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Mutual Help Groups for Mental Health Problems:

A Review of Effectiveness Studies

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#### Abstract

This paper reviews empirical studies on whether participating in mutual help groups for people with mental health problems leads to improved psychological and social functioning. To be included, studies had to satisfy four sets of criteria, covering: (1) characteristics of the group, (2) target problems, (3) outcome measures, and (4) research design. The 12 studies meeting these criteria provide limited but promising evidence that mutual help groups benefit people with three types of problems: chronic mental illness, depression/anxiety, and bereavement. Seven studies reported positive changes for those attending support groups. The strongest findings come from two randomized trials showing that the outcomes of mutual help groups were equivalent to those of substantially more costly professional interventions. Five of the 12 studies found no differences in mental health outcomes between mutual help group members and non-members; no studies showed evidence of negative effects. There was no indication that mutual help groups were differentially effective for certain types of problems. The studies varied in terms of design quality and reporting of results. More high-quality outcome research is needed to evaluate the effectiveness of mutual help groups across the spectrum of mental health problems.

The last 20 years have seen a burgeoning of mutual help groups for people with mental health problems. Although, historically, these groups began in the addictions area (Alcoholics Anonymous being the prototypical example), there are long-established mutual help groups for a range of mental health problems. This is, of course, in addition to groups catering to a plethora of physical disorders (Davison, Pennebaker, & Dickerson, 2000). A substantial percentage of the US population has participated in a support group of some type at some point in their lives (Kessler, Mickelson, & Zhao, 1997), as has a smaller but still significant proportion of Canadians (Gottlieb & Peters, 1991). Although there are no comparable surveys outside of North America, there are indications that mutual help groups have rapidly expanded in other industrialized countries (Borkman, 1999; Munn-Giddings, & Borkman, 2005; Trojan, 1989).

A mutual help group is defined as a group of people sharing a similar problem, who meet regularly to exchange information and to give and receive psychological support (Chinman, Kloos, O'Connell, & Davidson, 2002; Levy, 2000). Groups are run principally by the members themselves, rather than by professionals, even though professionals may have provided extensive assistance during the groups' founding years. Traditionally, groups meet face to face, but internet-based groups have expanded rapidly in recent years (Eysenbach, Powell, Englesakis, Rizo, & Stern, 2004). Mutual help groups are described in the literature under a variety of labels, including, for example, "mutual aid" and "mutual support" groups, as well as the broader terms "self-help groups" and "support groups." The latter two terms encompass a wide variety of activities, many of which fall outside the definition of a mutual help group (e.g., structured bibliotherapy interventions or professionally-led support groups), causing considerable confusion in the literature. Mutual help groups are, of course, only one form of self help activity (see other papers in this special issue for the fuller range). However, they are worth focusing on because of their ubiquity and because a distinct theoretical rationale underpins their existence (Helgeson & Gottlieb, 2000). From a theoretical point of view, mutual help groups can be conceptualized as drawing on the potential benefits of socially supportive interactions. Specifically, they utilize support from people who have gone through similar difficulties and participants therefore can easily empathize with each other. This type of peer support may compensate for deficiencies in people's natural support networks. In addition, group members possess "experiential knowledge" (Borkman, 1990), in contrast to the professional knowledge of service providers. A number of benefits would be expected from such supportive interactions, including feeling more understood and less isolated, an increased sense of empowerment and self-efficacy, and acquiring more effective ways of coping with one's difficulties (Helgeson & Gottlieb, 2000). Therefore, it is important to study how effective mutual help groups are, and conditions that enhance their effectiveness.

The present review paper was driven by the question "What is the evidence that participating in a mutual help group brings about positive changes for people with mental health problems?" This raises the thorny issues of what kind of changes to focus upon and what type of evidence to consider in determining whether such changes occur. A large literature of surveys, qualitative studies, and first-person accounts attests to the subjective benefits of mutual help groups (see, for example, Borkman, 1999; Davidson, 2003; Humphreys, 2000; Levy, 2000). These studies often give a vivid picture of the types of changes that members experience in terms of identity, life narrative reconstruction, spiritual development, and sense of feeling cared about but they are not designed to yield evidence about causal relationships between group involvement and more traditional "psychiatric outcomes" such as reduction of symptoms and hospitalizations. Randomized controlled trials present different tradeoffs. On the one hand, they are powerful tools for evaluating causality and measuring quantitative, standardized indicators of mental health. But the high level of researcher standardization and control inherent in a clinical trial can distort the informal, peer-driven processes essential to mutual help organizations (Humphreys & Rappaport, 1994).

Our own position is a pluralist one: we believe that multiple sources of evidence are important and valuable for addressing this issue (Barker & Pistrang, 2005; Humphreys & Rappaport, 1994). However, for the purposes of this review, we adopt a more specific focus, namely, that which Humphreys (2004) has labeled the "treatment-evaluation" perspective. In other words, we will examine the evidence that bears on whether mutual help groups "work," in terms of providing the kinds of outcomes at which a professionally-led intervention would aim. Some readers may question the wisdom of such a focus, since it runs the danger of implying that mutual help is simply another professionally organized treatment. This is emphatically not our position: we actively celebrate the many features of mutual help groups that set them apart from professional interventions. However, as Humphreys (2004) has argued, it is still essential to examine the evidence on outcome from a treatment-evaluation point of view, that is, to determine the extent to which groups help their members directly with the problems that brought most of them into the group in the first place. This is important in order to assist consumers who may be considering investing their time and energy in a mutual help group and also to demonstrate that an evidence base exists for interventions that are organized from a grass-roots rather than a professional level. We fully acknowledge, however, that the treatment-evaluation perspective adopted here addresses only part of the range of potential benefits from mutual help.

Following Kyrouz, Humphreys, and Loomis (2002), the current review will therefore be limited to quantitative studies employing either group-comparison or longitudinal designs. These designs allow some degree of causal inference to be drawn about changes resulting from group membership for people with mental health problems. In terms of outcome measurement, the review will examine studies that address improvement in psychological or social functioning. This review differs from related reviews in terms of the range of interventions and the types of target problems that are covered (see Table 1).

Insert Table 1 about here

Most prior reviews have focused on a broader range of interventions such as self help, in general, (den Boer, Wiersma, & van den Bosch, 2004; Lewis et al., 2003) or social support interventions (Hogan, Linden, & Najarian, 2002), many of which are professionally led. Moreover, the distinction between professionally-led and member-led groups often is not made, making it difficult to know what is being evaluated. Two reviews (Eysenbach et al., 2004; Ybarra & Eaton, 2005) have focused specifically on online support groups and other online interventions. In terms of target problem, several have included both physical and mental health problems (e.g., Hogan et al., 2002; Levy, 2000), whereas others have focused on specific types of mental health problems (e.g., severe mental illness in Davidson et al., 1999 and mood and anxiety disorders in den Boer et al., 2004). The most closely related review (Kyrouz et al., 2002) is an intentionally, informal narrative review, aimed at a general audience, covering mutual help

groups for a broad range of psychological and physical health problems. The present paper builds on Kyrouz et al. (2002) by using systematic search strategies and inclusion criteria to focus on mental health problems and examining in detail each study's outcome and methodological approach. To be included in the review, studies had to satisfy four sets of criteria. These addressed: (1) characteristics of the group, (2) target problem, (3) outcome measures, and (4) research design.

## Method

# Inclusion and Exclusion Criteria

*Characteristics of the group*. Studies were included if the group being evaluated met all of the following criteria: (1) it aimed to provide support by and for people with a common problem; (2) it was primarily run by its members or facilitated by someone with the same problem (i.e., at most, outside professionals provided occasional consultation); (3) the content of the sessions was determined by members (e.g., the group was not built around a structured self-help intervention such as a series of prescribed cognitive-behavioral techniques; and (4) members met either face-to-face or via the internet. Groups meeting these criteria could be described under a variety of labels (e.g., self-help group, support group, mutual help group, or mutual aid group). Studies were excluded if the group was only one aspect of a larger mutual help or consumer-run organization which meant that the effects of group membership could not be isolated.

*Target problems*. Studies were included if the group membership comprised adults with mental health problems. This criterion was broadly interpreted to include specific problems such as depression or anxiety, as well as more vaguely defined problems such as "chronic mental illness." Bereavement was included as these groups partly focus on reducing depression.

Substance misuse and addictions were excluded because this is a distinct specialism with its own large, mutual help literature (recently reviewed by Humphreys, 2004), the only exception being groups specifically designed for people with both chronic mental illness and a substance use disorder. Groups for caregivers (e.g., relatives of people with Alzheimer's disease or of people with serious mental illness) were also excluded as they focus on reducing caregivers' stress or burden rather than on specific mental health problems.

*Outcome measures*. Studies were included only if they reported at least one mental health outcome measure, assessing either (1) psychological symptoms, (2) rates of hospitalization, (3) adherence to psychiatric medication, or (4) social functioning. Studies measuring only perceived social support or satisfaction with the intervention were excluded.

*Research design*. It was anticipated that randomized controlled trials would be rare because most of the literature has focused on existing, community-based support groups (to which randomized assignment is usually impossible). Therefore, in line with other, related reviews (Davidson, et al., 1999; Kyrouz et al., 2002), the inclusion criterion was that the study used either a comparison group (randomized or non-randomized) or a prospective longitudinal design comparing data from two or more time points.

## Search Strategy

Three procedures were used to identify all relevant studies published prior to our cut-off date of May 2006. First, we used existing reviews of the literature in this and related areas: mutual-aid/self-help groups (Kyrouz et al., 2002; Levy, 2000), peer support in severe mental illness (Davidson et al., 1999), social support interventions (Hogan et al., 2002), self-help interventions (den Boer et al., 2004; Lewis et al., 2003), and online support groups (Eysenbach et al., 2004). Second, the PsychInfo database from 1989 to May 2006 was searched using the terms

"mutual support," "mutual aid," "mutual help," "online support," and "internet support." Searches using the broader terms "support group" and "self-help group" yielded a greatly overinclusive set of studies, even when further delimited by using mental health terms such as anx\*, depress\*, and psych\* (the asterisk is a standard wildcard convention used to encompass variant terms such as depression, depressed, depressive, etc.). As several recent reviews covered these areas we limited our search to the 2003 to May 2006 database for these terms but also searched the additional databases of Medline (which focuses on biomedicine and the life sciences), Cinahl (which focuses on nursing-orientated research), and EMBASE (which focuses on biomedical and pharmocological research). Third, potential papers were identified from reference lists, manual searches of several key journals, and recommendations by experts in the field. Only Englishlanguage papers published in peer-reviewed journals were considered for the review.

Judgments about the eligibility of studies for the review were made initially by a research assistant and then by the first author. When eligibility was not clear-cut, the first two authors read and discussed the paper and came to a decision; if any doubt remained, the third author was consulted. Of the studies focusing on mental health problems (criterion 2), the majority of exclusions were made on the grounds of characteristics of the group (criterion 1, e.g., they were professionally led), or design (criterion 4). Studies that met the design criterion almost always met the criterion for outcome measures (criterion 3); very few studies were excluded on the grounds of outcome measures alone.

#### Examples of Excluded Studies

Several studies came close to meeting the inclusion criteria but were eventually excluded. Some did not fully meet the criteria concerning characteristics of the group or provided insufficient information for making a judgment. For example, Rathner, Bönsch, Maurer, Walter, and Söllner (1993) report on a group for bulimic women which appeared to be based around a structured self-help intervention designed by professionals. In a few other studies, the outcome measure was not considered to be assessing a mental health variable as defined above. For example, Dunham et al. (1998) otherwise excellent study of computer-mediated support for young single mothers, utilized parenting stress as the only pre-post outcome measure. In some other studies, the effects of the mutual help groups could not be disentangled from that of a larger intervention. For example, in Vachon, Lyall, Rogers, Freeman-Letofsky, and Freeman's (1980) frequently cited study of a "widow-to-widow" program, the intervention comprised one-to-one as well as group support. Similarly, in Segal and Silverman's (2002) study of self-help agencies, mutual support groups were only one of many activities, and in Burti et al. (2005) well-designed Italian study, the self-help group was embedded in a multifaceted "Psychosocial Center."

#### Results

Twelve studies met the inclusion criteria for the review. Table 2 summarizes the characteristics of the mutual help groups under investigation and Table 3 summarizes the methodological characteristics of the studies.

Insert Tables 2 and 3 about here

Four of the studies used randomized controlled designs to evaluate mutual help groups set up for the purpose of the study. The other eight used quasi-experimental or prospective longitudinal designs to evaluate pre-existing groups, seven of which were part of national selfhelp organizations and one internet-based. All 12 studies included standardized outcome measures, mostly assessing psychological symptoms. Nearly all studies used more than one outcome measure; there was a heavy reliance on self-report measures with only three studies supplementing these with independent interviewers' ratings. Sample sizes were moderate to large, ranging from 61 upwards; most studies had a hundred or more participants. In 10 studies, the sample comprised a high proportion (70% or over) of women. All studies except one were North American.

The standard of reporting of findings was variable. In particular, the majority of studies did not provide sufficient information (i.e., cell means and standard deviations) to compute Cohen's *d*, the standard measure for effect sizes in meta-analytic reviews. However, two of the best designed studies were also very thorough in their reporting of results.

Details of the individual studies are summarized in Table 4. Below we highlight the main findings for each of the three clusters of studies according to target problem.

Insert Table 4 about here

## Groups for Chronic Mental Illness

Three studies examined groups for general psychiatric problems or chronic mental illness, one of which was specifically targeted at individuals with a concurrent substance use disorder. Two used prospective longitudinal (uncontrolled) designs and one used a crosssectional design. All three studies report some evidence for the effectiveness of mutual help groups although their designs do not allow firm conclusions to be drawn.

In a well-designed longitudinal study of groups for people with serious mental illness, Roberts et al. (1999) found improvement over a one-year period on measures of psychological symptoms and social adjustment. A particular strength of the study was that it examined associations between interpersonal transactions during meetings (using observer ratings) and the outcome variables. One interesting finding was that giving help was associated with improved functioning but receiving help was associated with improved functioning only for those members who reported higher group integration.

Magura, Laudet, Mahmood, Rosenblum, and Knight (2002) studied 12-step groups for people with both chronic mental illness and substance use disorder. The outcome variable of interest was adherence to psychiatric medication. Consistent attendance at meetings was associated with better adherence when independent predictors of adherence (such as severity of psychiatric symptoms) were controlled. However, the degree of overall change in adherence was not examined.

Using a cross-sectional design to study groups for people with psychiatric problems, Galanter (1988) compared longstanding members, recent members, and community controls on a number of mental health outcome variables. Longstanding group members reported higher wellbeing (comparable to that of community controls), lower neurotic distress, and less use of psychiatric medication, compared to recent members. Because the "longstanding" members had been in the groups for many years and had become group leaders, they were probably a highly select group which could mean these results overstate or understate the benefits of participation (cf. Klaw, Horst, & Humphreys, 2006). A number of other findings concerning improvements since joining the groups were reported (e.g., a reduction in neurotic distress) but these were based on members' retrospective reports rather than longitudinal data.

Groups for Depression and Anxiety

Three studies examined groups for depression, and one for depression and anxiety. Two provide evidence for effectiveness and two do not. The strongest evidence comes from Bright, Baker, and Neimeyer's (1999) well-designed, randomized study comparing the relative efficacy of group cognitive-behavioral therapy (CBT) and mutual help groups for depression, both professionally and non-professionally (peer) led. Self-report measures as well as ratings by an independent clinician were used to assess pre-post change. Participants improved on all measures, the outcomes of the mutual help groups being equivalent to those of the CBT groups, and peer leaders were as effective as professional therapists. This study did not include a formal cost-effectiveness analysis but it goes without saying that the training and employment of professionals is substantially more costly than "helping" provided by peer volunteers. In other words, this finding of equal effectiveness demonstrates superior cost-effectiveness for the peerled groups.

In the only study of internet support groups, Houston, Cooper, and Ford (2002) used a longitudinal design to assess depressive symptoms over time. One-third of members showed a resolution of depressive symptoms with more frequent users more likely to improve (after adjusting for a number of other variables). The investigators were concerned that use of an online support group might have the unfortunate consequence of a decrease in face-to-face social support but they found that social support scores did not change over time.

Powell and colleagues (Powell, Hill, Warner, & Yeaton, 2000; Powell, Yeaton, Hill, & Silk, 2001) used a "partially randomized" design (the study began with a quasi-experimental design and later became fully randomized) to study self-help groups for adults hospitalized for unipolar or bipolar depression. The experimental condition involved providing a "sponsor" (an experienced group member) to introduce participants to the group. An intent-to-treat analysis

showed that the intervention increased the likelihood of group attendance nearly three-fold (Powell et al., 2000). At one-year follow-up, the team evaluated impact on two outcomes: Daily functioning and management of illness. Experimental participants did not have significantly higher scores than controls on either outcome measure (Powell et al., 2001). However, self-rated level of involvement in the group predicted improved management of illness. Unfortunately, the project team did not employ a two-stage, sample selection, data analytic model (see Humphreys, Phibbs, & Moos, 1996) which could have determined whether the negative results for the experimental condition reflected lack of an effect of self-help group participation per se or the fact that many individuals who were assigned a sponsor never attended any meetings.

Cheung and Sun (2000) studied groups for people with anxiety and depression in Hong Kong. Unusually, all participants had received 12 sessions of group cognitive-behavioral therapy before joining a mutual aid group. The prospective longitudinal design had three measurement points. At the time of joining the mutual aid group, participants had mean scores on mental health outcome variables within the clinical range (it is unclear how much change resulted from the previous group therapy) and there was no overall change over the one-year period of the study. The authors also examined self-efficacy as a potential mediator of outcome. Changes in self-efficacy were associated with changes in mental health but whether this shared variance is a true mediational effect or a case where two measures tap quite similar aspects of psychological adjustment is not clear.

#### Groups for Bereavement

Five studies examined groups for bereavement (loss of a spouse or a child), three of which used randomized designs. One study provides strong evidence and one somewhat weaker evidence for effectiveness; the remaining three show no effects. Strong evidence is provided by Marmar, Horowitz, Weiss, Wilner, and Kaltreider's (1988) randomized study comparing a 12week, peer-led mutual help group with brief individual psychodynamic psychotherapy for unresolved grief reactions in bereaved women. Participants in both conditions showed a reduction in stress-specific and general symptoms as well as improvement in social functioning (based on both self-report measures and independent clinician ratings). The outcomes of the mutual help group were equivalent to those of the psychotherapy intervention. Again, it is worth noting that even in the absence of a formal cost-effectiveness analysis, equivalent findings for effectiveness here suggest superior cost-effectiveness for the mutual help condition.

Some evidence for effectiveness is also provided by Lieberman and Videka-Sherman's (1986) study examining changes in mental health status among members of a self-help organization for widows and widowers. The study used a quasi-experimental design, over a one-year time period, to compare participants with different levels of involvement in the groups and also to compare members with a normative bereaved sample. Members showed more improvement than the normative sample. There were few differences between members and "non-members" (individuals who had attended a maximum of two meetings). However, when level of involvement in the groups was examined, those members who participated more actively and formed social linkages within the groups were found to show more positive change. Interestingly, those members who had received additional professional help (e.g., psychotherapy) did not improve more than other members.

Three other studies found no differences between members and non-members. Tudiver, Hilditch, Permaul, and McKendree's (1992) randomized controlled trial of the efficacy of mutual help groups for recently bereaved men found no evidence of the intervention being superior to a waiting-list control. Caserta and Lund (1993) also used a randomized design to compare groups for bereaved older adults with a no-intervention control condition, in terms of the outcome variables of depression and grief. No main effects for group membership were found although the analysis and presentation of the data make it difficult to fully understand the findings (e.g., cell means are not presented). However, there was some indication that, for members with lower interpersonal and coping skills, greater meeting attendance was associated with reduced depression and grief.

Finally, in Videka-Sherman and Lieberman's (1995) quasi-experimental study of a national self-help organization for parents whose child had died, there were no differences in mental health or social functioning between members and non-members over a one-year period. Sadly, there were few signs of recovery for any of these parents regardless of whether they were members of the organization or their level of involvement within it (the one exception being some change in attitudes for highly involved members). There were also no differences between those who reported receiving professional help and those who did not. This study differs from the previously discussed "no difference" findings of other studies in that no intervention seemed to alleviate the high levels of distress in this population. However, parents did report subjective benefits from group membership such as feeling more confident, more in control, and freer to express feelings but these data were based on retrospective accounts rather than longitudinal comparisons.

### Discussion

The 12 studies reviewed here clustered into three areas – chronic mental illness, depression/anxiety, and bereavement – and our conclusions are therefore restricted to those areas. Overall, they provide limited but promising evidence that mutual help groups are beneficial for people with these types of problems. Seven of the 12 studies reported some positive changes in mental health for group members. The strongest findings come from two randomized studies showing that the outcomes of mutual help groups were equivalent to those of established, more costly, professionally-provided psychological interventions. Five of the 12 studies found no differences in mental health outcomes between mutual help group members and non-members; no studies showed any evidence of negative effects. There was no indication that mutual help groups were beneficial for certain types of problems but not others.

Despite the large and growing literature on mutual help groups only a handful of studies met our criteria for inclusion. Many studies that are frequently cited in the literature as providing evidence for the effectiveness of mutual help groups were excluded from our review because they did not fulfill the criteria concerning either characteristics of the group under study, outcome measures, or research design. Even those that met the criteria were of variable quality in terms of design and reporting of results.

### Methodological Issues

We have tried in this review to take a middle line between two different methodological positions. On the one hand, traditional evidence-based medicine regards the randomized controlled trial (RCT) as the gold standard in research design. On the other hand, RCTs can be a poor methodological choice for evaluating mutual help groups if researchers operate the group themselves and take control of participation, in effect changing it from a peer-led to a professionally-controlled intervention (Humphreys & Rappaport, 1994). Although RCTs are rare in the mutual help literature, our review included some good examples in which the autonomy of group members seemed to have been preserved. The review also included examples of carefully conducted quasi-experimental and longitudinal designs.

This review has been restricted to studies utilizing mental health outcome measures such as those common in professional treatment evaluations. Although important to study, such outcomes do not capture the full range of benefits of mutual help groups. Levy (2000) has argued that the outcomes important to group members may not be those that are assessed by symptomoriented measures. First-person accounts, surveys, and qualitative studies have indicated that relevant outcomes include, for example, reduced isolation, increased confidence, changes in identity, and a sense of empowerment (Borkman, 1999; Munn-Giddings & Borkman, 2005; Rappaport, 1993). Although some of the studies in the current review found that participants reported such benefits, measurements of these variables were not incorporated into the longitudinal or quasi-experimental designs.

Another issue concerns the heterogeneity of the groups under study. Not only were there differences in target problems but also differences in the nature of the groups. For example, some groups were set up as part of a research study whereas others were naturally occurring. These two types of groups likely differed on several dimensions (e.g., degree of structure and training of peer facilitators) although there were no apparent differences in outcome between them. Due to the small number of studies in the review and their heterogeneous nature, it was not possible to identify factors that could explain the variability in reported outcomes.

Finally, in any study aiming to demonstrate the effect of group membership, the definition of "membership" is problematic (Levy, 2000). This is particularly the case for naturally occurring groups, which may run over long periods of time with a fluctuating attendance at group meetings. Differences in attendance and level of participation may account for differences in outcome, a phenomenon analogous to the "dose-response" relationship in pharmacology. Several studies in the current review reported a correlation between higher levels

of participation or involvement (operationalized in various ways) and positive outcomes (Caserta & Lund, 1993; Houston et al., 2002; Lieberman & Videka-Sherman, 1985; Magura et al., 2002). These findings are consistent with the hypothesis that greater involvement may lead to more positive change but they might also be taken to reflect differential attrition (i.e., the more severely troubled participants drop out). It is worth noting, however, that in a study of an alcohol-focused self-help group (Klaw et al., 2006), people with more serious problems were *more* rather than less likely to become long-term group members. Thus, selective attrition can lead to understatement as well as overstatement of the effects of mutual help groups.

# Recommendations for Future Research

Many of the studies included in our review did not adequately report their results. Cell means and standard deviations were often absent making it impossible to calculate effect sizes (and therefore conduct a meta-analysis) and to estimate the clinical significance (as opposed to the statistical significance) of the findings. Information on the number of participants joining or declining and the pattern of attrition was also rarely provided. The CONSORT statement (Consolidated Standards of Reporting Trials), which has been widely disseminated (e.g., Moher, Schulz, & Altman, 2001), provides guidelines for the reporting of randomized trials. These can be adapted for research using other types of designs and we recommend that investigators consult them for guidance.

The characteristics of the groups being studied also need to be clearly described by investigators so that judgments can be made about whether these meet the definition of a mutual help group. This is particularly important because the terms "support group" and "self-help group" subsume a range of different types of groups. Published reports are sometimes disappointingly ambiguous about the degree to which putative mutual help groups are memberled and whether they are built around a structured self-help program (such as a cognitivebehavioral therapy package). In addition, empirical studies need to address a wider range of groups in terms of target problems. The studies in our review examined groups for three general problem areas. Further research is needed to evaluate the effectiveness of mutual help groups for other common mental health problems such as phobias and eating disorders.

Regarding outcome measures, we recommend that investigators include some standardized mental health outcome measures and, where possible, some assessment of costs. Although symptom reduction and cost-effectiveness are clearly not the only legitimate criteria of benefit, it is still important to assess this domain of outcomes if research findings in this field are to be used to inform public health and social policy decisions. In addition, investigators could draw on both the theoretical literature and qualitative studies to assess outcomes that have particular relevance to mutual help. For example, ratings of empowerment could be incorporated into a longitudinal or quasi-experimental design. When investigators have included such variables, they have tended to rely on participants' retrospective reports which provide less convincing evidence.

With respect to research design, more studies should use longitudinal designs with comparison groups in order to provide more clearly interpretable data about the effectiveness of mutual help groups. Whether such studies are randomized should depend not on an a priori judgment but on the purpose of the study and whether randomization will or will not conflict with the peer control inherent in mutual help groups. Last, we note that whereas researchers often design studies of professional treatment "versus" mutual help groups, studies of combined forms would better match the reality that many individuals access both forms of help (Kessler et al., 1997).

In the current review, we have addressed the broad question of whether mutual help groups are "effective" for people suffering from mental health problems. Clearly, more finegrained questions also need to be answered concerning who benefits (and who does not) and how any benefits or changes come about. The studies included in this review mostly concentrated on global outcome comparisons but some did examine potential mediating variables. One promising lead is the finding across several studies that individuals who make greater social links with other group members tend to benefit more. Future research is needed to examine this in more detail so that the possible causal processes can be disentangled.

Another promising direction is the examination of how group process variables, such as levels of self-disclosure and of giving and receiving help, relate to outcomes (Roberts et al., 1999). Research focusing on such process variables might take several forms including behavioral observations of the type conducted by Roberts et al. as well as in-depth qualitative studies investigating members' experiences of participation and change. Previous qualitative studies also point to possible mediating variables that could be incorporated into quantitative studies of effectiveness. For example, mutual help group members frequently describe a process of identity change (e.g., Rappaport, 1993; Solomon, Pistrang & Barker, 2001). Whether identity changes mediate changes in psychological symptoms is a question to be investigated in future research.

Davidson et al. (1999), in reviewing the effectiveness of mutual help for individuals with severe mental illness, observed that the literature showed "promising trends" but that "conclusions ... will remain tentative, however, until there are more systematic, prospective studies completed with comparison groups" (p.171). Despite the increasing interest in mutual help groups, in particular the popularity of online groups, the picture has improved only marginally. There is clearly still a crying need for high quality outcome research evaluating mutual help groups for the full range of mental health problems. The outcome data from the studies we have reviewed here are promising but not definitive. We have traveled some distance along Humphreys and Rappaport's (1994) "one journey" towards a better understanding of the effectiveness of mutual help groups but still have miles to go before we sleep.

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Review	Population or type of problem	Type of intervention	Method of review	Main difference from current review	
Barlow et al. (1999)	Physical and mental health	Self-help and professionally- facilitated support groups	Meta-analysis	Focused mostly on professionally led groups	
Davidson et al. (1999)	Severe mental illness	Mutual support groups; consumer run services; consumers as providers	Narrative review	Focused on severe mental illness	
den Boer et al. (2004)	Chronic mood and anxiety disorders	Self-help, including bibliotherapy and self-help groups	Meta-analysis	Narrower spectrum of mental health problems; limited to RCTs; mostly focused on bibliotherapy	
Eysenbach et al. (2004)	Physical and mental health	Electronic (online) peer support	Systematic review	Focused on electronic support	
Hogan et al. (2002)	Physical and mental health	Social support interventions including peer support groups	Systematic review	Focused on interventions aiming to improve social support	
Kyrouz et al. (2002)	Physical and mental health	Self-help mutual aid groups	Narrative review	Less formal review intended for non-professional audience	
Lewis et al. (2003)	Mental health problems	Self-help in general including books, CD-ROMs, self-help groups, etc.	Systematic review	Focused on self-help materials	
Levy (2000)	Physical and mental health	Self-help groups	Selective narrative review	Focused more on methodological and public policy issues rather than effectiveness	
Ybarra & Eaton (2005)	Mental health problems	Self-directed and therapist- led online therapies including online support groups	Systematic review	Focused on internet interventions	

Table 1. Recent Reviews that include Studies of Mutual Help Groups for Mental Health Problems

Feature	Number of studies		
Target Problem:			
Chronic mental illness	3		
Depression/anxiety	4		
Bereavement	5		
Modality:			
Face-to-face	11		
Internet	1		
Status:			
Pre-existing group	8		
Group set up for the study	4		

 Table 2.
 Summary Characteristics of the Mutual Help Groups

Feature	Number of studies		
Design:			
Randomized controlled trial	4		
Non-randomized controlled trial	3		
Prospective longitudinal	4		
Cross-sectional	1		
Type of Comparison Group:			
Established psychological therapy	2		
Wait-list control	1		
No-intervention control	4		
Community (probability) sample	1		
No comparison group	4		
Type of Outcome Measure <sup>a</sup> :			
Psychological symptoms	10		
Social functioning	5		
Use of psychiatric medication	4		
Number of Measurement Occasions:			
One	1		
Two	5		
Three	3		
Four	3		

 Table 3. Methodological Characteristics of the Studies

<sup>a</sup>Totals add up to more than 12 because some studies used more than one type of outcome measure.

# Table 4. Description of Individual Studies

Author (date)	Target problem	Nature of group	Design	Assessment points <sup>a</sup>	Sample size	Outcome measures <sup>b</sup>	Results
Groups for chron	ic mental illness	5:		-			
Galanter (1988)	General psychiatric disorders	National self-help organization for people with psychiatric problems ("Recovery")	Cross-sectional comparison of recent members, longstanding members and community controls	Single time point in on- going groups	155 recent members, 201 longstanding members, 195 controls	General Well-Being Schedule; Neurotic Distress Scale; mental health treatment (including use of psychiatric medication)	Longstanding members higher on well-being, lower on neurotic distress and receiving less mental health treatment than recent members. Longstanding members similar to controls on well-being.
Magura et al. (2002)	Chronic mental illness plus substance use disorder	12-step groups ("Double Trouble in Recovery")	Prospective longitudinal	Baseline plus 1 year	240	Adherence to psychiatric medication	Consistent attendance associated with better adherence after controlling for baseline variables.
Roberts et al. (1999)	Serious mental illness	National mutual-help organization for people experiencing mental illness ("GROW")	Prospective longitudinal	Baseline plus 6 to 13 months later	98	SCL-90; SAS; Interviewer-rated adjustment	Improvement over time on all three outcome measures.
Groups for depre	ssion and anxiet	ty:					
Bright et al. (1999)	Depression	10-session, weekly mutual support group	Randomized 2x2 design: mutual support group vs. group cognitive- behavioral therapy, peer- vs. professional- led	Pre and post	98	BDI; Hamilton; Hopkins Symptom Checklist; Automatic Thoughts Questionnaire	Improvement on all measures: mutual support group equivalent to CBT group; peer-led groups equivalent to professional-led groups.
Cheung & Sun (2000)	Depression and anxiety	Support groups, meeting monthly, in a mutual-aid organization in Hong Kong	Prospective longitudinal	3 time points: pre-group, 6 months, and 12 months	65	GHQ, STAI, CES-D, self-efficacy, social support	No changes over time.
Houston et al. (2002)	Depression	Internet-based depression support groups	Prospective longitudinal	Baseline, 6- months and 12-months	103	CES-D	Overall 34% resolved their depressive symptoms; more frequent users more

Powell et al. (2001) <sup>c</sup>	Mood disorders (mostly unipolar depression)	Manic-depressive and depressive association groups	Partially randomized assignment to support groups and to no- intervention control	Pre, 6 months and 1 year	144	Daily functioning; management of illness	likely to have resolution. No effects for being assigned self-help group sponsor, but group involvement predicted improved illness
							management.
Groups for bereat Caserta & Lund (1993) <sup>c,d</sup>	Bereavement (death of spouse)	Short-term (8 weekly sessions) and long-term (10 additional monthly sessions) self-help groups	Randomized assignment to short- term or long-term self-help group or to a no-intervention control	Pre, post- short-term groups, post- long-term groups, plus follow-up	295	Geriatric Depression Scale; Texas Revised Inventory of Grief	No main effects for group attendance. Among those with initially low interpersonal and coping skills, group attendance predicted less depression and grief.
Lieberman & Videka- Sherman (1986)	Bereavement (death of spouse)	National self-help organization for widows and widowers ("THEOS")	Comparisons of members with different levels of involvement and with "non-members" (attended <3 meetings) and with normative bereaved sample	Baseline plus 1 year	394 members, 108 non- members	Hopkins Symptom Checklist; self-esteem; well-being; life satisfaction; mastery; use of psychotropic medication	Members showed more improvement than normative sample on most measures; more improvement than non- members on only 2 measures. More involved members showed more positive change.
Marmar et al. (1988)	Bereavement (death of husband)	12-session, weekly mutual-help group	Random assignment to mutual-help group or brief dynamic psychotherapy	Pre and post, plus 4 month and 1 year follow up	61	SCL-90; BDI; BPRS; IES; clinician-rated stress; SAS; GAS	Improvement on most measures. Mutual-help group equivalent to brief psychotherapy.
Tudiver et al. (1992)	Bereavement (death of wife)	9-session, weekly mutual- help group	Randomized assignment to group or wait-list control	Pre, post (2 months), 8 months, 14 months	113	GHQ-28; BDI; STAI; SAS	No main effects for group membership; whole sample showed improvement over time on psychological but not social variables.
Videka- Sherman & Lieberman (1985)	Bereavement (death of child)	National self-help organization for bereaved parents ("Compassionate Friends")	Comparison of non- members and members at varying participation levels	Baseline plus one year	97 non- members; 289 members at	Hopkins Symptom Checklist; self-esteem; life satisfaction; mastery; use of	No effect for group membership; whole sample showed little improvement over time

various levels of	psychotropic medication; social role	(small changes on only two measures).
participation	functioning	

<sup>a</sup>"Baseline" refers to a first measurement in an on-going group. "Pre" refers to a measurement taken before the start of the group.

<sup>b</sup>Abbreviations of measures: BDI = Beck Depression Inventory; BPRS = Brief Psychiatric Rating Scale; CES-D = Center for Epidemiological Studies Depression Scale; GAS = Global Assessment Scale; GHQ = General Health Questionnaire; Hamilton = Hamilton Rating Scale for Depression; IES = Impact of Event Scale; SAS = Social Adjustment Scale; SCL-90 = Symptom Checklist-90; STAI = State-Trait Anxiety Inventory.

<sup>c</sup> Powell et al. (2001) and Caserta & Lund (1993) did not report cell means and it was unclear whether the sample as a whole changed over time.

<sup>d</sup>Half the groups in the Caserta & Lund study were facilitated by peers and half by professionals. The analysis does not distinguish between these.