical trial methodology'[42]. This willingness to conduct high-quality clinical research is directly linked to the current dominance of cognitive behavioural therapies for common conditions such as depression.

More fundamentally, Fonagy *et al.* (2005[44]) point out that there are profound incompatibilities between psychoanalysis and natural science. Success for psychoanalysis is measured in terms of meaning, which is not reducible to either symptoms or suffering. They also assert that psychoanalysis has had a tradition of regarding the uninitiated with contempt, scaring off open-minded researchers, but go on to urge the engagement of psychoanalytic clinicians in research programmes as a desirable goal. Lorentzen (2006[49]) agrees that psychoanalytic group therapy, in

particular group analysis, is lagging behind other group therapies in quantitative research, and suggests that a range of research approaches are necessary: randomised clinical trials for drawing causal inferences, supplemented by other methods such as theoretical, conceptual studies; epistemological discussions; other controlled studies; naturalistic (observational) studies; case studies of individuals and groups; and qualitative studies of different types.

4.4 Discussion

The studies examined, including previous reviews, consistently support the use of GA and A/D group psychotherapy as an effective approach, across diverse conditions, participant groups and settings.

The available research suggests that the different forms of group therapy are broadly effective and that future research should focus on the aptitude-treatment interaction, identifying which types of client/patient are more likely to respond positively to which kind of group therapy.

This investigation presented significant methodological issues for the researchers, arising from the relatively low number of empirical studies, in particular high quality RCTs, into the effectiveness of GA and A/D group psychotherapy. Other issues were inconsistent reporting, the lack of clearly defined terminology to describe therapeutic approaches, poor use of key words in titles and abstracts, the varying quality of published studies and the variety of outcome measures used in studies.

There is an urgent need for high-quality research, including both qualitative and quantitative methods, to increase both the volume and quality of the evidence base for GA and A/D group psychotherapy. The methodological challenge is to undertake randomised controlled trials of long term therapy, which requires assertive follow-up over a number of years, and greater agreement on an appropriate primary outcome measure.

Furthermore, the quality of reporting of research in GA and A/D group psychotherapy needs to improve in order to facilitate awareness and usage of research and to facilitate systematic reviews of such evidence. The mental health guidelines published by NICE have been organised around the notion of single disorders and not upon the mixed conditions which are often addressed by group psychotherapy in heterogeneous groups.

4.5 Recommendations

i. A key recommendation of the review has emerged from the process of sifting the literature, relating to the poor quality of reporting in many studies identified by the search. Adopting the 'structured abstract' approach used by many effectiveness studies (such as RCTs) in the clinical research literature, would significantly improve the 'visibility' of much research in group psychotherapy. Our experience of the sifting process highlighted the tendency to 'bury' important information about interventions

and outcome measures in the full-text of a research paper, when such information should be clearly stated in the abstract.

ii. The scoping stage of this research identified only five RCTs, and the heterogeneity of these studies made a meta-analysis impossible. Furthermore, the varying quality of included studies made it difficult to generalise findings and to provide statistically robust conclusions about the efficacy of group psychotherapy when compared to other approaches. Therefore there is an urgent need for high-quality empirical research, both RCTs and high quality practice-based evidence, to increase both the volume and quality of the evidence base for GA and A/D group psychotherapies.

iii. Given the value of individual outcome predictors and moderators compared with average outcomes, future research should aim to identify which types of client/patient are more likely to respond positively to which kind of group therapy (also known as ATI or aptitude-treatment interaction research). This would identify the types of patients for whom GA and A/D group therapies are most effective. Similarly, ATI research could investigate the different indicators for group versus individual psychotherapy.

iv. Given the potential for cost-effectiveness of group therapy versus individual therapy, it would be worthwhile to conduct a trial of costs and outcomes of group versus individual psychodynamic therapy.

v. There is uncertainty over whether heterogeneous or homogeneous group membership is more effective; this could be the topic of both process and outcome research, exploring the aspects of heterogeneity versus homogeneity of group membership that have an impact on outcome.

vi. Given the similar outcomes of different forms of group therapy, a head to head non-inferiority trial between psychodynamic vs. CB group therapy would be of value.

vii. Consideration could be given to researching the perspective of the service user in a study of group members' experience or of conducting a review of personal testimony.

viii. A wide range of mental health problems have been studied but with few replications. It may be of value for IGA/GAS to reach a consensus on the patient groups most likely to benefit from this approach and on appropriate primary outcome measures. This could help to focus future research efforts around which evidence can accumulate.

ix. The quality of research reporting in GA and A/D group psychotherapy should be improved in order to facilitate awareness and usage of research and to facilitate systematic reviews of such evidence. In particular, it is vital that future research adopts the following:

- the 'structured abstract approach' outlined above
- clear definitions and agreed set of key words for the group interventions
- consistent use of (a set of) measures which capture both the short-term and longer-term impacts of group psychotherapy

x. The research committees of the IGA and GAS, after consultation with other relevant bodies, could develop these recommendations further by producing good practice guidelines for the conduct and publication of research examining GA and A/D group psychotherapy.

4.6 Conclusion

Notwithstanding the difficulties encountered in undertaking this review, the studies, including RCTs, other controlled studies, observational studies and one qualitative study, consistently report that group psychotherapy is an effective approach, across diverse conditions and settings, and this conclusion is supported by earlier reviews. In addition, there may be important effects of age, sex, self-efficacy, psychological mindedness and the quality of object relations on outcomes; attachment style and interpersonal distress have an important bearing on group attendance.

The relatively low numbers of currently available studies on Group Analysis and Analytic/Dynamic Group Psychotherapy presents both a challenge and an opportunity to the therapeutic community to undertake research into these group approaches in order to consolidate these conclusions.

References

Included studies

1. Bateman, A. & Fonagy, M. Treatment of Borderline Personality Disorder With Psychoanalytically Oriented Partial Hospitalization: An 18-Month Follow-Up. American Journal of Psychiatry, 2001: 158, pp.6–42.
2. Bateman, A. & Fonagy, M. 8-Year Follow-Up of Patients Treated for Borderline Personality Disorder: Mentalization-Based Treatment Versus Treatment as Usual. American Journal of Psychiatry, 2008: 165, pp.631–638.
3. Beutel, M. E., Knickenberg, R. J., Krug, B., Mund, S., Schattenburg, L. & Zwerenz, R. Psychodynamic focal group treatment for psychosomatic inpatients--with an emphasis on work-related conflicts. International Journal of Group Psychotherapy, 2006:56(3), pp.285-305.
4. Blay S.L., Vel Fucks, J.S., Barruzi, M., Di Pietro, M.C., Gastal, F.L., Neto, A.M., De Souza, M.P., Glausiusz, L.R. & Dewey, M. Effectiveness of time-limited psychotherapy for minor psychiatric disorders: randomised controlled trial evaluating immediate v. long-term effects. British Journal Psychiatry, 2002: 180, pp.416-422.
5. Britvic, D., Anticevic, V., Urlic, I., Dodig, G., Lapenda, B., Kekez, V, & Mustapic, I. Psychotherapeutic program for post-traumatic stress disorder: Prospective study of 70 war veterans. Group Analysis, 2007: 40(4), pp 507-22.
6. Britvic, D., Radelic, N.; & Urlic, I. Long-term dynamic-oriented group psychotherapy of posttraumatic stress disorder in war veterans: Prospective study of five-year treatment. Croat. Med J., 2006, 47, pp. 76-84.
7. Ciano, R., Rocco, P. L., Angarano, A., Biasin, E., & Balestrieri, M. Group-analytic and psychoeducational therapies for binge-eating disorder: An exploratory study on efficacy and persistence of effects. Psychotherapy Research, 2002: 12(2), pp. 231-239.
8. Cogan, R. & Porcerelli, J. H. Psychoanalytic psychotherapy with people in abusive relationships: Treatment outcome. Journal of Aggression, Maltreatment & Trauma, 2003: 7(1-2), pp. 29-46.
9. Conway, S., Audin, K., Barkham, M., Mellor-Clark, J., & Russell, S. Practice-based Evidence for a Brief Time-intensive Multi-modal Therapy Guided by Group-analytic Principles and Method. Group Analysis, 2003: 36(3), pp. 413-435.
10. de Chavez, M. G. Comparative study of the therapeutic factors of group therapy in schizophrenic inpatients and outpatients. Group Analysis, 2000: 33(2), pp. 251-264.
11. Gonzalez, J. M. & Prihoda, T. J. A case study of psychodynamic group psychotherapy for bipolar disorder. American Journal of Psychotherapy, 2007: 61(4), pp. 405-422.
12. Kipnes, D. R., Piper, W. E., Joyce, A. S. Cohesion and outcome in short-term psychodynamic groups for complicated grief'. International Journal of Group Psychotherapy, 2002: 52(4), pp. 483-509.

13. Lanza, M. L., Anderson, J., Boisvert, C. M., LeBlanc, A., Fardy, M., & Steel, B. Assaultive behavior intervention in the Veterans Administration: psychodynamic group psychotherapy compared to cognitive behavior therapy. Perspectives in Psychiatric Care, 2002; 38, 3, pp. 89-97.

14. Lau, M. & Kristensen, E. Outcome of systemic and analytic group psychotherapy for adult women with history of intrafamilial childhood sexual abuse: a randomized controlled study. Acta Psychiatrica Scandinavica, 2007: 116(2), pp. 96-104.

15. Lorentzen, S., Bogwald, K. P. & Høglend, P. Change during and after long-term analytic group psychotherapy. International Journal of Group Psychotherapy, 2002: 52(3), pp. 419-429.

16. Lorentzen, S. & Høglend, P. Predictors of change during long-term analytic group psychotherapy, Psychotherapy & Psychosomatics, 2004:73(1), pp. 25-35.

17. Lorentzen, S & Høglend, P. Moderators of the effect of treatment length in long term psychodynamic group psychotherapy, Psychotherapy & Psychosomatics, 2008:77, pp. 321-322

18. Lorentzen, S., Sexton, H. C. & Høglend, P. Therapeutic alliance, cohesion and outcome in a long-term analytic group. A preliminary study. Nordic Journal of Psychiatry, 2004:58(1), pp. 33-40.

19. Lotz, M. & Jensen, H. H. Focus in psychodynamic group therapy: An empirical study of dynamic focus, diagnoses, and symptomatic outcome. Nordic Psychology, 2006: 58(3), pp.248-261.

20. Lundqvist, G. & Ojehagen, A. Childhood sexual abuse. An evaluation of a two-year group therapy in adult women. European Psychiatry: the Journal of the Association of European Psychiatrists, 2001:16(1), pp. 64-67.

21. Lundqvist, G., Svedin, C. G., Hansson, K., & Broman, I. Group therapy for women sexually abused as children: mental health before and after group therapy. Journal of Interpersonal Violence, 2006 Dec, 21 (12), pp. 1665-1677.

22. Macdonald, J., Sinason, V. & Hollins, S. An interview study of people with learning disabilities' experience of, and satisfaction with, group analytic therapy. Psychology & Psychotherapy: Theory, Research & Practice, 2003:76(4), pp. 433-453.

23. Morrison, A. & Treliving, L. Evaluation of outcome in a dynamically orientated group for adult males who have been sexually abused in childhood. *British Journal of Psychotherapy*, 2002:9(1), pp.59-76.

24. Ogrodniczuk, J. S. The effect of group climate on outcome in two forms of short-term group therapy, Group Dynamics, 2003:7(1), pp. 64-76.

25. Piper, W. E., McCallum, M., Joyce, A. S., Rosie, J. S., & Ogrodniczuk, J. S. Patient personality and time-limited group psychotherapy for complicated grief. International Journal of Group Psychotherapy, 2001:51, pp.525–552.

26. Ryan, M., Nitsun, M., Gilbert, L. & Mason, H. A prospective study of the effectiveness of group and individual psychotherapy for women CSA survivors. Psychology & Psychotherapy: Theory, Research & Practice, *2005*:78(4), pp.465-479.

27. Sandahl, C., Gerge, A., & Herlitz, K. Does Treatment Focus on Self-Efficacy Result in Better Coping? Paradoxical Findings from Psychodynamic and Cognitive-Behavioral Group Treatment of Moderately Alcohol-Dependent Patients. Psychotherapy Research. 2004:14(3) pp.388-397.

28. Sharpe, J., Selley, C., Low, L. & Hall, Z. Group Analytic Therapy for Male Survivors of Childhood Sexual Abuse. Group Analysis, 2001: 34, p.195.

29. Sigman, M. & Hassan, S. Benefits of long-term group therapy to individuals suffering schizophrenia: A prospective 7-year study. Bulletin of the Menninger Clinic. 2006:70(4), pp.273-282.

30. Tasca, G.A., Ritchie, K., Conrad, G., Balfour, L., Gayton, J., Daigle, V., & Bissada, H. Attachment scales predict outcome in a randomized controlled trial of two group therapies for Binge Eating Disorder: An aptitude by treatment interaction. Psychotherapy Research, 2006:16, pp.106-121.

31. Terlidou, C., Moschonas, D., Kakitsis, P., Manthouli, M., Moschona, T., & Tsegos, I. K. Personality Changes after Completion of Long-term Group-Analytic Psychotherapy. Group Analysis. 2004: 37(3), pp.401-418.

32. Tschuschke, V., Anbeh, T., & Kiencke, P. Evaluation of Long-term Analytic Outpatient Group Therapies. Group Analysis, 2007:40(1), pp.140-159.

33. Valbak, K. Good outcome for bulimic patients in long-term group analysis: A single-group study. European Eating Disorders Review. 2001:9(1), pp.19-32.

34. Vlastelica, M., Jurcevic, S. & Zemunik, T. Changes of defense mechanisms and personality profile during group analytic treatment. Collegium Antropologicum, 2005:29(2), pp.551-558.

35. Wennberg, P., Weinryb, R., Saxon, L., Goransson,S., Bush, M. & Skarbrandt, E. Personality, Levels of Psychological Distress and Premature Termination of Psychodynamic Group Therapy: Results from a Prospective Longitudinal Study. Group Analysis, 2004:37(2), pp.179–185.

36. Wilberg, T., Karterud, S., Pedersen, G., Urnes, O., Irion, T., Brabrand, J., Haavaldsen, G., Leirvag, H., Johnsen, K., Andreasen, H., Hedmark, H. & Stubbhaug, B. Outpatient group psychotherapy following day treatment for patients with personality disorders. Journal of Personality Disorders, 2003:17(6), pp.510-521.

37. Zöger, S., Erlandsson, S., Svedlund, J. & Holgers, K-M. Benefits from group psychotherapy in the treatment of severe refractory tinnitus. Audiological Medicine, 2008:6(1), pp.62-72.

Reviews

38. Barlow, S., Burlingame, G., & Fuhriman, A. Therapeutic application of groups: From Pratt's “thought control classes” to modern group psychotherapy. Journal of Group Dynamics, 2000:4, 115–134.

39. Burlingame, G. M. F. The differential effectiveness of group psychotherapy: A meta-analytic perspective. Group Dynamics, 2003:7(1), pp.3-12.

40. Cuijpers, P., van straten, A., & Smit, F. Psychological treatment of late-life depression: a meta-analysis of randomized controlled trials. International Journal of Geriatric Psychiatry, 2006:21, pp.1139-1149.

41. de Liz, T. M. S. Differential efficacy of group and individual/couple psychotherapy with infertile patients. Human Reproduction, 2005:20(5), pp.1324-32.

42. DeRubeis, R. J. C. Empirically supported individual and group psychological treatments for adult mental disorders. Journal of Consulting and Clinical Psychology, 1998:66(1), pp.37-52.

43. Engels, G.I. & Vermey, M. Efficacy of nonmedical treatments of depression in elders: a quantitative analysis. Journal of Clinical Geropsychology, 1997:3(1), pp. 17-35.

44. Fonagy, M., Roth, A. & Higgitt, A. Psychodynamic psychotherapies: Evidence-based practice and clinical wisdom. Bulletin of the Menninger Clinic, 2005:69(1), pp.1-58.

45. Guimon, J. Evidence-based research studies on the results of group therapy: a critical review. European Journal of Psychiatry, 2004: 18(suppl), pp. 49-60.

46. Hoag, M. J. & Burlingame, G.M. Evaluating the effectiveness of child and adolescent group treatment: a meta-analytic review. Journal of Clinical Child Psychology, 1997:26(3), pp. 234-246.

47. Huxley, N. A. Psychosocial treatments in schizophrenia: A review of the past 20 years. Journal of Nervous and Mental Disease, 2000:188(4), pp. 187-201.

48. Kösters, M., Burlingame, G. M., Nachtigall, C., & Strauss, B. A Meta-Analytic Review of the Effectiveness of Inpatient Group Psychotherapy. Group Dynamics: Theory, Research, and Practice. 2006:10(2), pp. 146-163.

49. Lorentzen, S. Contemporary Challenges for Research in Group Analysis. Group Analysis. 2006: 39(3), pp.321–340.

50. Mackin, R.S. & Araen, P.A. Evidence-based psychotherapeutic interventions for geriatric depression. Psychiatric Clinics of North America, 2005:28(4), pp. 805-820.

51. McDermut, W., Miller, I.W. & Brown, R.A. The efficacy of group psychotherapy for depression: a meta-analysis and review of empirical research. Clinical Psychology: Science and Practice, 2001:8(9), pp. 98-116.

52. Pinquart, M. & Sorensen, S. How effective are psychotherapeutic and other psychosocial interventions with older adults? A meta-analysis. Journal of Mental Health and Aging, 2001:7(2), pp. 207-243.

53. Swartz, H.A. & Frank, E. Psychotherapy for bipolar depression: a phase-specific treatment strategy? Bipolar Disorders, 2001:3(11), pp. 11-22.

54. Verheul, R. & Herbrink, M. The efficacy of various modalities of psychotherapy for personality disorders: a systematic review of the evidence and clinical recommendations. International Review of Psychiatry, 2007:19(1), pp. 25-38.

55. Weiss, R. D., Jaffee, W. B., de Menil, V. P., & Cogley, C. B. Group Therapy for Substance Use Disorders: What Do We Know? Harvard Review of Psychiatry, 2004:12(6), pp.339-350.

56. Weiss, F. Psychodynamic group psychotherapy for the obese disordered-eating adult: a contemporary view. Group, 2006:30(4), pp. 337-357.

Other references cited

57. Baldwin, S., Stice, E. & Rohde, P. Statistical analysis of group-administered intervention data: Reanalysis of two randomized trials. Psychotherapy Research, 2008:18(4), pp. 365-376.

58. Bandolier. How good are systematic reviews of acupuncture? [online]. [Accessed 8 April 2009] 2006. Available from World Wide Web: <http://www.medicine.ox.ac.uk/bandolier/band151/b151-7.html>

59. Braye, S. & Preston-Shoot, M. 2005, "Emerging from out of the shadows? Service user and carer involvement in systematic reviews", *Evidence & Policy: A Journal of Research, Debate and Practice*, vol. 1, no. 2, pp. 173-194.

60. Budman, S.H., Demby, A., Soldz, S. & Merry, J. Time-limited group psychotherapy for patients with personality disorders: Outcomes and dropouts. International Journal of Group Psychotherapy. 1996: 46, pp. 357-377.

61. Chilcott, J., Brennan, A., Booth, A., Karnon, J. & Tappenden, P. The role of modelling in prioritising and planning clinical trials. Health Technology Assessment, 2003;7(23), pp. 1-125.

62. Cohen, J. Statistical Power Analysis for the Behavioral Sciences (second ed.)., 1988. Lawrence Erlbaum Associates.

63. Covi L. & Lipman, R.S. Cognitive behavioral group psychotherapy combined with imipramine in major depression: a pilot study: 1987, Psychopharmacol Bul 23, pp. 173-176.

64. Dennis, C. L. & Hodnett, E. Psychosocial and psychological interventions for treating postpartum depression. Cochrane Database of Systematic Reviews, 2007:4 , CD006116.

65. EPPI. EPPI-Centre Homepage. [online]. [Accessed 8 April 2009] 2009. Available from the World Wide Web: <http://eppi.ioe.ac.uk/cms/>

66. Fleischmann, P. 2009, "Literature Reviews. An example of making traditional research methods user focused.," in *This is Survivor Research*, A. Sweeney et al., eds., PCCS Books, Ross-on-Wye, pp. 82-97.

67. Ghersi, D. Making it happen: approaches to involving consumers in Cochrane reviews. Evaluation & the Health Professions, 2002, vol. 25 (3), pp. 270-283.

68. Hanley, B., Bradburn, J., Barnes, M., Evans, C., Goodare, H., Kelson, M., Kent, A., Oliver, S., Thomas, S., & Wallcraft, J. 2004, *Involving the public in NHS, public health, and social care research: Briefing Notes for Researchers.*, INVOLVE, Eastleigh.

69. Harden A**.** Extending the boundaries of systematic reviews to integrate different types of study: examples of methods developed within reviews of young people's health**.** In Popay J. Moving beyond effectiveness in evidence synthesis. London: National Institute for Health & Clinical Excellence, 2006, pp.15-30.

70. Hedges, L. & Olkin, I. Statistical Methods for Meta-Analysis, 1985. Orlando: Academic Press.

71. Higgins, J.P.T. & Green, S. Cochrane Handbook for Systematic Reviews of Interventions (version 5.0.1). [online]. [Accessed 8 April 2009] 2008. Available from the World Wide Web: <http://www.cochrane.org>

72. Kanas, N. Long-term Psychodynamic Group Therapy for Patients with Personality Disorders, International Journal of Group Psychotherapy 2006:56(2), pp.245-251.

73. Kennard, D., Roberts, J. & Winter, D. A Workbook of Group-Analytic Interventions, 2000. Jessica Kingsley

74. Kenny, D. & Voie, L. Separating individual and group effects. Journal of Personality and Social Psychology. 1985:48, pp. 339-348.

75. Lackner, J.M., Morley, S., Dowzer, C., Mesmer, C. & Hamilton, S. Psychological treatments for irritable bowel syndrome: a systematic review & meta-analysis. Journal of Consulting and Clinical Psychology. 2004:72, pp. 1100-1113.

76. Leykin, Y. & DeRubeis, R. Allegiance in Psychotherapy Outcome Research: Separating Association From Bias. Clinical Psychology: Science and Practice, 2009:16,1, pp. 54-65.

77. Luborsky, L., Diguer, L., Seligman, D. A., Rosenthal, R., Johnson, S., Halperin, G., Bishop, M. & Schweizer, E. The researcher's own therapeutic allegiances—A "wild card" in comparisons of treatment efficacy. Clinical Psychology: Science and Practice. 1999:6, pp. 95–132.

78. Moher, D., Jadad, A.R. & Tugwell, P. Assessing the quality of randomised controlled trials: an annotated bibliography of scales and checklists. Controlled Clinical Trials. 1999:16, pp. 62-73

79. Moncrieff, J., Churchill, R., Drummond, D.C. & McGuire H. Development of a quality assessment instrument for trials of treatments for depression and neurosis. International Journal of Methods in Psychiatric Research. 2000:10, pp. 126-133.

80. Monsen, J.T., Odland, T., Faugli, A., Daae, E. & Eilertsen, D.E. Personality disorders: Changes and stability after intensive psychotherapy focusing on affect consciousness. Psychotherapy Research: 1995a, 5, pp. 33-48.

81. Monsen, J.T., Odland, T., Faugli, A., Daae, E. & Eilertsen, D.E. Personality disorders and psychosocial changes after intensive psychotherapy: A prospective follow-up study of an outpatient psychotherapy project, 5 years after end of treatment. Scandinavian Journal of Psychology: 1995b, 36, 256-268.

82. NICE. Borderline personality disorder: treatment and management. [online]. [Accessed 8 April 2009]2009.Available from the World Wide Web: http://www.nice.org.uk/Guidance/CG78

83. NICE. Depression: Management of Depression in Primary and Secondary Care. [online]. [Accessed 8 April 2009]2007.Available from the World Wide Web: http://www.nice.org.uk/Guidance/CG23

84. NICE. Depression: the treatment and management of depression in adults (update). [online]. [Accessed 30 November 2009]2009.Available from the World Wide Web: http://guidance.nice.org.uk/CG90

85. Naylor, C., Wallcraft, J., Samele, C., & Greatley, A. 2007, *Research priorities for patient-carer centred mental health services* Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation (SDO).

86. Ogrodniczuk, J.S. Men, women and their outcome in psychotherapy. Psychotherapy Research, 2006:16(4), pp 453-462.

87. Ogrodniczuk, J.S., Piper, W.E. & Joyce, A.S. Treatment compliance in different types of group psychotherapy: exploring the effect of age Journal of Nervous and Mental Disorders. 2006: 194(4), pp. 287-93.

88. Ogrodniczuk, J.S., Piper, W.E. & Joyce, A.S. Treatment compliance among patients with personality disorders receiving group psychotherapy : What are the roles of interpersonal distress and cohesion? Psychiatry. 2006: 69(3), pp. 249-261.

89. Rose, D. 2009, "Collaboration. Is Collaborative Research Possible?," in *Handbook of Service User Involvement in Mental Health Research*, J. Wallcraft, B. Schrank, & M. Amering, eds., Wiley-Blackwell, Chichester, pp. 169-179.

90. Social Care Institute for Excellence 2007, *Collection of examples of service user and carer participation in systematic reviews* Using Knowledge in Social Care Research, Resource 2, SCIE, London.

91. Wampold, B. E., Minami, T., Baskin, T. W., & Callen, T. S. A meta-(re)analysis of the effects of cognitive therapy versus 'other therapies' for depression.[see comment]", Journal of Affective Disorders, 2002, 68(2-3):159-65.

92. Watson, R.J.D. & Richardson, DH. Accessing the literature on outcome studies in group psychotherapy: The sensitivity and precision of Medline and PsyclNFO bibliographic database searching. The British Journal of Medical Psychology, 1999: 72, pp.127-134.

Appendix I- PsycINFO subject headings

Below is a list of all the subject headings and their related narrower subject headings, used in the search strategy above. The 'scope notes' describe what the meaning of the term is in the context of the particular database. The project team would like some advice on which terms the expert panel feel are relevant to the search and which can be discarded.

Subject Heading: Group Psychotherapy
Scope Note for: *Group Psychotherapy*
MAIN TERM: Group Psychotherapy
DATE OF ENTRY: 1967
Has two narrower terms:

Encounter Group Therapy [+NT]
MAIN TERM: Encounter Group Therapy
DATE OF ENTRY: 1973
SCOPE NOTE:
Goal-oriented unstructured groups whose members seek heightened self-awareness and fulfillment of their human potential. The group leader (not necessarily a clinically trained therapist) participates freely in the group activity. Techniques used include role playing, sensory awareness, and physical contact.
Has one narrower term:

Marathon Group Therapy
MAIN TERM: Marathon Group Therapy
DATE OF ENTRY: 1973
SCOPE NOTE:
Encounter group that meets for extended sessions and that aims to develop the ability to express oneself emotionally and to initiate intimate interpersonal interactions.
No narrower terms.

Therapeutic Community
MAIN TERM: Therapeutic Community
DATE OF ENTRY: 1967
SCOPE NOTE:
Institutional or residential treatment setting emphasizing social and environmental factors in therapy and management and rehabilitation, usually of psychiatric or drug rehabilitation patients.
No narrower terms.

Subject Heading: Group Counseling
Scope Note for: *Group Counseling*
MAIN TERM: Group Counseling
DATE OF ENTRY: 1973

No narrower terms.

Subject Heading: Group Dynamics
Scope Note for: *Group Dynamics*
MAIN TERM: Group Dynamics
DATE OF ENTRY: 1967
Has six narrower terms:

Group Cohesion
MAIN TERM: Group Cohesion
DATE OF ENTRY: 1973
SCOPE NOTE:
Mutual bonds formed among the members of a group as a consequence of their combined efforts toward a common goal or purpose.
No narrower terms.

Group Development
MAIN TERM: Group Development
DATE OF ENTRY: 1997
SCOPE NOTE:
Used in treatment and nontreatment settings.
No narrower terms.

Group Discussion
MAIN TERM: Group Discussion
DATE OF ENTRY: 1967
No narrower terms.

Group Participation
MAIN TERM: Group Participation
DATE OF ENTRY: 1973
SCOPE NOTE:
Involvement in a group's purpose or activities.
No narrower terms.

Group Performance
MAIN TERM: Group Performance
DATE OF ENTRY: 1967
SCOPE NOTE:
Process and effectiveness of a group in accomplishing an intended goal.
No narrower terms.

Intergroup Dynamics
MAIN TERM: Intergroup Dynamics
DATE OF ENTRY: 1973
No narrower terms.

Subject Heading: Analysis
Scope Note for: *ANALYSIS*
MAIN TERM: Analysis
DATE OF ENTRY: 1967
SCOPE NOTE:
Conceptually broad term referring to the process of examination of a complex problem, its elements, and their relations. Use a more specific term if possible.
Has one relevant narrower term (all others relate to analysis of data):
.

Behavior Analysis [+NT]
MAIN TERM: Behavior Analysis
DATE OF ENTRY: 2001
SCOPE NOTE:
Field of psychology emphasizing the experimental, conceptual, and applied analysis of behavior in humans and animals.
Has one narrower term:

Behavioral Assessment
MAIN TERM: Behavioral Assessment
DATE OF ENTRY: 1982
SCOPE NOTE:
Identification and measurement of response units and their controlling environmental and organismic variables for the purposes of understanding and altering human behavior.
Has one narrower term:

Functional Analysis
MAIN TERM: Functional Analysis
DATE OF ENTRY: 2001
SCOPE NOTE:
A part of behavioral assessment concerned with the experimental manipulation of environmental events that are maintaining or suppressing a target behavior.
No narrower terms.

Subject Heading: Cognitive Therapy
Scope Note for: *Cognitive Therapy*
MAIN TERM: Cognitive Therapy
DATE OF ENTRY: 1982
SCOPE NOTE:
Directive therapy based on the belief that the way one perceives and structures the world determines one's feelings and behavior. Treatment aims at altering cognitive schema and hence permitting the patient to change his/her distorted self-view and world view.
No narrower terms.

Subject Heading: Cognitive Behavior Therapy
Scope Note for: *Cognitive Behavior Therapy*

MAIN TERM: Cognitive Behavior Therapy
DATE OF ENTRY: 2003
SCOPE NOTE:
An integrated approach to psychotherapy that combines the techniques of cognitive and behavior therapy.
HISTORICAL NOTE
Use COGNITIVE THERAPY to access references from 1982 to June 2003.
No narrower terms.

Subject Heading: Behavior Therapy
Scope Note for: *Behavior Therapy*
MAIN TERM: Behavior Therapy
DATE OF ENTRY: 1967
SCOPE NOTE:
Therapeutic approach that may employ classical conditioning, operant learning techniques, or other behavioral techniques, in an attempt to eliminate or modify problem behavior, addressing itself primarily to the client's overt behavior, as opposed to thoughts, feelings, or other cognitive processes.
Has six narrower terms:

Aversion Therapy
Scope Note for: *Aversion Therapy*
MAIN TERM: Aversion Therapy
DATE OF ENTRY: 1973
SCOPE NOTE:
Form of behavior therapy designed to eliminate undesirable behavior patterns through learned associations with unpleasant or painful stimuli. Also known as aversive conditioning therapy.
Has one narrower term:

Covert Sensitization
MAIN TERM: Covert Sensitization
DATE OF ENTRY: 1988
SCOPE NOTE:
Form of aversion conditioning in which noxious mental images, thoughts, or feelings are associated with undesirable behavior by verbal cues. Frequently used in therapeutic settings.
No narrower terms.

Exposure Therapy
Scope Note for: *Exposure Therapy*
MAIN TERM: Exposure Therapy
DATE OF ENTRY: 1997
Has two narrower terms:

Implosive Therapy
MAIN TERM: Implosive Therapy
DATE OF ENTRY: 1973

SCOPE NOTE:
Behavioral therapy involving flooding the client with anxiety through intense or prolonged real-life or imagined exposure to feared objects or situations, thereby demonstrating that they cause no harm. The aim is gradual extinction of anxiety or phobic responses.
No narrower terms.

Systematic Desensitization Therapy
MAIN TERM: Systematic Desensitization Therapy
DATE OF ENTRY: 1973
No narrower terms.

Implosive Therapy
See above.

Reciprocal Inhibition Therapy
Scope Note for: *Reciprocal Inhibition Therapy*
MAIN TERM: Reciprocal Inhibition Therapy
DATE OF ENTRY: 1973
SCOPE NOTE:
Form of behavior therapy which seeks to evoke one response in order to bring about a suppression or decrease in the strength of a simultaneous response. Used to weaken unadaptive habits, particularly anxiety responses.
No narrower terms.

Response Cost
Scope Note for: *'Response Cost'*
MAIN TERM: Response Cost
DATE OF ENTRY: 1997
SCOPE NOTE:
Punishment procedure in which positive reinforcer is lost when a specified behavior is performed.
No narrower terms.

Systematic Desensitization Therapy
See above.

Appendix IIa- Search history from initial PsycINFO search

#	Searches	Results
1	group psychotherapy/	14532
2	group counseling/	4463
3	"group analy$".mp.	2132
4	("group dynamic" adj5 therapy).mp. [mp=title, abstract, heading word, table of contents, key concepts]	18
5	"analy$ group$".mp. [mp=title, abstract, heading word, table of contents, key concepts]	834
6	exp group dynamics/	23058
7	psychoanaly$ group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	340
8	psychodynamic$ group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	230
9	(group dyanmic adj5 psychothera$).mp. [mp=title, abstract, heading word, table of contents, key concepts]	0
10	("group dynamic" adj5 psychotherap$).mp. [mp=title, abstract, heading word, table of contents, key concepts]	12
11	analysis/ or exp behavior analysis/	9660
12	cognitive behavior therapy/	4191
13	cognitive therapy/	10616
14	exp behavior therapy/	15267
15	or/11-14	37518
16	group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	446359
17	15 and 16	8239
18	or/1-10	41153
19	17 or 18	47570
20	limit 19 to (english language and yr="1970 - 2008")	40522
21	analytic group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	411
22	group analy$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	2132
23	dynamic group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	134
24	group dynamic therap$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	9
25	group dynamic psychotherap$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	5
26	psychoanaly$ group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	340
27	group psychoanaly$.mp. [mp=title, abstract, heading word, table of contents, key concepts]	166
28	or/21-27	2966
29	**limit 28 to (english language and yr="1970 - 2008")**	**2390**

| Combine selections with: And Or

Appendix IIb- Search history from final PsycINFO search

1. "group analy$".mp. [mp=title, abstract, heading word, table of contents, key concepts]

2. group dynamic adj5 therapy).mp. [mp=title, abstract, heading word, table of contents, key concepts]
3. psychoanaly$ group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

4. psychodynamic$ group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

5. (group dynamic adj5 psychotherap$).mp. [mp=title, abstract, heading word, table of contents, key concepts]

6. analytic group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

7. dynamic group$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

8. group psychoanaly$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

9. or/1-8

10. group therap$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

11. group treatment$.mp. [mp=title, abstract, heading word, table of contents, key concepts]

12. group psychotherap$.m_titl

13. group psychotherap$.ab.

14. Psychotherapy, Group/

15. "group session*".mp.

16. "group focus*".mp.

17. ("group based" or "group basis").mp. [mp=title, abstract, heading word, table of contents, key concepts]

18. or/10-17

19. (dynamic* or analytic* or psychoanaly*).mp. [mp=title, abstract, heading word, table of contents, key concepts]

20. 18 and 19

21. 9 or 20

22. limit 21 to (english language and yr="1970 - 2008")

23. randomized controlled trial.pt.

24. controlled clinical trial.pt.

25. randomized controlled trials/

26. random allocation/

27. double blind method/

28. single blind method/

29. or/23-28

30. clinical trial.pt.

31. exp clinical trial/

32. (clin$ adj25 trial$).tw.

33. ((singl$ or doubl$ or trebl$ or tripl$) adj25 (blind$ or mask$)).tw.

34. placebos/

35. placebo$.tw.

36. random$.tw.

37. research design/

38. or/30-37

39. "comparative study"/

40. follow-up studies/

41. prospective studies/

42. (control$ or prospectiv$ or volunteer$).tw.

43. evaluation studies/

44. exp experimental design/ or between groups design/

45. treatment effectiveness evaluation/ or evaluation/ or clinical audits/ or clinical trials/ or mental health program evaluation/ or psychotherapeutic outcomes/ or treatment outcomes/

46. or/39-45

47. 29 or 38 or 46

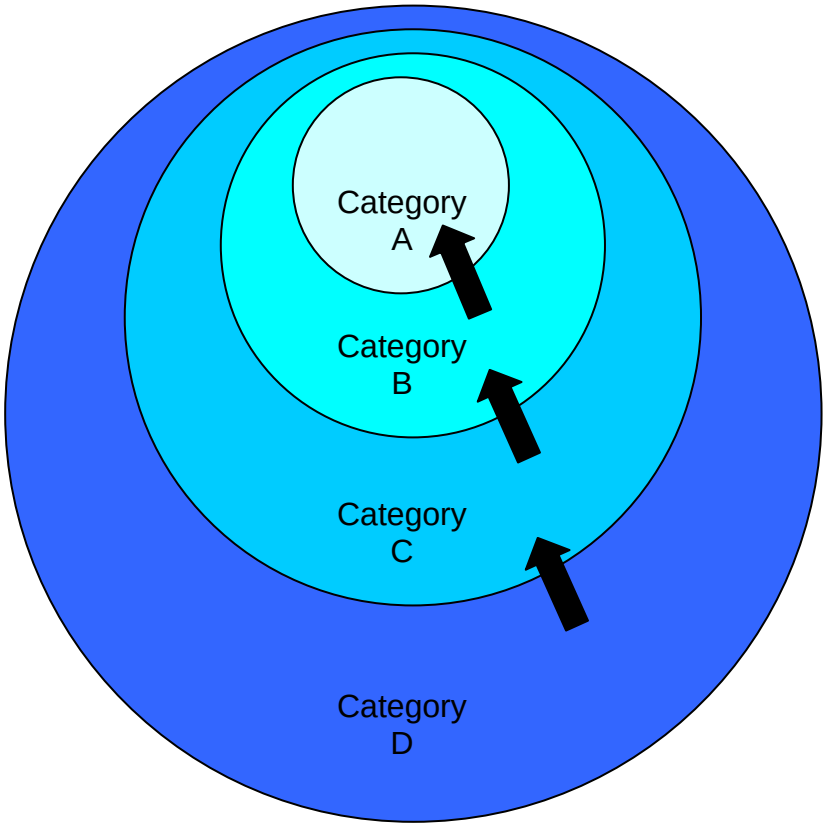
48. 22 and 47

Note: $ is a truncation device and therefore 'psycho$' picks up variants such as psychology, psychological, psychotherapy etc. It is therefore a strategy for maximising sensitivity (capturing more hits).
adj5 is a proximity operator looking for the specific words within 5 words of each other. It therefore picks up variant phrases for different therapies. It is a strategy for increasing specificity (i.e. capturing more relevant references in that it is more specific than simply using AND which looks for any combination of the words anywhere within the abstract).

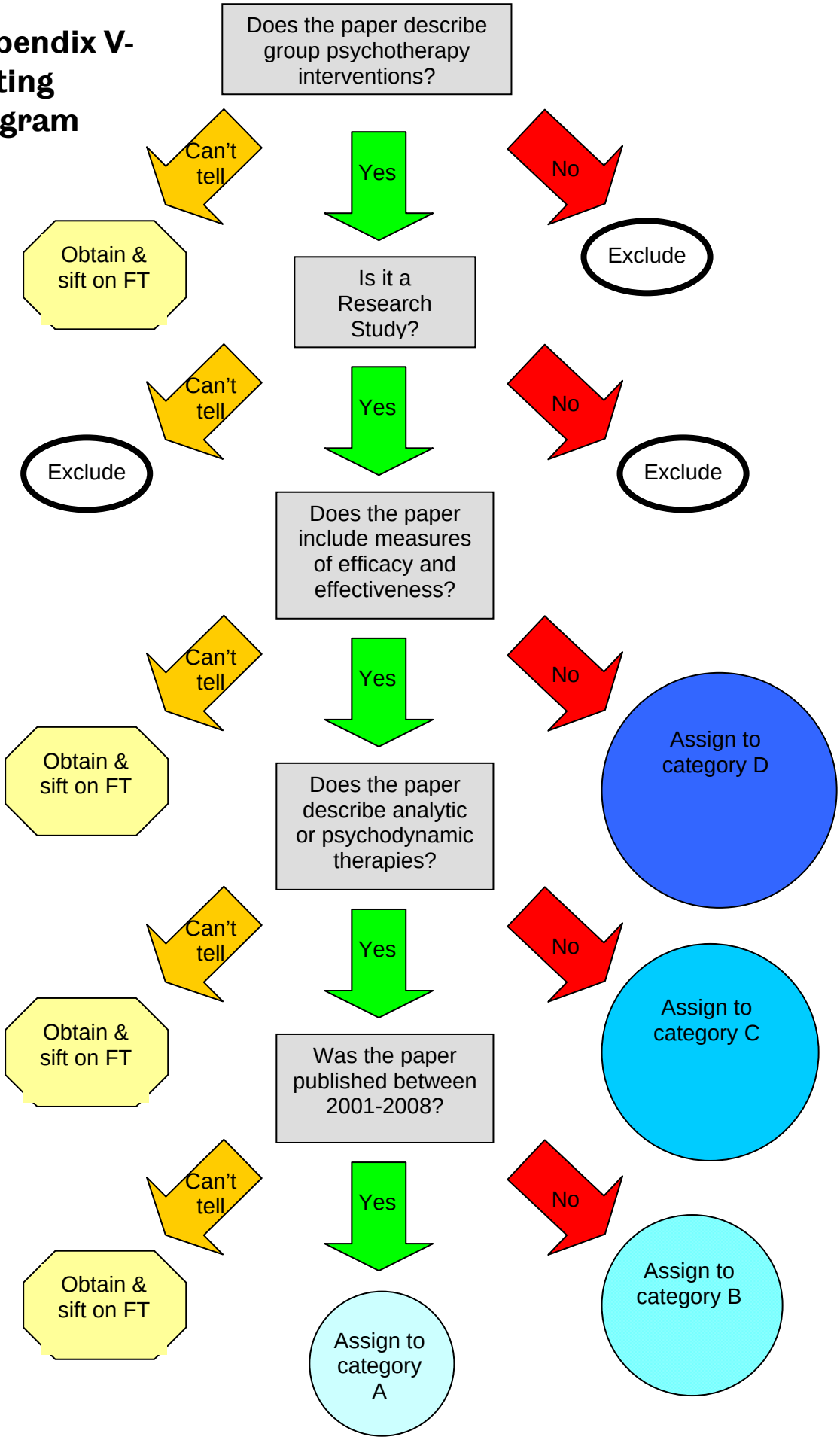
Appendix III- Final sift criteria

Sift question		Decisions		
1.	Does the paper describe group psychotherapy interventions?	Yes- Go to 2	Can't tell- Obtain & Sift on FT	No- Exclude
2.	Is it a Research Study?	Yes- Go to 3	Can't tell- Exclude	No- Exclude
3.	Does the paper include measures of efficacy or effectiveness?	Yes- Go to 4	Can't tell- Obtain & Sift on FT	No- Assign to category D
4.	Does the paper describe analytic or psychodynamic therapies?	Yes- Go to 5	Can't tell- Obtain & Sift on FT	No- Assign to category C
5.	Was the paper published between 2001-2008?	Yes- Assign to Category A	Can't tell- Obtain & Sift on FT	No- Assign to category B

Appendix IV- 'Onion Layers' schema



Appendix V- Sifting diagram



Appendix VIa- Mini Data-Extraction Form

Field	Options	Tick
Study Title/First Author/Year		
Study Design	Systematic Review	
	Comparative Study	
	RCT	
	Before and After	
	'Wait-list' control	
	Non-comparative study	
	Qualitative Study	
	Other design please specify:	
Treatment Orientation	Analytic	
	Dynamic/Psychodynamic	
Mean age of participants (or range)	Intervention Group:	
	Control Group:	
Gender	Male/ Female /Mixed/Can't Tell	
Group Profile	Homogenous/Heterogeneous/Can't Tell	
Disease/s or Condition/s in group		
Group Size		
Outcome measure	Generic/ Disease Specific/Can't Tell	
	Describe:	
Therapy duration	Time limited/ Ongoing/Can't Tell	
Please check reference list for potentially relevant-sounding titles and give first author and (year and/or reference number) below for checking against the RefMan database.		
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Appendix VIb- Full Data-Extraction Form

Paper reference		
Study setting	Health care setting (inpatient/outpatient), country	
Participants	Sample size, total number recruited	
	Was there a power calculation (priori sample calculation)?	
	Number receiving therapy (attending at least one group therapy session) (if controlled study, number in each group)	
	Number of participants in analysis (if controlled study, number in each group)	
	% of patients recruited that were included in analysis	
	Are the characteristics of study drop-outs /lost to follow-up described? If so, give details	
	Inclusion/exclusion criteria (disease/condition, age, sex, prior therapy, other)	
	Baseline characteristics (e.g. %s with disease/condition, prior therapy)	
	Length of study follow-up (recruitment to last data collection)	
Intervention (if comparative study then data for intervention	Therapists (number, training)	

group only)	Treatment orientation details	
	Duration of therapy (include no. of sessions, length of therapy)	
	Concurrent treatment, if any (e.g. medication)	
	Attendance rates or drop-out rates	
Results	Were the outcome assessors blinded to the treatment allocations? (If used only patient self-report measures, then NA)	
	Primary outcome measure (description, e.g. BDI, HADS)	
	Was the primary outcome measure tool validated?	Yes / part of validated scale used / no / don't know
	Results of primary outcome measure	
	Secondary outcomes (decription)	
	Were secondary outcome measures tools validated?	
	Results of secondary outcome measures	
For studies with control groups (RCT, matched case-control, patient preference)		

Control therapy	Therapists (number, training)	
	Treatment orientation details	
	Duration of therapy- describe	
	Concurrent treatment, if any (e.g. medication)	
	Attendance rates or drop-out rates	
Participants	Were baseline characteristics similar between groups? If not, how did they differ?	
	Have potential confounders been described or dealt with in analysis?	
For RCTs	Was the method used to assign participants to the treatment groups really random?	Yes/No/Not reported
	What method of assignment was used?	
	Was the allocation of treatment concealed?	Yes/No/Not reported
	What method was used to conceal treatment allocation?	
	Were participants analysed according to allocated treatment (in accordance with intention to treat principle)?	

Appendix VII- Qualitative Data Extraction Form

Ref. ID:	**Authors:** Macdonald J., Sinason V. & Hollins S.
	Year: 2003
Title: An interview study of people with learning disabilities' experience of, and satisfaction with, group analytic therapy. Psychol Psychother Theory Res Pract,. 76: 433–53.	
Data Extracted by: Andrew Booth	**Date: 07/03/09**
Language: English	**Country of Research Setting: UK**
Funding:	
Research Setting: Haleacre Unit, Amersham Hospital, UK	
Sample: **Number**: 2 psychodynamic groups provided by an inner city service: 9 learning-disabled clients, four from a sexual offenders' group and five from a women's group, **Ages:** Mean age of participants = 34 **Gender:** 4 males (sex offenders) 5 females (women's group) **Ethnicity: NA** **Educational Level / Professional experience: NA** **Other characteristics:**	
Aims of study / Research Question: To provide qualitative exploration of clients with LD's experience of, and satisfaction with, two psychodynamic groups being run in the service. Specific aims of the study were: (1) to elicit clients' views on their experience of group analytic therapy; (2) to identify both positive and negative aspects of clients' experience of group analytic therapy.	
Theoretical Framework / Concept / Interventions: Orientation of researchers is `transcendental realist' position (Miles and Huberman, 1994) i.e. that our knowledge of reality is inevitably coloured by how we describe it, but they propose a broadly empirical approach in which some understandings of the social world can be demonstrated to be more accurate representations of social `reality' than others. As they put it, `social phenomena exist not only in the mind but also in the objective world and . . . there are some lawful and reasonably stable relationships to be found among them' (Miles & Huberman, 1994, p. 4). Orientation of group therapy is psychodynamic, but some ambiguity because also named 'group analytic' at points; no evidence of group analysis methods being used. **Comments:**	
Methods: **Data Collection:** Study was limited to client interviews. A semi-structured interview schedule was used to gather data (see Appendix A). Focused on person's general experience of group therapy (positive and negative aspects of experience - to facilitate and legitimize the interviewees' expression of both positive *and* negative feedback. (E.g. in the structuring of the interview, it is assumed that it would be perfectly normal and appropriate for the interviewee to express more critical	

feedback or reservations about the groups.) Specific questions (based on Yalom's (1985) taxonomy of therapeutic factors in group psychotherapy - selected because widely accepted and not exclusively relevant to any specific school of group psychotherapy), included at end of the interview - designed to prompt interviewees to think about factors believed important in effectiveness of group psychotherapy with non-learning disabled clients.
Schedule starts with general open-ended enquiries about interviewee's experience of group. Moves to more concrete questions to trigger `yes/no' answers. Balance between open-ended and concrete questions designed to enable inarticulate interviewees to provide as much of their feedback as possible, by piecing together each interviewee's responses by `gradual elimination of alternatives' and `progressive adaptation of questions' while also attempting to be sensitive to `those unspoken signals by which an informant indicates that enough is enough' (p. 63). Aims to maximize interviewer's understanding of interviewee's perspective by using `yes/no' questions as way of `following' the interviewee rather than `leading' them.

Overall structure of interview same for all participants. Precise wording of follow up questions not always adhered to rigidly to preserve rapport with interviewee (e.g. where interviewee had problems understanding more complex questions). Nine interviews transcribed in their entirety.

Analysis: Analysed both groups together because preliminary inspection suggested that themes relating to experience of group analytic therapy were similar for both groups. Aim was to provide broad examination of experience of group analytic approach being developed within service. However, where different themes emerged in the two groups, noted in results.

Interviews analysed using Interpretive Phenomenological Analysis (IPA) (Smith, 1995). Primary aim in IPA is to understand experience and perspective of interviewees. IPA designed for analysis of small numbers of interviews. Researcher reads through interview transcripts several times, initially jotting down notes of what seems to be significant or interesting in the margin. Researcher then attempts to identify key words which capture essential qualities of what he or she finds in the text, the `emerging themes'. Researcher then attempts to identify how emerging themes relate to each other (e.g. whether superordinate theme encompasses several subordinate themes). Goal is to produce master list of all themes, ordered coherently.

Other:

Main Findings:
Three superordinate positive themes with 17 subthemes and four superordinate negative themes with 11 subthemes emerged. Table 1 summarizes themes and number of participants making comments coded with each theme. Illustrations of each theme provided below.

Examples of three positive superordinate themes.

Positive theme 1: Non-specific positive comments
Non-specific positive comments about the therapists
Do you find it useful when you see [name of therapist]]? Yeah. [Yeah. How's it useful to you?] I like her. (P3, 491).
[name of therapist]'s alright. I like that lady, I do like her. I'm not saying anything about her. I do like her. She's a nice lady. She's gorgeous. She's nice. I like her [inaudible]

(P4, 41).

Non-specific positive comments about the group
[Is there any way you'd like the group to be different?] No. It's alright how it is. (P1, 65).
I like everything about the group. I like the people. I like [therapist] I like coming in to [hospital]. (P5, 70).

Positive theme 2: Communication
Psychotherapy created opportunity for participants to express themselves in supportive environment.

Talking characterizes therapy
[And what does [therapist] do?] Just like talk to us and like she stares at us and like she like smiling at us. [. . . What do you do when you're in the group?] I talk too much! [Laughs]. [. . . And what does everybody do . . . ?] Just talk, you know, it goes round in circles. (P2, 71, 79, 113).
[Do you think that the group has helped you with anything that you have found difficult?] Yeah, I want to come here [inaudible] to talk about it. (P4, 54).
[What actually happens when you're in there?] Oh we just talk about things, you know. [Um, what do [therapists] do when you're in the group?] We just talk about it and they just talk about it with us. [What do you do when you're in the group?] Oh, I listen to what they have to say. [What do other group members do when you're in the group?] They talk about things and listen to them. (P9, 3).

Feeling able to talk
[How was it helpful for you?] It was very helpful. [Yeah. Do you know why?] It makes you come out a bit more. [Yeah, express yourself ?] Mm. (P1, 41).
[What do other people in the group do?] Listen. [They listen as well. Who does the talking?] [Name of group member] and me. (P3, 32).
You can talk to them. Almost anything. (P6, 153).

Talking about difficult experiences
[Um. Could you tell me about the last time you were in the group. About the last group you had?] We were talking about bullying. [Right. What were they saying about it?] [inaudible]. And I talked about it. [You talked about bullying?] Mm. [About having been bullied?] Yeah. Yeah a bit. [Um. And was that helpful for you?] Yeah. (P1, 31).
Basically, we just sat in the room and listened to each other's problems like. And they heard my problems, what problem I've got [inaudible]. And, that's it really. (P5, 28).
I find it helpful that you can go somewhere and talk to someone about problems. Because the people out there who have got loads of problems and they've got nowhere to go and no-one to talk to. I find the group very helpful. I've got someone to go and say I've got this problem, that problem. (P7, 34).

Ability to talk contrasting with other situations
[And is that something that's easier to talk about in the group?] It's alright in the group but not with social workers. [You can't talk to social workers about it?] No. [And why's that?] Because they laugh at yer. Going round to them two, they're alright. I get on with them so much. (P2, 49). [P2 goes on to describe a number of other experiences which she does not feel she can share elsewhere].
[You haven't been able to talk to anybody?] No. I haven't been able to talk to anybody about them. If I try to talk to someone, they don't want to know. So I think this group

is more better for me because I can tell people how I feel. If I tell anybody else how I feel they don't care. [Inaudible]. . . . [So, if you told someone in the group, how's that?] Because they know. They know how I feel. (P7, 25).

Being encouraged to talk
[Yeah. And is there anything else that they do that you find helpful?] They ask you questions. [And you find that helpful?] Yeah. [What kind of questions?] It could be how I am. [Yeah]. Asking about my [close relative] [laughs]. Cos she's moving out soon. (P1, 79).
[Therapist] does speak a little bit, but then she goes quiet after and it's our turn to talk to her. (P2, 20).

Being listened to and being understood
[Um I want to concentrate now on the positive things in the group. So, what do you think is most helpful about the group?] Oh, people just listening to my problems really, I suppose. (P5, 51).
[P has described difficulties in her family]. [Yeah, and somebody can understand it?] Yeah, and somebody can understand what I went through and what I'm going through now. (P7, 73).

Helps resist urge to re-offend (men's group)
[How do you think that talking about it helps?] Yeah, talking about it helps. Talking about it in the group helps. Yeah. Yeah it helps, it helps me very much. [Why does it help do you think?] Well, if I don't talk about it, right. It's going to right, what's the word, I'm probably going to do something stupid, like go up to a kid and touch them where I shouldn't touch them. . . . If I don't talk about it I probably will do it, but I know, touch wood, I know touch wood I wouldn't do it. (P5, 3).

Positive theme 3: Inclusion
Participants seemed to feel included and valued in the group.

Group is inclusive
[Have you learned things from the other group members that you have found useful?] Yeah. Cos they're like friends. (P2, 282).
I know they want me in there because I talk too much. [They want you in there?] Yeah, because if I go to the toilet for a fag they start coming out, you know what I mean. (P8, 73).
Get on with [group members] and uh, I would love to er a relationship with [group member], you know. (P9, 177).

Therapists valuing
[Are there any other things that you like about the group?] Mm. [Inaudible]. They don't leave anybody out. (P1, 95).
Yeah. I like [therapist] I do like [therapist], she's alright. She always asks for me. I like talking to her [inaudible] I get upset I say I want to go home and see my family. (P4, 130).
If they [therapists] were to hear my story, I don't know what they'd say. [Do you think they'd say [inaudible]?] [Therapist] would say `Oh my God, you've been through a lot!' `How do you cope?'. (P7, 112).

Humour in way of speaking about therapists
[Therapists] are very nice people, very nice ladies. I like [therapists] very much.

Sometimes I get mixed up, I call [name of one therapist name of other therapist] and [name of other therapist name of first therapist] sometimes. I mix them up. Muck about.I call [one therapist other therapist] and [other therapist, first therapist], and they laugh about it. [Do you do it deliberately?] I do it deliberately, yeah. (P5, 18).

[Is there anything else they do which you find helpful?] Well if you tell them something really bad they put on a soft voice [laughs] you know like `Ooh, is it? That's terrible.' It's quite funny really that. Um, yeah, because they know, I don't know but I think they know how we're feeling. They just know how we're feeling about ourselves.

Inclusion contrasting with exclusion elsewhere
Sometimes my friends listen, friends that I know, that know about my problem, about me and children. But some people I don't tell because they might take it the wrong way and might beat me up, or, they might call me a pervert or, whatever, you know what I mean? (P5, 24).
[How is [group] different [from family]?] Because I make friends, and I can't seem to keep them. I can't seem to hang on to them. And they don't give. I seem to give, give, give all the time, and they don't return nothing. And I feel. I can't put my finger on it but it's a good vibe, you know what I mean, in the group.

Separating from mothers (women's group)
I said I want to leave home, and my mum won't let me go, because I'm being a child for, I'm [age] now, I'll be [age] next. So, I just want to get out of that house because I want to get away from my mum. (P2, 118).
I wouldn't talk before, I wouldn't do anything, because my mum would always put me down, so it's all come from there. (P6, 36).

Similar others in the group (women's group)
But some of them are shy. [But some of them are shy too?] Yeah. [Is that nice to know?] Yeah. I think yeah. [That other people can be shy too?] Mmhm. (P1, 24).
Yeah. When I listen to [name of group member] and the other new girl, I can't remember her name, they've got a similar kind of family to mine, and their mothers are very similar to mine. It reminds me as they talk, tell her story, I can see myself with my mum, you know, I can picture it. So similar. It does make me want to cry. I get tears in my eyes. I try not to show it. (P6, 100).

Ability to help others
I felt sorry for her so I gave her some sweets . . . , and um, I had a sort out and I gave her a bikini, cos I didn't want it no more, and she cheered up. So I'm glad I did that. [How did it make you feel to help?] Good. (P6, 125).

Therapists are helpful
Well, they give us advice, you know. [Anything else?] Um, uh, I'm at [inaudible] at the moment. Um, I think [inaudible] I'm unhappy at the moment, they'll want to see if I can leave [address of home], and I want to see if I can go near [place], see if I can go closer [place] and go there. . . . They're writing a letter at the moment, but they haven't finished off. We'll finish it off this week. (P9, 12).

Negative theme 1: General
Participants' comments generally positive. Some negative comments e.g. denying that any change had taken place, or that particular feature of group had had a positive impact.

[Do you think you've changed in any way since you've started seeing [therapist]?] No. (P3, 53).
[P says he wants to get a job and a girlfriend and a normal family life] [Do you think you've made any progress in that direction since starting the group?] Not really, no. (P5, 46).
[Do you think differently about other people since you started?] No. (P7, 20).

Negative theme 2: Avoidance

Most negative themes seem to relate to participants' desire to avoid emotional pain, increased by participation in the group.

Talking is distressing

[And do you think when difficult things have happened, like your [relative] leaving, it's sort of helped talking about it in the group?] Yeah, but it's a bit scary. (P2, 219).
[It sounds like you don't find it helpful talking about that in the group?] I don't. Everybody knows about it in there. And that winds me up. (P4, 20).
[How do you feel before the group?] Alright. [Your face is . . . A bit anxious?] Yeah, a bit anxious sometimes, like. Especially, like, I like to have a fag before I go in there, because it gives me like [?] think what to say like, you know. [Inaudible]. It gives me in-, inwhatever. [Inspiration?] Inspiration, yeah. (P5, 31).
I can never ever trust people. That's what I say to them. You can never trust. This person could be your favourite friend, right. And you don't know what that friend's going to say to the next person. See that's why I have so many secrets, I can't tell nobody. Because I don't know who they're going to tell on to. (P7, 98).

Other participants' distress is distressing

I don't like him just upset, I don't like that. But every time he gets upset, that make me, me wind up [inaudible]. I do that, I'll stop. (P4, 99).
[Have you learned things from other group members that you have found useful?] No. It's all depressing. Nothing's happy at the moment. [Inaudible] joyful. I want to be happy. My mum's done that, my dad's done this, [inaudible], but yeah it's alright. (P7, 123).
[You've been feeling low.] Yeah. [How's it helpful having people with similar problems in the group?] It might make things worse, I don't know, but I've got to go somewhere, and I suppose I've got to try. (P8, 200). [P8 also made comments saying that she avoided thinking about things which were associated with emotional distress].

Therapists are too confrontational

And she [therapist] keeps staring at people with her head like that. [With her head like that?] Yeah, and she keeps staring at us. [What does that make you think?] Scared. [A bit scary? When she doesn't speak then?] Yeah. She does speak a little bit, but then she goes quiet after and she goes, its our turn to talk to her. (P2, 14).
[What do [therapists] do in the group?] They do nothing. [Inaudible]. Keep on talking about children and I don't like it, I don't. (P4, 11).
[Do [therapists] do anything else that's unhelpful?] Sometimes she moans at [name] sometimes. . . . Yeah about her family. I said to her 'You shouldn't do that because you're making her upset', you know. I don't think she wants to answer any questions, which is right. [You said to her that you thought she was going to upset her?] Yeah. Cos that's rude to ask about your family really, unless the subject comes up. (P8, 161).

Negative reminders

I still feel wary of [another group member], because to me she reminds me of my

mum, the same kind of person. Yeah. (P6, 86).

Negative theme 3: Negative aspects of group members

Four subthemes relate to negative characteristics/behaviours of other group members.

Negative patient behaviours

P4 talks about the fact that another participant does not listen to him.

[Name] talks about his mum and dad. [Inaudible]. He gets home, and the police arrest him. I tell him that. I talk to him. He doesn't take any notice. Say it all the time. (P4, 5).

P6 talks about how she does not like another group member who she says `takes the rise' out of another group member: I don't know how the girls feel, but I really feel sorry for [name]. I don't mean that in a horrible way, I just want to be friends with her. I don't like it when [name] takes the rise of out [name]. I get really annoyed with [name]. Sometimes I sit there and wish that [name] wasn't there because I feel she causes trouble. Apart from that, as I say, she's alright I suppose. (P6, 124).

Others in group dissimilar

[Do you feel that other people in the group have similar or different problems?] Well, they have different problems I suppose from my problem. [Have any of them had similar problems as well?] No. (P5, 85).

[Are there any other things you don't like about the group?] . . . When I first went there I thought `Oh God, they're not like me, you know'. But then, I realized, I sort of felt sorry for some of the girls there, like [name]'s one of them, I felt sorry for her. (P6, 73).

And when you hear their problems, you think `Am I going to get problems like they are?' I don't think when they was a teenager they had much of a life. Am I going to get these problems as well? I hope I don't. [Inaudible]. (P7, 81).

Group conflict (women's group)

[What is the worst thing that has happened in the group for you?] I think when two girls was arguing in the group. They wasn't friends any more. [Right.] That was a bit difficult. They had words with each other. [. . . Inaudible]. [And how did that make you feel?] Um. I wanted them to make back up but they didn't. [Yeah. And that upset you?] A little bit. (P1, 110).

Other group members absent (women's group)

[Can you tell me about the last group last week?] We had to write letters because everybody is disappearing. Disappearing us. There's two people who's gone. There's another girl who used to be with us. [Sighs]. . . . But I can't believe we have to write letters to them. [. . .] Because like they didn't want to come back here. And there was another girl that I liked. And she was ill. And [details of another group member], cos we miss her. And like we didn't know where she was, so she should have phoned in and told us. But she didn't. [So you talked about that.. Did you talk about other things.] She should have said goodbye this girl, but she didn't. So we was annoyed. (P2, 127).

Negative theme 4: Other

Several negative comments did not fit superordinate negative themes - concrete problems associated with group, e.g. noise outside or not having tea and biscuits to comments about sleeping during group or not enjoying group.

Quality:

Following guidelines for qualitative research studies, attempt to
(1) **own perspective of interviewer** and principal investigator,
(2) **situate sample** by describing groups/context within which they operate,
(3) **ground conclusions** - providing sufficient examples for readers to check their own interpretations of interview material against authors - to enable readers to `resonate' with the research participants' perspectives, and
(4) **provide sufficiently clear/coherent account of main themes** in data.

Findings to be interpreted cautiously.

- **Subjective** - not possible to draw conclusions about efficacy of treatment.
- **Not possible to determine extent to which valuable/problematic features are generic** characteristics of treatment model or more specific features of groups and their context (e.g. particular personal qualities of group conductors).
- **Heterogeneity between women's group and male sex offenders' group not addressed.** Major themes characterize both groups. Some different categories did emerge; strong similarities between two groups' views of group psychotherapy, important differences in men's and women's responses to the groups have not emerged.
- **Findings may represent biased sample**. (Two group members who did not take part may have had more negative experiences. Other individuals who had negative experience may have dropped out, meaning their views not represented).
- **Clients' positive comments (about therapists/group) may be to please interviewer.** (Interviewer and first author enthusiastic about group analytic approach. May have influenced clients' responses. However, participants able to talk about negative aspects and to disagree with interviewer on occasions. Interpersonal influence may be comparatively mild. Relatively few negative comments about therapists. May reflect genuine warmth towards therapists or participants reluctant to criticize therapists to someone connected with service.
- Responses suggest **most participants (6/9) found some questions hard to understand.** Researcher's impression was that later questions (more complex), were hard. However, four participants said questions were easy to understand, and seven participants indicated that they liked doing the interview.
- Lack of credibility checks i.e. **no respondent validation** (although they were provided with feedback).
- **Not possible to `triangulate' qualitative accounts with external factors such as quantitative outcome data.** (Hope to do this in future)

Table 1. Superordinate and subthemes relating to client experience and satisfaction with psychodynamic group psychotherapy

	Major themes	Categories	*N* total = 9
Positive	*Non-specific positive comments*	Non-specific positive comments about the therapists	9
		Non-specific positive comments about the group	9
	Communication	Talking characterizes therapy	9
		Feeling able to talk	8
		Talking about difficult experiences	7
		Ability to talk contrasting with other situations	6
		Being encouraged to talk	6
		Being listened to and being understood	4
		Helps resist urge to offend (men)	2/4
	Inclusion	Group is inclusive	8
		Therapists valuing	8
		Humour in way of speaking about therapists	3
		Inclusion contrasting with exclusion elsewhere	5
		Separating from mothers (women)	4/5
		Similar others in the group (women)	5/5
		Ability to help others	5
		Therapists are helpful	5
Negative	*General*	General negative comments	7
	Avoidance	Talking is distressing	8
		Other participants' distress is distressing	3
		Therapists are too confrontational	4
		Negative reminders	2
	Negative aspects of group members	Negative patient behaviours	4
		Others in group dissimilar	4
		Group conflict (women)	2/5
		Other group members absent (women)	2/5
	Other	Concrete problems	5
		Other	4

Comments: "Clients are also participating in an outcome study".
Findings suggest that it may be possible for clients with LD to engage meaningfully in this treatment. User satisfaction is important aspect of treatment compliance.

Appendix VIII- Research quality rating scale for randomised controlled trials

1.	Clear objectives & outcomes specified *a priori*	0 = objectives unclear 1 = objectives clear but main outcomes not a priori 2 = objectives clear & pre-specified outcome method
2.	Sample size adequate	0 = inadequate (n<50) 1 = moderate (n= or >50) 2 = large (n=>100) or pre-specified by power calculation
3.	Trial duration	0 = too short (<3 mth) 1 = reasonable (3-6 mth) 2 = long enough for assessment of long term outcomes
4.	Power calculation stated *a priori*	0 = not reported 1 = mentioned without details 2 = details of calculations provided
5.	Integrity of randomised allocation	0 = unrandomised & likely to be biased 1 = partially or quasi-randomised some bias possible 2 = randomised allocation
6.	Concealment of allocation from those involved in patient recruitment?	0 = not done or not reported 2 = concealment of allocation code detailed
7.	Treatments clearly described	0 = main treatments not clearly described 1 = inadequate details of main or adjunctive treatments 2 = full details of main or adjunctive treatments
8.	Manualised treatment*	0 = no treatment manual 2 = treatment manual
9.	Representative subjects and source	0 = source of subjects not described 1 = source of subjects given but no info on sampling 2 = source of subjects given & representative sample (e.g. consecutive admissions or referrals or random sample)
10.	Inclusion criteria with formal diagnoses to confirm	0 = none 1 = diagnostic criteria or clear exclusion criteria 2 = diagnostic criteria and clear exclusion criteria
11.	Exclusion criteria & no of exclusions/refusals recorded	0 = criteria & number of exclusions/refusals not recorded

		1 = criteria or number of exclusions/refusals recorded 2 = criteria and number of exclusions/refusals recorded
12.	Sample demographics & clinical characteristics well described	0 = little/no information (only age/sex) 1 = basic details (e.g. marital status, ethnicity) 2 = full description (e.g. socioeconomic, clinical history)
13.	Blinding of assessor & integrity of blinding tested	0 = not done 1 = done but no test of blinding 2 = done and test of blinding
14.	Compliance with experimental procedures, e.g. attendance, adherence	0 = not assessed 1 = assessed for some experimental treatments 2 = assessed for all experimental treatments
15.	Details on side effects/unwanted effects recorded	0 = inadequate details 1 = recorded by group but details inadequate 2 = full unwanted effects profiles by group
16.	Information on withdrawals; number and reasons.	0 = no info on withdrawals by group 1 = withdrawals by group reported without reasons 2 = withdrawals and reasons by group
17.	Psychometrically sound outcome measures, described clearly	0 = main outcomes not valid or described clearly 1 = some of main outcomes not clearly described 2 = main outcomes valid or described clearly
18.	Comparability on prognostic variables, and stats used to adjust for differences	0 = no info on comparability 1 = some info on comparability & appropriate adjustment 2 = full info on comparability & appropriate adjustment
19.	Inclusion of withdrawals (intention to treat analysis)	0 = less than 95% subjects included 2 = 95% or more subjects included
20.	Presentation of results	0 = little information presented 1 = adequate information 2 = comprehensive information
21.	Appropriate statistical analysis including correction for multiple tests	0 = inadequate 1 = adequate 2 = comprehensive & appropriate
22.	Conclusions justified (i.e. accurate representation of results, critique of the limitations of the methods used, possible sources of bias considered, other relevant literature discussed).	0 = no 1 = partially 2 = yes

23.	Declaration of interests	0 = no 2 = yes
24.	Allegiance to therapy stated, declaration of interests e.g. funding.*	0 = no 2 = yes
25.	Duration of follow up after therapy*	0 = end of therapy measures only 1 = < 6 month follow up 2 = 6 month or more follow up
26.	Co-interventions avoided or equal*	0 = no 2 = yes
27.	Record concurrent drug use*	0 = not recorded 2 = recorded & reported
28.	Credibility of treatments equal & expectancy for improvement assessed?*	0 = credibility clearly unequal & expectancy not assessed 1 = credibility equal but expectancy not assessed 2 = expectancy assessed
29.	Consecutive subjects recruited*	0 = non-consecutive or not reported 2 = consecutive subjects
30.	Presented results include data for re-analysis of main outcomes (e.g. point estimates & measures of variability for each primary outcome such as SD, 95% CI)*	0 = data inadequate for re-analysis 2 = data complete for reanalysis

Quality ratings based on papers by (see references list): Moncrieff et al (2000)[79], Moher et al (1995)[78], Lackner et al (2004)[75]

Appendix IX- Treatment outcome and between-group effect sizes (RCTs)

Author, date, (outcome measure)	Group	Sample size	Mean	Standard deviation	Cohen's 'd' Effect Size unless otherwise stated (95% CI)
Blay *et al.*, 2002[4] (GHQ)	**Treatment- BGDP**	**43**	**4.61**	**3.54**	**0.48 (0.04, 0.91)**
	Control- TAU (outpatient)	**41**	**6.24**	**3.29**	
Lanza *et al.*, 2002[13] (OAS) *	**Treatment- PPG**	**4**	**2.41**	**3.90**	**0.74 † (-0.57, 2.04)**
	Control- CBG	**6**	**0.05**	**2.06**	
Lanza *et al.*, 2002[13] (Monthly STAXI- trait) *	Treatment- PPG	4	3	5.1	1.06 † (-0.29, 2.40)
	Control- CBG	6	-1.16	2.14	
Lanza *et al.*, 2002[13] (Weekly STAXI- state *	Treatment- PPG	4	2.2	1.9	-0.14 † (-1.41, 1.12)
	Control- CBG	6	2.9	5.4	
Lanza *et al.*, 2002[13] (Weekly STAXI- control) *	Treatment- PPG	4	0.25	5.4	-0.26 † (-1.53, 1.01)
	Control- CBG	6	1.64	4.4	
Lau *et al.*, 2007[14] (GAF) *	Treatment- AGP	40	59.3	15.7	-0.57 (-0.99, -0.13)
	Control- SGP	46	68.1	15.4	
Lau *et al.*, 2007[14] (GSI)	**Treatment- AGP**	**40**	**1.63**	**0.77**	**-0.88 (-1.31, -0.43,)**
	Control- SGP	**46**	**0.99**	**0.69**	
Lau *et al.*, 2007[14] (GLQ) *	Treatment- AGP	40	3.78	1.64	-0.22 (-0.65, 0.20)
	Control- SGP	46	4.12	1.4	
Lau *et al.*, 2007[14] (RCQ gen) *	Treatment- AGP	40	3.34	1.05	-0.76 (-1.19, -0.31)
	Control- SGP	46	4.13	1.03	
Lau *et al.*, 2007[14] (RCQ rel) *	Treatment- AGP	40	3.1	1.21	-0.32 (-0.74, 0.11)
	Control- SGP	46	3.47	1.12	
Piper *et al.*, 2001[25] (anxiety)	Treatment- IT	47	48.2	13.7	0.30 (-0.10, 0.70)
	Control- ST	48	52.2	12.7	
Piper *et al.*, 2001[25] (depression) BDI	Treatment- IT	47	19.3	15.4	0.26 (-0.15, 0.66)
	Control- ST	46	23	13.3	
Piper *et al.*, 2001[25] (inter-personal distress)IIP-64	Treatment- IT	47	1.32	0.67	0.40 (-0.01, 0.81)
	Control- ST	48	1.58	0.62	
Piper *et al.*, 2001[25] (self-esteem) RSES *	Treatment- IT	47	2.9	2.2	-0.38 (-0.79, 0.03)
	Control- ST	47	3.7	2	
Piper *et al.*, 2001[25] (general symptomatic distress) GSI	Treatment- IT	46	1.29	0.99	0.09 (-0.32, 0.50)
	Control- ST	47	1.37	0.75	
Piper *et al.*, 2001[25] (social (role) dysfunction) from SF-36	Treatment- IT	47	2.2	0.7	0.33 (-0.08, 0.73)
	Control- ST	48	2.4	0.5	
Piper *et al.*, 2001[25] (physical dysfunction) *	Treatment- IT	47	60.2	27.2	0.29 (-0.11, 0.70)
	Control- ST	47	52.6	24.4	
Piper *et al.*, 2001[25] (intrusion)	Treatment- IT	47	10.9	9.3	-0.13 (-0.53, 0.28)
	Control- ST	47	9.8	8.1	
Piper *et al.*, 2001[25] (pathological grief) *	**Treatment- IT**	**47**	**5.4**	**5**	**0.02 (-0.38, 0.42)**
	Control- ST	**47**	**5.3**	**5.2**	
Piper *et al.*, 2001[25] (grief- TRIG)	Treatment- IT	47	37.9	11.5	0.05 (-0.35, 0.46)
	Control- ST	47	38.5	10.9	

Author, date, (outcome measure)	Group	Sample size	Mean	Standard deviation	Cohen's 'd' Effect Size unless otherwise stated (95% CI)
Piper *et al.,* 2001[25] (avoidance)	Treatment- IT	47	10.7	8.6	-0.10 (-0.50, 0.31)
	Control- ST	47	9.9	7.5	
Piper *et al.,* 2001[25] (target severity- therapist)	Treatment- IT	51	3.8	0.6	0 (-0.39, 0.39)
	Control- ST	49	3.8	0.7	
Piper *et al.,* 2001[25] (target severity- assessor)	Treatment- IT	50	2.8	1.5	0.14 (-0.26, 0.53)
	Control- ST	48	3	1.4	
Piper *et al.,* 2001[25] (target severity- patient)	Treatment- IT	50	2.9	1.4	0.08 (-0.32, 0.47)
	Control- ST	48	3	1.2	
Piper *et al.,* 2001[25] (life dissatisfaction) *	Treatment- IT	46	3.9	1.6	0.19 (-0.22, 0.60)
	Control- ST	47	3.6	1.5	
Tasca *et al.,* 2006[30] (days binged)	**Treatment- GDIP**	**37**	**1.11**	**1.9**	**-0.36 (-0.82, 0.10)**
	Control- GCBT	**37**	**0.57**	**0.93**	
	Treatment- GDIP	**37**	**1.11**	**1.9**	**1.26 (0.75, 1.74)**
	Control- WLC	**37**	**3.58**	**2.03**	
Tasca *et al.,* 2006[30] (BMI)	Treatment- GDIP	37	39.85	9.37	0.25 (-0.21, 0.70)
	Control- GCBT	37	42.65	12.82	
	Treatment- GDIP	37	39.85	9.37	0.19 (-0.27, 0.64)
	Control- WLC	37	41.63	9.57	
Tasca *et al.,* 2006[30] (CES-D)	Treatment- GDIP	37	16.81	13.13	0.17 (-0.29, 0.62)
	Control- GCBT	37	19.03	13.62	
	Treatment- GDIP	37	16.81	13.13	0.51 (0.04, 0.97)
	Control- WLC	37	23.3	12.28	
Tasca *et al.,* 2006[30] (IIP)	Treatment- GDIP	37	1.23	0.52	0.11 (-0.35, 0.56)
	Control- GCBT	37	1.29	0.61	
	Treatment- GDIP	37	1.23	0.52	0.45 (-0.02, 0.91)
	Control- WLC	37	1.5	0.67	
Tasca *et al.,* 2006[30] (RSES) *	Treatment- GDIP	37	25.72	2.27	-0.18 (-0.64, 0.28)
	Control- GCBT	37	26.17	2.64	
	Treatment- GDIP	37	25.72	2.27	-0.28 (-0.74, 0.18)
	Control- WLC	37	26.32	1.97	
Tasca *et al.,* 2006[30] (Dietary restraint- TFEQ) *	Treatment- GDIP	37	8.75	3.94	0.06 (-0.40, 0.51)
	Control- GCBT	37	8.52	3.75	
	Treatment- GDIP	37	8.75	3.94	0.55 (0.08, 1.00)
	Control- WLC	37	6.63	3.82	
Tasca *et al.,* 2006[30] (Hunger- TFEQ)	Treatment- GDIP	37	9.4	3.02	-0.48 (-0.94, -0.02)
	Control- GCBT	37	7.73	3.82	
	Treatment- GDIP	37	9.4	3.02	0.04 (-0.41, 0.50)
	Control- WLC	37	9.54	3.37	

Note: Measures: GHQ = General Health Questionnaire; OAS = Overt Aggression Scale; STAXI = State-Trait Anger Expression Inventory; GAF = Global Assessment of Functioning; GSI = Global Severity Index; GLQ = Global Life Quality; RCQ = Registration Chart Questionnaire; TRIG = Texas Revised Inventory of Grief; BMI = Body Mass Index; CES-D = Centre for Epidemiological Studies- Depression Scale; IIP = Inventory of Interpersonal Problems; RSES = Rosenberg self-esteem scale; TFEQ = Three-Factor Eating Questionnaire.
Group descriptors: BGDP = Brief group dynamic psychotherapy; PPG = Psychodynamic Psychotherapy group; CBG = Cognitive-behaviour group; AGP = Analytic group psychotherapy; SGP = Systemic group psychotherapy; IT = Interpretive therapy; ST = Supportive therapy; GDIP = Group Psychodynamic Interpersonal Psychotherapy; GCBT = Group cognitive behavioural therapy; WLC = Wait list control
Primary outcome measure showed in bold type; * High scores are favourable; † Hedges g used due to small sample size

Appendix X- Healthcare settings used in studies

Inpatient/Outpatient	Study
Inpatient	Beutel *et al.,* 2006[3] Blay *et al.,* 2002[4] Lanza *et al.,* 2002[13] Valbak, 2001[33]
Outpatient	Britvic *et al.,* 2007[5] Britvic *et al.,* 2006[6] Ciano *et al.,* 2002[7] Cogan & Porcerelli, 2003[8] Conway *et al.,* 2003[9] Gonzalez *et al.,* 2007[11] Kipnes *et al.,* 2002[12] Lau *et al.,* 2007[14] Lorentzen *et al.,* 2002[15] Lorentzen *et al.,* 2004 'Predictors of change...'[16] Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18] Lotz & Jensen, 2006[19] Lundqvist *et al.,* 2001[20] Lundqvist *et al.,* 2006[21] Macdonald *et al.,* 2003[22] Morrison & Treliving, 2002[23] Piper *et al.,* 2001[25] Ryan *et al.,* 2005[26] Sharpe *et al.,* 2001[28] Tasca *et al.,* 2006[30] Terlidou *et al.,* 2004[31] Tschuschke & Anbeh, 2007[32] Vlastelica *et al.,* 2005[34] Wennberg *et al.,* 2004[35] Wilberg *et al.,* 2003[36] Zöger *et al.,* 2008[37]
Inpatient and outpatient	de Chavez, 2000[10] Sigman & Hassan, 2006[29]
Partial hospitalization	Bateman & Fonagy, 2001[1] Bateman & Fonagy, 2008[2]

Appendix XI- Settings of studies (country)

Country	Study
Brazil	Blay *et al.,* 2002[4]
Canada	Kipnes *et al.,* 2002[12] Piper *et al.,* 2001[25] Sigman & Hassan, 2006[29] Tasca *et al.,* 2006[30]
Croatia	Britvic *et al.,* 2007[5] Britvic *et al.,* 2006[6] Vlastelica *et al.,* 2005[34]
Denmark	Lau *et al.,* 2007[14] Lotz & Jensen, 2006[19] Valbak, 2001[33]
Germany	Beutel *et al.,* 2006[3] Tschuschke & Anbeh, 2007[32]
Greece	Terlidou *et al.,* 2004[31]
Italy	Ciano *et al.,* 2002[7]
Norway	Lorentzen *et al.,* 2002[15] Lorentzen *et al.,* 2004 'Predictors of change...'[16] Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18] Wilberg *et al.,* 2003[36]
Spain	de Chavez, 2000[10]
Sweden	Lundqvist *et al.,* 2001[20] Lundqvist *et al.,* 2006[21] Wennberg *et al.,* 2004[35] Zöger *et al.,* 2008[37]
UK	Bateman & Fonagy, 2001[1] Bateman & Fonagy, 2008[2] Conway *et al.,* 2003[9] Macdonald *et al.,* 2003[22] Morrison & Treliving, 2002[23] Ryan *et al.,* 2005[26] Sharpe *et al.,* 2001[28]
USA	Cogan & Porcerelli, 2003[8] Gonzalez *et al.,* 2007[11] Lanza *et al.,* 2002[13]

Appendix XII- No. of participants included in analysis

Author, date, (Study type)	Treatment	Control/ comparator	Control
Blay *et al.,* 2002[4] (RCT)	40	40	
Lanza *et al.,* 2002[13] (RCT)	4	6	
Lau *et al.,* 2007[14] (RCT)	40	46	
Piper *et al.,* 2001[25] (RCT)	53	54	
Tasca *et al.,* 2006[30] (RCT)	37	37	37
Bateman & Fonagy, 2001[1] (RCT-partial)	19	19	
Bateman & Fonagy, 2008[2] (RCT-partial)	22	19	
Beutel *et al.,* 2006[3] (CaCo)	144		
Ciano *et al.,* 2002[7] (CaCo)	6	5	
Gonzalez *et al.,* 2007[11] (CaCo)	8	11	
Kipnes *et al.,* 2002[12] (CaCo)	127	127	
Zöger *et al.,* 2008[37] (CaCo)	37	38	
Britvic *et al.,* 2007[5]	70		
Britvic *et al.,* 2006[6]	55		
Cogan & Porcerelli, 2003[8] (Obs)	59		
Conway *et al.,* 2003[9] (Obs)	30		
de Chavez, 2000[10] (Obs)	32		
Lorentzen *et al.,* 2002[15] (Obs)	69		
Lorentzen *et al.,* 2004 'Predictors of change…'[16] (Obs)	69		
Lorentzen *et al.,* 2004 'Therapeutic alliance…'[18] (Obs)	12		
Lotz & Jensen, 2006[19] (Obs)	139		
Lundqvist *et al.,* 2001[20] (Obs)	22		
Lundqvist *et al.,* 2006[21] (Obs)	42	10	18
Morrison & Treliving, 2002[23] (Obs)	17		
Ryan *et al.,* 2005[26] (Obs)	22	26	
Sharpe *et al.,* 2001[28] (Obs)	10		
Sigman & Hassan, 2006[29] (Obs)	10		
Terlidou *et al.,* 2004[31] (Obs)	39		
Tschuschke & Anbeh, 2007[32] (Obs)	244		
Valbak, 2001[33] (Obs)	19		
Vlastelica *et al.,* 2005[34] (Obs)	20		
Wennberg *et al.,* 2004[35] (Obs)	94		
Wilberg *et al.,* 2003[36] (Obs)	187		
Macdonald *et al.,* 2003[22] (qual)	9		
Mean	53.1	33.7	27.5
Median	37.0	26.0	n/a
SD	55.5	32.3	13.4

Appendix XIII- Age of participants

Author, date, (Study type)	Age
Blay *et al.,* 2002[4] (RCT)	20-60
Lanza *et al.,* 2002[13] (RCT)	*≥ 18 **
Lau *et al.,* 2007[14] (RCT)	*≥ 18 **
Piper *et al.,* 2001[25] (RCT)	43
Tasca *et al.,* 2006[30] (RCT)	42.75
Bateman & Fonagy, 2001[1] (RCT-partial)	
Bateman & Fonagy, 2008[2] (RCT-partial)	
Beutel *et al.,* 2006[3] (CaCo)	*≥ 50 **
Ciano *et al.,* 2002[7] (CaCo)	45.2
Gonzalez *et al.,* 2007[11] (CaCo)	*≥ 21 **
Kipnes *et al.,* 2002[12] (CaCo)	
Zöger *et al.,* 2008[37] (CaCo)	46.3
Britvic *et al.,* 2007[5]	39.5
Britvic *et al.,* 2006[6]	43.0
Cogan & Porcerelli, 2003[8] (Obs)	33.6
Conway *et al.,* 2003[9] (Obs)	35
de Chavez, 2000[10] (Obs)	34
Lorentzen *et al.,* 2002[15] (Obs)	36
Lorentzen *et al.,* 2004 'Predictors of change...'[16] (Obs)	36
Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18] (Obs)	33.5
Lotz & Jensen, 2006[19] (Obs)	36.2
Lundqvist *et al.,* 2001[20] (Obs)	32
Lundqvist *et al.,* 2006[21] (Obs)	34
Morrison & Treliving, 2002[23] (Obs)	*≥ 18 **
Ryan *et al.,* 2005[26] (Obs)	21-46 *
Sharpe *et al.,* 2001[28] (Obs)	21-55 *
Sigman & Hassan, 2006[29] (Obs)	
Terlidou *et al.,* 2004[31] (Obs)	
Tschuschke & Anbeh, 2007[32] (Obs)	18-69 *
Valbak, 2001[33] (Obs)	23.1
Vlastelica *et al.,* 2005[34] (Obs)	31.2
Wennberg *et al.,* 2004[35] (Obs)	39
Wilberg *et al.,* 2003[36] (Obs)	34
Macdonald *et al.,* 2003[22] (Obs)	34
Mean	36.6
Median	35.5
SD	5.5

* Not included for calculation of Mean and Standard deviation

Appendix XIV- Presenting problem or diagnosis

Condition	Study
Personality Disorder	Bateman & Fonagy, 2001[1] Bateman & Fonagy, 2008[2] Wilberg *et al.,* 2003[36]
Post traumatic stress disorder	Britvic *et al.,* 2007[5] Britvic *et al.,* 2006[6]
Work-related conflicts	Beutel *et al.,* 2006[3]
Eating disorder	Ciano *et al.,* 2002[7] Tasca *et al.,* 2006[30] Valbak, 2001[33]
Abusive relationships	Cogan & Porcerelli, 2003[8] Lanza *et al.,* 2002[13]
Schizophrenia	de Chavez, 2000[10] Sigman & Hassan, 2006[29]
Bipolar disorder	Gonzalez *et al.,* 2007[11]
Complicated grief	Kipnes *et al.,* 2002[12] Piper *et al.,* 2001[25]
Childhood sexual abuse	Lau *et al.,* 2007[14] Lundqvist *et al.,* 2001[20] Lundqvist *et al.,* 2006[21] Morrison & Treliving, 2002[23] Ryan *et al.,* 2005[26] Sharpe *et al.,* 2001[28]
Learning disability	Macdonald *et al.,* 2003[22]
Tinnitus	Zöger *et al.,* 2008[37]
Homogeneous	Blay *et al.,* 2002[4] Conway *et al.,* 2003[9] Lorentzen *et al.,* 2002[15] Lorentzen *et al.,* 2004 'Predictors of change...'[16] Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18] Lotz & Jensen, 2006[19] Macdonald *et al.,* 2003[22] Terlidou *et al.,* 2004[31] Tschuschke & Anbeh, 2007[32] Vlastelica *et al.,* 2005[34] Wennberg *et al.,* 2004[35]

Appendix XV- Orientation of group treatment

Author, date, (Study type)	Treatment orientation
Blay *et al.,* 2002[4] (RCT)	Brief gp PdP (Sifneos)
Lanza *et al.,* 2002[13] (RCT)	Gp PdP developed by PI
Lau *et al.,* 2007[14] (RCT)	Modified GA + 1hr meeting without therapist
Piper *et al.,* 2001[25] (RCT)	Interpretive therapy with psychodynamic orientation
Tasca *et al.,* 2006[30] (RCT)	Gp PdP (interpersonal therapy)
Bateman & Fonagy, 2001[1] (RCT-partial)	Ind & gp PaP
Bateman & Fonagy, 2008[2] (RCT-partial)	Outpatient mentalizing gp psychotherapy including expressive therapy
Beutel *et al.,* 2006[3] (CaCo)	PdP- focal gp work
Ciano *et al.,* 2002[7] (CaCo)	Gp PaP
Gonzalez *et al.,* 2007[11] (CaCo)	Psycho-education followed by gp PdP
Kipnes *et al.,* 2002[12] (CaCo)	PdP
Zöger *et al.,* 2008[37](CaCo)	PdP
Britvic *et al.,* 2007[5] (Obs)	Sociotherapeutic, psychoeducative and dynamic group approach (trauma-focused)
Britvic *et al.,* 2006[6] (Obs)	PdP
Cogan & Porcerelli, 2003[8] (Obs)	Gp PaP
Conway *et al.,* 2003[9] (Obs)	GA
de Chavez, 2000[10] (Obs)	Group PdP
Lorentzen *et al.,* 2002[15] (Obs)	GA
Lorentzen *et al.,* 2004 'Predictors of change…'[16](Obs)	GA
Lorentzen *et al.,* 2004 'Therapeutic alliance…'[18] (Obs)	GA
Lotz & Jensen, 2006[19] (Obs)	PdP
Lundqvist *et al.,* 2001[20] (Obs)	PdP
Lundqvist *et al.,* 2006[21] (Obs)	PdP
Morrison & Treliving, 2002[23] (Obs)	Group PdP
Ryan *et al.,* 2005[26] (Obs)	Focal, integrative psychotherapy
Sharpe *et al.,* 2001[28] (Obs)	GA
Sigman & Hassan, 2006[29] (Obs)	IPT
Terlidou *et al.,* 2004[31] (Obs)	GA
Tschuschke & Anbeh, 2007[32] (Obs)	Gp PaP + GA
Valbak, 2001[33] (Obs)	GA
Vlastelica *et al.,* 2005[34] (Obs)	GA
Wennberg *et al.,* 2004[35] (Obs)	Group PdP
Wilberg *et al.,* 2003[36] (Obs)	Group PdP
Macdonald *et al.,* 2003[22] (qual)	Group PdP

Appendix XVI- Length of study follow-up

Author, date, (Study type)	Study follow-up- recruitment to last data collection (mths)
Blay *et al.,* 2002[4] (RCT)	19
Lanza *et al.,* 2002[13] (RCT)	6
Lau *et al.,* 2007[14] (RCT)	12
Piper *et al.,* 2001[25] (RCT)	3
Tasca *et al.,* 2006[30] (RCT)	
Bateman & Fonagy, 2001[1] (RCT-partial)	18
Bateman & Fonagy, 2008[2] (RCT-partial)	18
Beutel *et al.,* 2006[3] (CaCo)	
Ciano *et al.,* 2002[7] (CaCo)	12
Gonzalez *et al.,* 2007[11] (CaCo)	30
Kipnes *et al.,* 2002[12] (CaCo)	6
Zöger *et al.,* 2008[37] (CaCo)	3
Britvic *et al.,* 2007[5] (Obs)	10
Britvic *et al.,* 2006[6] (Obs)	60
Cogan & Porcerelli, 2003[8] (Obs)	2
Conway *et al.,* 2003[9] (Obs)	3
de Chavez, 2000[10] (Obs)	
Lorentzen *et al.,* 2002[15] (Obs)	12
Lorentzen *et al.,* 2004 'Predictors of change…'[16] (Obs)	
Lorentzen *et al.,* 2004 'Therapeutic alliance…'[18] (Obs)	
Lotz & Jensen, 2006[19] (Obs)	
Lundqvist *et al.,* 2001[20] (Obs)	
Lundqvist *et al.,* 2006[21] (Obs)	12
Morrison & Treliving, 2002[23] (Obs)	
Ryan *et al.,* 2005[26] (Obs)	8
Sharpe *et al.,* 2001[28] (Obs)	6
Sigman & Hassan, 2006[29] (Obs)	84
Terlidou *et al.,* 2004[31] (Obs)	6
Tschuschke & Anbeh, 2007[32] (Obs)	
Valbak, 2001[33] (Obs)	1.5
Vlastelica *et al.,* 2005[34] (Obs)	48
Wennberg *et al.,* 2004[35] (Obs)	
Wilberg *et al.,* 2003[36] (Obs)	
Macdonald *et al.,* 2003[22] (qual)	
Mean	17.3
Median	11.0
SD	21.0

Appendix XVII- Duration of group treatment

Author, date, (Study type)	No. of sessions	Duration (months)	Time in group
Blay *et al.,* 2002[4] (RCT)	16	2	24
Lanza *et al.,* 2002[13] (RCT)	26	6	39
Lau *et al.,* 2007[14] (RCT)	52	12	
Piper *et al.,* 2001[25] (RCT)	12	3	
Tasca *et al.,* 2006[30] (RCT)	17		
Bateman & Fonagy, 2001[1] (RCT-partial)	17	4	
Bateman & Fonagy, 2008[2] (RCT-partial)	144	18	180
Beutel *et al.,* 2006[3] (CaCo)	8	1	12
Ciano *et al.,* 2002[7] (CaCo)	14	7	21
Gonzalez *et al.,* 2007[11] (CaCo)	86	18	102
Kipnes *et al.,* 2002[12] (CaCo)	12	3	
Zöger *et al.,* 2008[37] (CaCo)	8	3	
Britvic *et al.,* 2007[5] (Obs)	40	10	
Britvic *et al.,* 2006[6] (Obs)	260	60	
Cogan & Porcerelli, 2003[8] (Obs)	16	2	12
Conway *et al.,* 2003[9] (Obs)	12	3	
de Chavez, 2000[10] (Obs)	5		
Lorentzen *et al.,* 2002[15] (Obs)	130	30	
Lorentzen *et al.,* 2004 'Predictors of change…'[16] (Obs)			
Lorentzen *et al.,* 2004 'Therapeutic alliance…'[18] (Obs)	240	60	360
Lotz & Jensen, 2006[19] (Obs)	39		
Lundqvist *et al.,* 2001[20] (Obs)		24	
Lundqvist *et al.,* 2006[21] (Obs)	46	24	
Morrison & Treliving, 2002[23] (Obs)	80	17	
Ryan *et al.,* 2005[26] (Obs)	12	3	
Sharpe *et al.,* 2001[28] (Obs)	130	6	168
Sigman & Hassan, 2006[29] (Obs)	308		28
Terlidou *et al.,* 2004[31] (Obs)	300		448
Tschuschke & Anbeh, 2007[32] (Obs)	101		
Valbak, 2001[33] (Obs)	100		150
Vlastelica *et al.,* 2005[34] (Obs)	200		
Wennberg *et al.,* 2004[35] (Obs)	100		
Wilberg *et al.,* 2003[36] (Obs)			
Macdonald *et al.,* 2003[22] (qual)			
Mean	84.4	14.4	128.7
Standard deviation	92.0	17.0	144.2

Appendix XVIII- Outcome measures

i. All studies

Scale	Abbrevi-ation	Study
Beck Depression Inventory	BDI	Bateman & Fonagy, 2001[1], Britvic *et al.,* 2007[5], Kipnes *et al.,* 2002[12], Sharpe *et al.,* 2001[28]
Brief Symptom Inventory	BSI	Ryan *et al.,* 2005[26]
Card (Q) Sort	CS	de Chavez, 2000[10]
Chief Complaints	CC	Lorentzen *et al.,* 2004 'Predictors of change...'[16]
Child Sexual Abuse Questionnaire	CSA-Q	Lau *et al.,* 2007[14]
Clark's Personal and Social Adjustment Scale	CPSAS	Valbak, 2001[33]
Clinical Global Impression Scale for bipolar disorder	CGI-BD	Gonzalez *et al.,* 2007[11]
Clinician administered PTSD scale		Britvic *et al.,* 2006[6]
Crown-Crisp Index for neurotic symptoms	CCINS	Britvic *et al.,* 2006[6]
Differentiation-Relatedness of Self and Object Representations	D-RSOP	Cogan & Porcerelli, 2003[8]
ICD-10 Personality Questionnaire	DIP-Q	Lau *et al.,* 2007[14]
Eating Disorder Inventory	EDI	Ciano *et al.,* 2002[7]
Expectations of Therapy and Perceived Outcome	ETPO	Lau *et al.,* 2007[14]
Flashbacks		Lau *et al.,* 2007[14]
General Health Questionnaire	GHQ-12	Blay *et al.,* 2002[4]
Global Assessment of Functioning	GAF	Bateman & Fonagy, 2008[2], Gonzalez *et al.,* 2007[11], Lau *et al.,* 2007[14], Lorentzen *et al.,* 2002[15], Tschuschke & Anbeh, 2007[32], Wilberg *et al.,* 2003[36]
Global Life Quality	GLQ	Valbak, 2001[33], Lau *et al.,* 2007[14]
Global Outcome Measure	GOM	Lorentzen *et al.,* 2004 'Predictors of change...'[16]
Global Severity Index	GSI	Kipnes *et al.,* 2002[12], Lorentzen *et al.,* 2002[15], Lorentzen *et al.,* 2004 'Predictors of change...'[16], Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18], Lundqvist *et al.,* 2001[20]
Grief symptom scales		Piper *et al.,* 2001[25]
Group Climate Questionnaire	GCQ	Beutel *et al.,* 2006[3]
Group Evaluation Scale	GES	Beutel *et al.,* 2006[3]
Impact of Group Psychotherapy Change	IGPC	Lorentzen *et al.,* 2004 'Predictors of change...'[16]

Scale	Abbrevi-ation	Study
Inventory of dispositional and situational ways of coping with stress	IDSWCS	Britvic *et al.,* 2007[5]
Inventory of Interpersonal Problems	IIP	Bateman & Fonagy, 2001[1], Conway *et al.,* 2003[9], Lorentzen *et al.,* 2002[15], Lorentzen *et al.,* 2004 'Predictors of change...'[16], Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18]
Life style index + Defence Mechanism Scale	LSI-DMS	Vlastelica *et al.,* 2005[34]
Life style questionnaire	LSQ	Britvic *et al.,* 2006[6]
Minnesota Multiphase Personality Inventory	MMPI	Terlidou *et al.,* 2004[31], Vlastelica *et al.,* 2005[34]
Mississippi Scale for PTSD	MS-PTSD	Britvic *et al.,* 2007[5]
Multiple Affect Adjective Checklist	MAAC	Cogan & Porcerelli, 2003[8]
Overt Aggression Scale of Aggression	OAS	Lanza *et al.,* 2002[13]
Quality of life scale	QLS	Britvic *et al.,* 2007[5]
Registration Chart Questionnaire	RCQ	Lau *et al.,* 2007[14], Valbak, 2001[33]
SCL-R-90	SCL-R-90	Bateman & Fonagy, 2001[1], Lau *et al.,* 2007[14], Lotz & Jensen, 2006[19], Lundqvist *et al.,* 2006[21], Morrison & Treliving, 2002[23], Valbak, 2001[33], Wennberg *et al.,* 2004[35]
Social Adjustment Scale	SAS	Bateman & Fonagy, 2001[1]
Spielberger State and Trait Inventory	SSTI	Bateman & Fonagy, 2008[2]
State-Trait Anger Expression Inventory	S-TAEI	Cogan & Porcerelli, 2003[8]
Tinnitus Severity Questionnaire	TSQ	Zöger *et al.,* 2008[37]
Visual Analogue Scales	VAS	Zöger *et al.,* 2008[37]

ii. Randomised controlled trials

Outcome measure	CSA-Q	DIP-Q	Expectations of therapy and perceived outcome	Flashbacks	GAF
Article	*14*	*14*	*14*	*14*	*14*
Outcome measure	GHQ-12	GLQ	Grief symptom scales	Overt Aggression Scale of aggressive behaviour outcome measure	RCQ
Article	*4*	*14*	*24*	*13*	*14*
Outcome	SCL-90R				

measure					
Article	*14*				

Blay *et al.,* 2002[4]
Lanza *et al.,* 2002[13]
Lau *et al.,* 2007[14]
Piper *et al.,* 2001[25]

ii. Other controlled trials

Outcome measure	BDI	Clinical Global Impression Scale for bipolar disorder (CGI-BD)	Eating Disorder Inventory	GAF	Global severity Index
Article	*1, 12*	*11*	*7*	*10, 11*	*12*
Outcome measure	Group Climate questionnaire	Group Evaluation Scale	Inventory of Interpersonal Problems	SCL-90R	Social Adjustment Scale
Article	*3*	*3*	*1*	*1*	*1*
Outcome measure	Spielberger State and Trait Inventory	Tinnitus severity questionnaire	Visual Analogue Scales	Zanarini Rating Scale for DSM-IV borderline personality disorder	
Article	*1*	*36*	*36*	*10*	

Bateman & Fonagy, 2001[1]
Bateman & Fonagy, 2008[2]
Beutel *et al.,* 2006[3]
Ciano *et al.,* 2002[7]
Gonzalez *et al.,* 2007[11]
Kipnes *et al.,* 2002[12]
Zöger *et al.,* 2008[37]

iii. Observational studies

Outcome measure	Beck depression inventory	Brief Symptom Inventory	Card (Q) Sort	Chief complaints	Clark's personal and Social Adjustment Scale
Article	*5, 27*	*25*	*10*	*16*	*32*
Outcome measure	Clinician administered PTSD scale	Crown-Crisp Index for neurotic symptoms	Differentiation-Relatedness of Self and Object Representations	Global Assessment of Functioning	Global Life Quality
Article	*6*	*5, 6*	*8*	*15, 31,35*	*32*
Outcome measure	Global outcome measure	Global severity Index	Impact of group psychotherapy change	Inventory of Interpersonal Problems	Inventory of dispositional and situational

					ways of coping with stress
Article	*16*	*15, 16, 17, 18*	*16*	*9, 15, 16, 17*	*5*
Outcome measure	Life style index + Defence Mechanism Scale	Life style questionnaire	Minnesota Multiphase Personality Inventory	Mississippi Scale for PTSD	Multiple affect adjective checklist
Article	*33*	*6*	*30,33*	*5*	*8*
Outcome measure	Quality of life scale	Registration Chart Questionnaire	SCL-90-R	State-Trait Anger Expression Inventory	
Article	*5*	*32*	*18,20,22,32,34*	*6*	

Britvic *et al.,* 2007[5] (Obs)
Britvic *et al.,* 2006[6] (Obs)
Cogan & Porcerelli, 2003[8]
Conway *et al.,* 2003[9]
de Chavez, 2000[10]
Lorentzen *et al.,* 2002[15]
Lorentzen *et al.,* 2004 'Predictors of change...'[16]
Lorentzen *et al.,* 2004 'Therapeutic alliance...'[18]
Lotz & Jensen, 2006[19]
Lundqvist *et al.,* 2001[20]
Lundqvist *et al.,* 2006[21]
Morrison & Treliving, 2002[23]
Ryan *et al.,* 2005[26]
Sharpe *et al.,* 2001[28]
Sigman & Hassan, 2006[29]
Terlidou *et al.,* 2004[31]
Tschuschke & Anbeh, 2007[32]
Valbak, 2001[33]
Vlastelica *et al.,* 2005[34]
Wennberg *et al.,* 2004[35]
Wilberg *et al.,* 2003[36]