

# DRUG & ALCOHOL FINDINGS *Review*

## *analysis*

This entry is our analysis of a review or synthesis of research findings added to the Effectiveness Bank. The original review was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). [Links](#) to other documents. [Hover over](#) for notes. [Click to highlight](#) passage referred to. [Unfold extra text](#)  The Summary conveys the findings and views expressed in the review. Below is a commentary from Drug and Alcohol Findings.

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### ► [Cohesion in group therapy: a meta-analysis.](#)

**Burlingame G.M., McClendon D.T., Chongming Y.  
Psychotherapy: 2018, 55(4), p. 384–398.**

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*A review commissioned by the American Psychological Association suggests that fostering cohesion between leaders and groups and within groups is an important way to improve group therapy outcomes. Practice recommendations are offered to help group leaders make the most of this common substance use treatment modality.*

**SUMMARY** [Though not specific to clients with drug and alcohol problems, studies included in the analyses described below may have included such clients, and the principles are likely to be applicable to these disorders among others, partly because severe substance use problems generally form part of a complex of broader psychosocial problems. This review updates an [earlier version](#) also in the Effectiveness Bank.]

The featured review is one of several in a [special issue](#) of the journal *Psychotherapy* on features of the therapist-client relationship related to effectiveness, based on the work of a task force of the American Psychological Association. Its aim was to clarify concepts and review research findings on links between outcomes of group therapy and the alliance or sense of cohesion between the members of the group, and between the group and its leader(s).

In group therapy multiple relationships develop simultaneously. Members have relationships with other members, with the group as a whole, and with group leaders or therapists. Therapists develop similarly structured relationships, as well as with co-leaders if applicable. Running through the many ways of conceptualising and measuring these concepts can be discerned two fundamental domains: relationship *structure* and relationship *quality*. Studies of how groups perceived relationships have shown that the quality dimensions concern positive emotional bonds, positively working together on therapeutic tasks and to achieve therapeutic goals, and negative relationships when there is conflict in the group or a failure to empathise. In terms of structure, these quality dimensions may be found in different mixes in 'horizontal' member–member and member–group relationships, and 'vertical' member–leader relationships.

The review incorporated a [meta-analysis](#) amalgamating results from relevant studies to estimate the overall strength of the link between outcomes and cohesion, and to be able to probe for

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#### Key points

From summary and commentary

The American Psychological Association has commissioned a series of reviews on therapist-client relationships across psychotherapy. The featured review concerns group therapies.

Amalgamated findings from 55 studies were that the more solid the working relationship or bond within a group and between members ('cohesion') and therapists, the better the outcomes.

However, it is not possible to determine whether better cohesion *causes* better outcomes, and in respect of (individual as well as group) substance use therapy findings have been inconsistent.

#### Measuring cohesion

The [Group Questionnaire](#) assesses cohesion and other dimensions of the



influences on the strength of that link. The assumption was made that there is no single, true strength of the link between outcomes and cohesion which appears to vary only because of methodological differences, but that instead strength really did vary across the studies included in the analysis.

Studies were included in the analysis if they involved a group of at least three meeting for counselling, psychotherapy or personal growth, if cohesion and outcomes were measured, and if their relationship was assessed in such a way that the results could be combined with those of other studies. Searches found 55 relevant English-language studies involving 6,055 patients. About 8 in 10 of the studies assessed groups intended to have a therapeutic impact by reducing the severity of the symptoms addressed by the programme. On average programmes lasted 22 sessions. The dominant methodology assessed cohesion once during the life of a group and then correlated it with the improvement in outcomes from before to after therapy, a research design which cannot establish that differences in cohesion *caused* (as opposed to merely being associated with) differences in outcomes. [Other considerations may favour causality as an interpretation of the association, such as the plausibility of this explanation and the consistency of the findings.]

The strengths of the links between cohesion and outcomes were expressed as **effect sizes**. Effectively this metric indicates how influential cohesion was if its link to outcomes was indeed a causal one.

## Main findings

Across all these studies the strength of the link between cohesion and therapeutic progress equated to a medium-strength, statistically significant effect size of 0.56. In other words, the more solid the working relationship between the members of a group and between the group and its leader(s), the better the outcomes tended to be. Most of the individual studies also found a significant link – 29 of 55 at the conventional 'less than 1 in 20 by chance' level, and another three just short of this. In only five of the studies was the relationship either zero or negative.

However, the findings were not consistent, and the strength of the link varied more than would be expected by chance. Nevertheless, the overall conclusion from 55 studies published across a 50-year span was that there was sufficient precision to produce a robust estimate of the relationship between cohesion and outcomes.

Several features of the studies and of the groups were significantly related to the strength of the cohesion–outcomes link:

- The link was stronger when *outcomes* were assessed by measures of self-esteem or interpersonal problems/relationships, but such studies were rare. Two measures of general psychiatric and depressive symptoms respectively featured in nearly half the studies, and resulted in reliable calculations of the strength of the link, which was close to the overall average. Thus, the cohesion–outcomes link appears well supported when outcomes are defined by general psychiatric and depressive symptoms.
- Second was the *theoretical orientation* of the leader. The link was strongest for those with an interpersonal orientation to therapy, and lower but still statistically significant when they favoured cognitive-behavioural, psychodynamic, supportive, or eclectic approaches.
- The cohesion-outcomes relationship was strongest (nearly twice as strong) when *ways to enhance cohesion* were included in the programme, such as pre-group videos and interventions during sessions to build feelings of safety and group cohesion. Without these, insufficient cohesion may be generated for it to register a strong relationship with

quality of therapeutic relationship in groups. Group members rate their agreement with various statements from "not true at all" to "very true". Sample statements for the three quality subscales are:

- Positive Bond: "The group leaders were friendly and warm toward me," and "I felt that I could trust the other group members during today's session."
- Positive Work: "The group leaders and I agree on what is important to work on," and "The other group members and I agree about the things I will need to do in therapy."
- Negative Relationship: "The members were distant and withdrawn from each other," and "There was friction and anger between members."

These dimensions are crossed by three structural dimensions: member–leader, member–member, and member–group.



outcomes, though even in these studies the relationship remained statistically significant.

- Different *types of groups* differed in the aggregate strength of the cohesion–outcomes link. Of greatest interest in the current context was that the link was modest but remained statistically significant (and about the same strength) in psychoeducation, therapy, and support groups, though the latter were not studied often enough to produce reliable figures.
- The link between cohesion and outcomes was stronger in group programmes which emphasised *interaction among members* than among problem-specific groups comprising members with similar diagnoses.
- The *more sessions*, the stronger was the cohesion-outcomes relationship. The correlation among programmes lasting 20 or more sessions was 0.41, 13 to 19 sessions 0.27, and fewer than 13 sessions 0.21.
- *Group size* may also have been relevant. No significant link between cohesion and outcomes emerged across studies of large groups of more than nine members, but there was a significant relationship across studies of smaller groups.

In contrast, none of the variables characterising group members (their sex, age, or diagnoses) accounted for clinically significant differences in the strength of the cohesion–outcomes relationship. A positive (and not significantly different) association between group cohesion and client outcome was found across all three major classifications of psychological disorders. Neither did the strength of the link differ depending on whether the group took place in an inpatient versus an outpatient setting, and in both it was statistically significant.

It is important to stress that the associations recorded above do not necessarily reflect a causal effect of cohesion on later outcomes. Repeated assessment of both cohesion and outcomes throughout the course of group treatment is rare; just two studies over the past decade is insufficient to make causal inferences about the effect of cohesion on outcomes over time.

### Practice implications

The repeated, robust finding that cohesion is associated with group therapy outcomes argues that to optimise client outcomes, group therapy practitioners should seriously consider routinely assessing, monitoring, and enhancing group cohesion.

Cohesion is involved with client improvement in groups run according to cognitive-behavioural, psychodynamic, interpersonal, supportive, and eclectic orientations. Leaders of all theoretical orientations are encouraged to foster cohesion in its multiple manifestations.

Cohesion is associated with outcomes across different settings (inpatient and outpatient) and diagnostic classifications, so regardless of the setting in which they work, leaders should actively engage in interventions that foster and maintain cohesion.

In groups whose leaders emphasise interaction between members, cohesion is more strongly linked to outcomes than in groups less focused on *how* they work than what they are working on. Accordingly, group therapists are encouraged to promote interaction between group members.

When a leader implements specific interventions to support a positive group climate, outcome is more closely related to cohesion, suggesting that therapists should pay attention to the three major relationship structures (member–member, member–leader, and member–group), promoting positive emotional and working relationships and handling conflict when it arises.

**FINDINGS COMMENTARY** Across all studies the link between cohesion and therapeutic progress equated to a medium-strength, statistically significant effect size of 0.56, almost identical to that between outcomes and the corresponding concept (therapeutic alliance) found across studies of individual psychotherapy ([source article](#); forthcoming [Effectiveness Bank analysis](#)). This positions the relational qualities designated by cohesion/alliance as potentially significant in improving outcomes across psychotherapeutic formats, settings and approaches,



suggesting it truly is a 'common factor' (1 2) underlying psychosocial therapy.

It will come as no surprise to anyone who has participated in groups that they do whatever they are there to do (in this case, to reduce symptoms distressing their members) better when members cooperate and get along. It also makes sense that the more interactive the group, the more cohesion or the lack of it is developed and expressed, and the more it matters. This may partly account for the greater strength of the link when therapists run groups according to interpersonal therapy principles. It seems likely, too, that when cohesion is explicitly promoted, this is done by a means which involves interaction, perhaps also accounting for why cohesion seemed to matter more in these groups. One factor not investigated in the analysis is whether the group is closed – intended to have same members throughout – or open, with a changing membership. With an average programme lasting 22 sessions, cohesion can be expected to be critical in closed groups, but less so when the personnel frequently changes.

Plausible as all this is, there are two major caveats which raise questions about whether the recommendation that "all group leaders should actively engage in interventions that cultivate and maintain cohesion" really would improve outcomes, desirable as it may be in itself to improve group climate.

The first arises from the nature of the relevant studies across psychotherapy, whether or not concerned with substance use problems. As the authors of the featured review point out, the designs of the studies they amalgamated cannot establish causality. No matter how strong the resulting association, it might arise from a causal link, but might not. For example, group members who are doing well in their recovery may elicit more favourable reactions from therapists and fellow group members, bolstering the focal client's feelings of alliance and cohesion. In this scenario the causal chain is reversed, and alliance/cohesion is the result rather than the cause of therapeutic progress.

The reviewers say that to best establish whether there is a causal link we would need to compare studies in which the programme deliberately enhanced cohesion, with those in which it did not. Better still would be to make this distinction within the same study so that everything else can be held constant, throwing into relief the influence of cohesion uncontaminated by the many differences between studies. No such study is mentioned in the review, which relies instead on the stronger correlation between cohesion and outcomes across six studies where cohesion was explicitly promoted. But [we know](#) that in at least two of these studies the groups comprised "students participating in interpersonal experiential groups that can be considerably different from therapy groups," and there may have been salient differences between typical group therapy and the programmes in the remaining four studies. Also, a stronger correlation does not necessarily mean that systematically promoting cohesion improved outcomes overall, just that the range of outcomes was more closely tied to the degree of cohesion – and for therapists and patients, overall improvement is the more important measure.

The second caveat is specific to substance use problems, in the treatment of which client-worker relationships (across both individual and group therapy) are [only inconsistently related](#) to substance use outcomes, though more consistently associated with engagement and retention. The latter is not a trivial finding, because for some treatments (especially those based on medications) retention is critical to their success. Nevertheless, in respect of the link between therapeutic relationships and drug use, [reviewers found](#) "few firm conclusions that can be drawn from these contradictory results".

Despite these caveats, the concordance with other findings, the strength and consistency of the link between cohesion and outcomes, the plausibility of a causal element to this link, and the absence of evidence that closer cohesion is in any way negative, suggest that it would be prudent for group therapists to assume there is a causal link, and to follow the practice recommendations advanced by the reviewers to maximise cohesion. To these might be added selecting the members of a group so they coalesce around common goals and



feel safe with each other. The recommendation that cohesion be monitored raises the question of how. A formal end-of-session questionnaire is itself an intervention of a kind which may or may not have beneficial effects. Doubtless group therapists naturally sense the degree of cohesion in a group and react to their perceptions – less intrusive, but possibly also less instructive.

As they are added to the Effectiveness Bank, listed here will be analyses of the remaining reviews commissioned by the task force established by the American Psychological Association.

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*Thanks for their comments on this entry in draft to George Christo, consultant clinical psychologist at the WDP Edgware Recovery Centre in London, England. Commentators bear no responsibility for the text including the interpretations and any remaining errors.*

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