Mutual Aid Processes in Treatment Groups for People with Substance Use Disorders: A Survey of Group Practitioners

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Abstract

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There is scant empirical evidence demonstrating the presence and importance of mutual aid processes in Substance Use Disorder (SUD) treatment groups (Crits-Christoph et al, 1999; Sandahl & Ronnberg, 1990). Consequently this exploratory, internet-delivered survey was conducted to further examine the presence of mutual aid processes in abstinence-based SUD treatment groups in the field and the variables that are associated with higher amounts of mutual aid. The sample for this study comprised members of NAADAC, the Association for Addiction Professionals (n=484). In order to obtain information about group treatment in the field a trigger question was asked allowing the identification of respondents that had led a treatment group in an abstinent-based setting within the previous two years (n=369). The study utilized an author-created scale, the Mutual Aid Processes Scale (MAPS) comprised of 30 mutual aid processes. Reliability testing of the MAPS indicated high reliability, with a Chronbach's Alpha of .96. Factor analysis suggested that all 30 items related as a unitary construct.

Univariate findings suggested that more than two-thirds of the possible mutual aid processes occurred with frequency. Of a range of 0 to 6, the overall score on the MAPS for this study was 3.89, with 4 equaling “frequently”, reinforcing the finding that mutual aid processes occur frequently in the groups about which were reported. The amount of education and training received by the group leader was positively associated with the scores on the MAPS. Further bivariate analyses and stepwise multiple regression analyses suggested that the group leader’s level of facilitation, frequency of meeting, and heterogeneous composition of membership with regard to mandated status were all positively associated with higher levels of mutual aid as measured on the MAPS, accounting for almost 23% of the variance on the mean scores of the MAPS (adjusted R^2= .218). The findings of this study have implications for counselor training, social work education, and group treatment research.

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Chapter One: Problem Statement

Introduction

Evidence has indicated that group treatment is provided in 95% of abstinent-based treatment programs in the United States (Stinchfield et al, 1994) and is effective in helping members achieve abstinence and other treatment goals (Panas et al, 2003). While different group types and models are utilized in this field, the primary clinical rationale for the use of group treatment, as opposed to individual treatment, is the resonance of the needs of people with substance use disorders (SUDs) with the opportunities for mutual aid that potentially arise through peer interaction (DiClemente, 1993; Flores, 1997; Freeman, 2001; Golden et al, 1994; Matano & Yalom, 1991; Substance Abuse and Mental Health Services Administration, 2005). At the same time, anecdotal reports have suggested that work with groups in the Substance Use Disorder (SUD) field is best characterized as individual work in a group setting, in part due to insufficient education regarding group practice models received by the group leaders (Greene, 2002; Hirayama et al, 1997; Flores, 1997). Furthermore, there is scant empirical evidence demonstrating the presence and importance of mutual aid processes in SUD treatment groups (Crits-Christoph et al, 1999; Greene, 2002; Sandahl & Ronnberg, 1990) in part due to inadequate measurement instruments (Garrett, 2005), the challenge that group member interaction presents to researchers (Weiss et al, 2004), and the persistent neglect of attention to process in intervention research

(Weiss, 1998). Consequently this exploratory study was conducted to further examine the presence of mutual aid processes in abstinence-based SUD treatment groups in the field.

Substance use disorder experts have reported their impression that the group treatment in the field is often individual work in a group setting (Flores, 1997; King & Lorenson, 1989; Greene, 2002). Flores (1997) has suggested that "too often therapists trained only in individual therapy...were thrust into group psychotherapy leadership roles" (p.10) as an explanation. With regard to the untrained substance abuse counselor without formal group practice model education Flores (1997) has suggested that these counselors utilize "procedures intuitively adopted from Alcoholics Anonymous" and act more like 12 Step sponsors providing individual guidance in the group setting (p. 11).

As the literature review will demonstrate, researchers either in their report and/or in their treatment design typically have paid scant attention to group process, as they rarely peer into the black box of treatment (Weiss, 1998). Of the 30 studies identified in this review only two strongly demonstrated the presence of mutual aid processes and indicated these processes were found to be helpful by participants. One study was of a cognitive-behavioral group intervention (Sandahl & Ronnberg, 1990) and the other was an interactive support group model (Crits-Christoph et al, 1999; Siqueland et al, 2004).

One explanation for the insufficient attention to group process in SUD treatment research is the perspective that the "interdependence of group members" is a "major hurdle" that makes data analysis difficult and challenging (Weiss et al, 2004, p. 348). Another potential explanation is that group treatment researchers and the research treatment providers lack sufficient group practice model training. As the literature review will demonstrate most study reports fail to indicate the amount and type of group practice model training or education received by the treatment providers. This observation has been identified as a critique of the group treatment literature in general for at least 50 years (Burlingame et al, 1994; Lieberman, 1983; Steinberg, 1993) and of the substance use disorder group treatment research as well (Greene, 2002). As a whole, the group treatment approaches used in SUD research have been characterized as little more than the study of an individual approach in a group setting, echoing the complaints about group work in the SUD field (Greene, 2002).

In 2003 the National Institute on Drug Abuse (NIDA) convened an expert panel to review the state of group treatment research (NIDA, 2003). This panel concluded that there remained significant work to be done before definitive conclusions could be drawn about the effectiveness of group treatment for people with SUDs (NIDA, 2003). One recommendation for future research was to examine group treatment change mechanisms, which include mutual aid processes (NIDA, 2003; Weiss, 2004).

The concern that substance abuse counselors are insufficiently prepared to facilitate treatment groups parallels the lament about the erosion of group work education in social work (Birnbaum & Auerbach, 1994; Birnbaum & Wayne, 2000; King & Lorenson, 1989; Middleman, 1978; Steinberg, 1992, 1993; Tropp, 1977). While there are several models of social group work, in general, mutual aid is regarded as an essential element of group work practice (Birnbaum & Wayne, 2000; Kurland & Salmon, 1998; Middleman & Wood, 1990; Northen & Roberts, 1976; Papell & Rothman, 1980; Steinberg, 2004) and should be a major focus of group work education (Birnbaum & Wayne, 2000; Kurland & Salmon, 1998).

Group work educators propose that special group facilitation skills are required to cultivate mutual aid processes (Birnbaum & Auerbach, Birnbaum & Wayne, 2000; Kurland & Salmon, 1998; Middleman & Wood, 1990; Schwartz, 1961). For this reason, the documented erosion of group work education in both quantity and quality has long been a concern among group work educators in social work (Birnbaum & Wayne, 2000; Middleman, 1978). Research reported in 1994 indicated that only 19% of MSW programs in the United States required students to take at least one group course, leaving most students to learn about group work in generalist foundations courses (Birnbaum & Auerbach, 1994). Further survey research of foundations' instructors approach to group work instruction indicated meaningful group work concepts, including mutual aid, were not being taught sufficiently (Birnbaum & Wayne, 2000). For these reasons, social work educators have recommended further inquiry documenting

the impact of the group work education on social workers' group practice (Kurland & Salmon, 1992; Steinberg, 1992).

Statement of the Research

This quantitative study used an anonymous, internet-delivered survey instrument to query group leaders of abstinence based SUD treatment groups about the presence and amount of 30 specific mutual aid processes. The sample included members of NAADAC, the Association for Addiction Professionals, with email addresses. The study identified the frequency with which specific mutual aid processes were perceived to be occurring according the self-report of group leaders. An additional aim of the study was to examine the impact of group specific social work education on the amount of mutual aid.

As no suitable measurement instrument for mutual aid processes was identified, an additional aim of the study was to create an instrument and then conduct reliability testing and factor analysis for an author-created measure, the Mutual Aid Processes Scale (MAPS). The MAPS is a 30 item scale reflecting ten types of mutual aid processes including: sharing data, the dialectic process, discussion of taboo topics, the all-in-the-same-boat phenomenon, mutual support, mutual demand, rehearsal of new skills, individual problem-solving, the strengths in numbers phenomenon and the instilling of hope. The score of the MAPS was used in bivariate and multivariate analyses. Variables that might potentially impact the amount of mutual aid as indicated on the MAPS were

examined and included variables related to the worker, the group, and group composition.

Major Questions and Hypotheses

The major questions examined in this study included the following:

- To what extent do specific mutual aid processes occur in treatment groups for people with Substance Use Disorders? Are some processes more likely to occur than others?
- Will respondents who are social workers reporting at least one semester of group specific education yield a higher total score on the Mutual Aid Processes Scale (MAPS) when compared to group leaders with other educational backgrounds?
- Will social workers with three or more semesters of group work specific course work yield a higher total score on the Mutual Aid Processes scale when compared to social workers with less than three semesters of group work specific coursework?
- What is, if any, the relationship between respondents' 12 Step participation and the total score on the Mutual Aid Processes Scale?
- What variables account for higher than average scores on the MAPS?

Hypotheses examined through this inquiry included:

- Respondents who are social workers that possess an MSW with at least one semester of group work specific education will yield higher total scores on the Mutual Aid Processes Scale (MAPS) as compared to those with other professional degrees and at least one semester of group work specific education.
- Respondents who are social workers that possess an MSW with three or more semesters of group work specific education will yield a higher total score on the MAPS as compared to MSW social workers with 2 or fewer semesters.
- There will be no statistically significant difference on the mean total score of the MAPS between respondents who report that they participated in a 12 Step program versus respondents reporting no participation in a 12 Step program.

Concepts

The following central concepts that inform this study will be defined: mutual aid, group treatment, substance abuse treatment provider and group practice model education/training.

Mutual Aid

The concept of mutual aid as group treatment technology can be understood as an exchange of help wherein the group member is both a provider and a recipient of help in service of achieving common group and individual goals (Borkman, 1999; Gitterman, 2006; Lieberman, 1983; Northen & Kurland, 2001; Schwartz, 1961; Shulman,

2006; Steinberg, 2004; Toseland & Siporin, 1986). Mutual aid includes the following activities that can occur between group members, including: sharing data, the dialectic process, discussion of taboo topics, the all in the same boat phenomenon, developing a universal perspective, mutual support, mutual demand (including confrontation), rehearsal of new skills, individual problem solving, the strengths in numbers phenomenon (Gitterman, 2004; Shulman, 2006; Steinberg, 2004) and the instilling of hope (Northen & Kurland, 2001).

While mutual aid occurs naturalistically in self-help groups (DiClemente, 1993; Rappaport et al, 1985; Roberts et al, 1999), it has been argued that special skills are required by the worker to stimulate mutual aid in group treatment (Flores, 1997; Glassman & Kates, 1990; Middleman & Wood, 1990; Schwartz, 1961; Shulman, 2006). The tasks of the group treatment provider include facilitating the development of mutual aid processes in addition to other group tasks (Matano & Yalom, 1991; Schwartz, 1961; Shulman, 2006; Steinberg, 2004).

Group Treatment

Several authors have provided definitions of group treatment for people with SUDs (Garvin & Bellamy, 2000; Flores, 1997; SAMHSA, 2005; Stinchfield et al, 1994; Weiss et al, 2004). The following factors are central to all proposed definitions, including: the group comprises at least two unrelated members; the groups are professionally facilitated; meet with regularity; and exist for the purpose of treating substance abuse and dependence. Stinchfield et al (1994) limit their definition to

interactional groups. Weiss et al (2004) and SAMHSA (2005) provide more expansive definitions recognizing the breadth of approaches in SUD treatment. All distinguish group treatment from self-help groups by noting the presence of a treatment provider, either a therapist or a counselor.

For the purpose of this study and building upon the aforementioned definitions group treatment will be identified as a group consisting of two or more unrelated clients with a Substance Use Disorder facilitated and/or led by a paid professional worker with the primary purpose of aiding members in achieving and/or maintaining abstinence. While mutual aid occurs in self-help groups, the focus of this inquiry is on mutual aid processes in group treatment, which by definition is provided by a treatment provider (Blume, 2002) and thus this definition excludes self-help groups and volunteer and/or peer-facilitated groups.

Substance Abuse Treatment Provider

The concept of substance abuse treatment professional is broadly defined for the purpose of this study and simply refers to a paid and/or salaried line worker or private practitioner providing treatment to people with SUDs. Professional discipline and educational background is likely to vary but expected to include social workers, psychologists, nurses, and credentialed and non-credentialed alcoholism and other drug counselors. The primary distinction to be made is that this concept can be distinguished from that of peer, peer educator, peer counselor, and volunteer workers.

Group Practice Model Education and Training

The concepts of education and training are conceptualized as including both formal education in an academic institution and trainings. Respondents will be asked to name their highest degree and certification; the number of semesters of group practice model education; the primary group model studied; and the amount of training sessions about group work.

Conceptual/Theoretical Framework

The theoretical frame for this project is drawn from practice theory. Practice theory systematically incorporates knowledge and concepts regarding physical and psychological behavior, social systems and the ensuing interaction; identifies guiding values and valued goals; and the specific techniques, skills, procedures and worker activity available to achieve the desired outcomes (Barker, 1991; Schwartz, 1976; Shulman, 2006; Simons & Aigner, 1985). The concept of practice theory stands in contrast to that of causal and developmental theories which seek to identify etiology of behaviors or provide an explanatory framework for specific phenomena (Simons & Aigner, 1985). Such theories are useful to practitioners and interact with practice theory but do not identify the procedures to be utilized in the helping process. Specific features of these practice theories and models as they relate to mutual aid will be identified further in the literature review.

The central premise of this theoretical frame is that mutual aid processes are recognized as essential to effective group treatment in a variety of group approaches.

As the literature review will demonstrate, the Mutual Aid Model of social group work (Gitterman, 2004; Shulman, 2006) and interactive group psychotherapy (Yalom, 1995), especially the model modified to meet the needs of people in SUD treatment (Matano & Yalom, 1991), view the cultivation of mutual aid as an important group treatment provider task. Cognitive-behavioral group treatment models can also incorporate opportunities for mutual aid (Rose, 1990). Rose (1990), in his review of the empirical cognitive-behavioral treatment literature not specific to any particular field, argued that "the group might be more effective if the group practitioners were also making use of the group as an inherent resource in treatment" (p.72). Rose (1990, 2004) has suggested that opportunities for mutual aid should be incorporated in cognitive-behavioral group work. Mutual aid is not proposed in this study as the exclusive domain of any particular model nor as precluding the presence of other activities within the group.

Relationship of the Research Question to Social Work

The findings of this study will have potential significance for social work education, the further application of the Mutual Aid Model to the group treatment of people with SUDs, the substance abuse treatment field and future substance abuse group treatment research. This study is grounded in the mission and values of the social work profession which seeks to "enhance human well-being" (NASW Code of Ethics, 1999, p.1). Furthermore, the study is resonant with the educational policy of the Council on Social Work Education (2004) which seeks through worker education to "enhance

the social functioning and interactions of individuals, families, groups, organizations, and communities" (p.4).

This study provides information about the impact of the state of group work education on social work practice. This information has relevance to social work educators concerned about group work education and practice. Additionally, despite the resonance of mutual aid with the group treatment of this population, the social work literature has insufficiently attended to the application of the Mutual Aid Model to group work with this population, more typically drawing upon Interactional Group Psychotherapy or Cognitive-Behavioral Models of group work. Consequently, the findings may enhance the application of the Mutual Aid Model to group work with people with SUDs.

Finally, the findings contribute new information about the presence and amount of mutual aid processes in this field. In addition to identifying specific mutual aid processes the study will identify variables that are associated with robust demonstrations of mutual aid. The findings of this study and the Mutual Aid Processes Scale have the potential to contribute to future research.

Chapter Two: The Review of the Literature

Introduction

The purpose of this chapter is to identify the role of mutual aid processes in group treatment for people with substance use disorders. This review will address three related topics: mutual aid processes; factors that potentially influence the presence and priority of specific mutual aid processes; and the role of mutual aid processes in group treatment for people with SUDs. The questions and hypotheses that emerge as a result of the analysis of this literature will be identified. The chapter will conclude with the rationale for this dissertation study.

Mutual Aid Processes

Mutual aid as group treatment technology can be understood as an exchange of help wherein the group member is both provider and recipient of help in service of achieving common group and individual goals (Borkman, 1999; Gitterman, 2006; Lieberman, 1983; Northen & Kurland, 2001; Schwartz, 1961; Shulman, 2006; Steinberg, 2004; Toseland & Siporin, 1986). In order to maximize the benefits to be derived from mutual aid, the skillful group leader purposefully facilitates interaction that fosters mutual aid; identifies and helps the group work through obstacles to mutual aid; and stimulates specific mutual aid processes with regard to the needs of the members (Glassman & Kates, 1990; Middleman & Wood, 1990; Schwartz, 1961, 1976; Shulman, 2006).

The rationale for cultivating mutual aid in the group encounter is premised on the following beliefs: 1) members have strengths, opinions, perspectives, information, and experiences that can be drawn upon to help others in the group; 2) helping others helps the helper, a concept referred to as the helper-therapy principle (Riessman, 1965) which has been empirically validated by one study of helping as it occurred in self-help groups (Roberts et al, 1999); and 3) some types of help are better received when emanating from a peer rather than a worker (Shulman, 2006). Anecdotal evidence indicates that mutual aid may strengthen self-esteem; enhance problem solving; encourage and support behavior change; foster healthy attachment; and in substance abuse treatment, provide affirmation of the value of a sober network (Cicchetti, in press; DiClemente, 1993; Flores, 1997, 2001; Levy, 1979; Matano & Yalom, 1991).

The primacy given mutual aid in some group approaches is due to the resonance with humanistic values, which cast members of groups as responsible both to and for one another (Glassman & Kates, 1990) and to the belief that these processes stimulate cognitive and behavioral processes yielding therapeutic, supportive, and empowering benefits (Berman-Rossi, 1992; Breton, 1990, 2004; Gitterman, 1989; Gottlieb, 1985; Hartford, 1976; Hopps & Pinderhughes, 1999; Lee, 1989; Northen 1969, 1976, 1987, 1988; Northen & Kurland, 2001; Schwartz, 1961, 1971, 1976, 1977; Shulman, 1979, 1986, 1992, 1999, 2006; Steinberg, 1992, 1997, 2004; Yalom, 1995). The cognitive processes stimulated through mutual aid potentially serve to strengthen coping skills, problem solving, and self-perception (Levy, 1979). The behavioral processes potentially

serve to reinforce behavioral change, increase use of adaptive coping skills, and support group members in changing their social environment (DiClemente, 1993; Levy, 1979).

While proposed as unique to social work with groups (Kurland & Salmon, 1992) evidence indicates that mutual aid can be found in a variety of group treatment approaches (Fuhriman & Burlingame, 1990; Holmes & Kivlighan, 2000; Northen, 1987) and is perceived to be therapeutic by contemporary group psychotherapists (Schleifer, 2007). Mutual aid processes have been referred to by various appellations in different streams of literature: “peer agency” (Hill, 1975); “psychosocial helping processes” (Levy, 1976, 1979; Wollert, Levy & Knight, 1982); “mutual help” (Rappaport et al, 1985; Roberts et al, 1999); “social support” (Droge et al, 1986); and “altruism”, “interpersonal learning”, and “universality”, factors identified in Yalom’s (1995) popular therapeutic factor construct.

Arguably, similar ideas have been expressed differently by theorists, researchers, and practitioners of various group approaches (Lieberman, 1983). In the manner in which practitioners of social work with groups discuss mutual aid, group psychotherapists refer to the concept of therapeutic factors (Crouch, Bloch & Wanlass, 1994; Dies, 1977; Hill, 1975; Holmes & Kivlighan, 2000: Levy, 1979; Lieberman et al, 1973; Lieberman, 1979; Magen, 2004; Northen, 1987; Rohrbauch & Bartels, 1975; Yalom, 1995). Therapeutic factors (TFs) have been described as “processes occurring within therapy that assist in facilitating client change” (Fuhriman & Burlingame, 1990,

p.9). The concept of therapeutic factor is broader than that of "mutual aid" in that it refers not only to the help derived through peer interaction but also to that which occurs as a result of direct group leader intervention as well (Yalom, 1995). Practitioners of social work with groups have pointed out the similarities between mutual aid and Yalom's (1995) description of Therapeutic Factors (Magen, 2004; Northen, 1987; Northen & Kurland, 2001; Shulman, 1986).

Mutual Aid and the Therapeutic Factor Construct

The seminal therapeutic factor (sometimes referred to as curative factor or change mechanism) research in the field was that conducted by Corsini and Rosenberg in 1955. They analyzed over 300 articles resulting in the presentation of nine types of change mechanisms (Crouch, Bloch, & Wanlass, 1994; Hill, 1975; Northen, 1987; Northen & Kurland, 2001; Yalom, 1995). This typology of change mechanisms included: ventilation, acceptance, spectator therapy, intellectualization, universalization, reality testing, altruism, transference, and interaction (Crouch, Bloch, & Wanlass, 1994; Yalom, 1994). Yalom (1975, 1995), drawing upon the work of Corsini and Rosenberg, the views of other therapists, and his own research of the perceptions of helpful factors as identified by successful group therapy clients has presented what is now widely regarded as the most popular elaboration of therapeutic factors (Magen, 2004).

The therapeutic factor construct presented by Yalom (1995) includes the following factors: the instillation of hope, universality, imparting information, altruism, the corrective recapitulation of the primary family group, development of socializing

techniques, imitative behavior, interpersonal learning, cohesion, catharsis and existential awareness. This construct has been utilized in a widely used Q-sort survey instrument that is most often used to query group therapy patients about their perception of these helpful factors (Crouch, Bloch, & Wanlass, 1994; Lieberman, 1983; Magen, 2004; Yalom, 1995). Yalom (1995) conducted a study of 20 group therapy patients in an outpatient setting who had recently terminated or were still in treatment. The ranked order of factors from most to least valued were as follows: interpersonal input, catharsis, cohesiveness, self-understanding, interpersonal output, existential factors, universality, instillation of hope, altruism, family reenactment, guidance and identification (Yalom, 1995).

While not identified as such, research has been conducted that demonstrates the importance of mutual aid in the group encounter. Findings from a comparative analysis of the literature conducted by Fuhriman and Burlingame (1990) indicated that the following therapeutic factors are unique to group treatment: vicarious learning (learning that occurs through observing other members working through similar issues); role flexibility (member as both help seeker and provider); universality (while the intellectual awareness of universality can be cultivated in individual therapy, this factor is experienced in a "qualitatively distinct" manner in group treatment); altruism (which includes problem solving and support); family reenactment (which includes both transference and support); and interpersonal learning (yielding social skill acquisition)

(p.48). The dominant theme, suggested Fuhriman and Burlingame (1990), is "the interpersonal focus of many of the therapeutic factors" (p.51).

Holmes and Kivlighan (2000) studied the therapeutic processes found in individual and group treatment. Critical incident questionnaires were administered to twenty individual and twenty group treatment subjects. They ranked the perceived helpfulness of four dimensions of therapeutic processes, including: emotional awareness-insight; relationship-climate factors; other-versus-self focus; and problem-definition change. The emotional awareness-insight component included affective and cognitive experiences that contributed to gaining insight (Holmes & Kivlighan, 2000). The relationship-climate factor could be described as group cohesion or the therapeutic alliance with the group leader and members (Holmes & Kivlighan, 2000). The other-versus-self category is analogous to the concept of altruism (Holmes & Kivlighan, 2000). The problem definition-change included solution identification (Holmes & Kivlighan, 2000). The relationship-climate category and other-versus-self focus category were higher for the group subjects than for the individual treatment patients (Holmes & Kivlighan, 2000). The findings were "consistent with the hypothesis that the relationship nature of group treatment would lead to the importance of these components" (Holmes & Kivlighan, 2000, p. 483).

Mutual Aid Processes in Self-Help Groups

The presence and importance of mutual aid processes have also been studied in mutual aid/self-help groups. This type of research has been conducted by utilizing the

therapeutic factor construct (Wollert, Levy, & Knight, 1982), researcher created survey instruments (Droge et al, 1986; Levy, 1976, 1979; Hatzidimitriadou, 2002; Mok, 2001; Paine et al, 1992); and direct observation of group process (Rappaport et al, 1985).

The most ambitious study of the helpful processes found in mutual aid/self-help groups was conducted by Levy (Levy, 1976, 1979). Levy (1976) studied the psychosocial helping processes of a diverse range of mutual aid/self-help groups, including: two chapters of Alcoholics Anonymous; two chapters of Take Off Pounds Sensibly; two chapters of Parents Anonymous; one chapter of Overeaters Anonymous; an Al-Anon chapter; Make Today Count; Recovery, Inc.; a National Organization of Women (NOW) sponsored consciousness raising group; and a support group of the La Leche League. The processes identified varied among the different group types. However, the central point made by Levy (1976) was that as a construct, the processes provided "insight into the helping process itself" and may illuminate the nature of professional and non-professional helping in both individual and group approaches (p.316).

Levy (1979) building upon the previous work presented above offered a framework for mutual aid processes and activities encountered in mutual aid/self-help organizations. The framework was based on review of the literature, observation of the above mentioned mutual aid/self-help groups and a descriptive, quantitative analysis of "help-giving activities" (Levy, 1976, p. 238). The behaviorally oriented processes Levy (1979) suggested could potentially operate in any behaviorally focused therapy.

However, the fact that they occur within the context of a peer group format and that members are both provider and recipient is essential in understanding the power of mutual help (Levy, 1979). The behavioral processes included: "direct and vicarious social reinforcement for the development of desirable behaviors and the elimination or control of problematic behaviors"; "training, indoctrination and support in the use of various kinds of self-control behaviors"; "modeling of methods of coping with stresses and changing behavior"; and "providing members with an agenda of actions they can engage in to change their social environment" (Levy, 1979, p.249).

The cognitive processes Levy (1979) suggested are not to develop insight but rather "equip members to better cope with their problems, to foster better problem solving, and to alter how they view themselves and their circumstances" (p.250). The use of the appellation "cognitive" does not dismiss the occurrence of affective change, but rather the point Levy (1979) made is that they are intertwined processes. According to Levy (1979), "the split between affect…and behavior and cognition…commonly found in the psychotherapy literature may rest more on the theoretical preconceptions of their authors than it does on reality of human functioning" (p.256-257). The cognitive processes identified include: "removing members' mystification over their experiences and increasing their expectancy for change and help by providing them with a rationale for their problems or distress and for the group's way of dealing with it"; "provision of normative and instrumental information and advice"; "expansion of the range of alternative perceptions of members' problems and circumstances and of the actions

they might take to cope with their problems"; "enhancement of members' discriminative abilities regarding the stimulus and event contingencies in their lives"; "support for changes in attitudes toward oneself, one's own behavior and society"; "social comparison and consensual validation leading to a reduction or elimination of members' uncertainty and sense of isolation or uniqueness regarding their problems and experiences"; and "the emergence of an alternative or substitute culture and social structure within which members can develop new definitions of their personal identities and new norms upon which they can base their self-esteem" (p.250-255).

Levy (1979) highlighted the role of universalization arising from consensual validation and social comparison: "perhaps the source of relief most frequently cited by group therapy members, as well as by the self-help group therapy members who we interviewed, is the discovery that they are not unique in having a particular problem or particular feelings. This realization helps to reduce some of the fear, shame, guilt and hopelessness…" (p.254). Levy (1979) postulated that this contributes to an adaptive spiral wherein members become more open to appreciating the wisdom of the groups' collective experiences, become receptive to utilizing other members' coping strategies and in turn cultivate their own coping resources.

The aforementioned groups were observed in order to help develop the Helping Processes Questionnaire which was then administered. Members were asked to rate on a five point scale, with one defined as "an inaccurate description" denoting that the

process rarely occurs, to a five, defined as “a very accurate description” , understood as a process that occurs often (Levy, 1979, p.259). The twenty-eight activities are presented with the mean score of frequency of occurrence provided parenthetically: empathy (4.20); mutual affirmation (3.94); explanation (3.89): sharing (3.83); morale building (3.82); self-disclosure (3.67); positive reinforcement (3.66); personal goal setting (3.61); catharsis (3.59): encouragement of sharing (3.57); reassurance of competence (3.41); behavioral prescription (3.4); normalization (3.39); justification (3.35); discrimination training (3.30); functional analysis (3.30); reflection and paraphrase (3.17); consensual validation (2.92); establishing group’s goals (2.78); behavioral proscription (2.62); reference to group’s norms (2.39); modeling (2.25); extinction (2.17); offering feedback (2.01); behavioral rehearsal (1.79); requesting feedback (1.76); punishment (1.65);and confrontation (1.65).

Wollert, Levy and Knight (1982) presented a further analysis of the aforementioned study. Of note, this report identified the resonance of mutual aid processes and activities of mutual aid/self-help groups with Therapeutic Factors considered important in group psychotherapy. Using Hill’s taxonomy of change mechanisms developed in 1975 which incorporated the work of Yalom and Corsini and Rosenberg the authors suggested that their process of catharsis is similar to ventilation; normalization is similar to universalization; explanation, functional analysis, and discrimination training relate to intellectualization; empathy, mutual affirmation, encouragement of sharing are resonant with acceptance; self-disclosure, sharing,

personal goal setting, and positive reinforcement are aspects of socialization; instillation of hope, reassurance of competence, mutual affirmation, encouragement of sharing, and behavioral prescription could be understood as altruism; consensual validation, offering feedback, seeking feedback and confrontation are likened to reality testing; instillation of hope by the TF of the same name; and finally, spectator therapy by the observation of the preceding processes as they occur in the group context (Wollert et al, 1982).

The Helping Processes Questionnaire was modified by Hatzidimitriadou (2002) and administered to members of fourteen mutual help groups in England (n=67). Hatzidimitriadou (2002) concluded that "a large number of naturally occurring helping processes" could be found in the groups studied (p.271). Across group types the most frequently occurring help activities included: "sharing, empathy, mutual affirmation, and behavioural prescription" (p.277). Hatzidimitriadou (2002) concluded that the findings reflected the general stance of self-help groups toward "safety and simplicity" (p. 277).

Rappaport et al (1985) studied chapters of GROW International. Their evaluation of group process was based on direct observation of several groups over six different time periods during twenty seven months. They employed a comment by comment coding analysis and identified the following codes: support; interpretative comments; direct guidance; requests for feedback; personal questions; interpersonal questions; personal disclosures; general sharing; group process; agreement; disagreement or

disapproval, and irrelevant talk (Rappaport et al, 1985). In agreement with Levy's (1979) observation that mutual help groups are safe and supportive forums, the findings indicate that support and agreement codes occurred at least seven times more frequently than negative coded communication (Rappaport et al, 1985).

Droge et al (1986) surveyed members of an epilepsy support group regarding their perception of the helping processes. The reported list of therapeutic factors identified is presented in ranked order with the means presented parenthetically. The factors were rated on a five point Likert scale, with a score of five indicating a high level of importance, and included: "helping others" (4.625); "sharing thoughts and feelings" (4.561); "experience of others puts mine in perspective" (4.417); "getting a perspective on my problem" (4.408); "understanding more about my problem" (4.388); "receiving advice and suggestions" (4.337); "solving problems" (4.327); "finding out what epilepsy means to me" (4.284); "being supported and valued by the group" (4.204); "learning my problems are not unique"; "discussing unjust treatment" (4.173); "being able to say what bothered me" (4.143); "try out new ways of solving problems"; "others telling me what they think of how I handle problems"(3.878) and "revealing things about myself" (3.551) (p.153).

The contrast between mutual aid processes that potentially occur in the professionally-led group session versus those that occur in the mutual aid/self-help group has been addressed by researchers of self-help groups (Levy, 1979; Wollert et al,

1982). Levy (1979) suggested that the reduced presence of helping activities that were the least likely to occur in self-help groups could be explained as a result of the lack of technical competence. Levy (1979) explained: "some of the activities, such as confrontation and those involving feedback, may also require a higher level of therapeutic competence for their effective use than is likely to be found among nonprofessionals" (p.265). Wollert et al (1982) concurred with Levy (1979) and suggested that the previous activities which could be likened to reality testing and/or interpersonal learning are emotionally threatening and would require leadership with "advanced training and systemic knowledge of small group processes" (p.216).

Mutual Aid in Social Work with Groups

Typically, the benefits of groups for individual members as identified by practitioners of 'social work with groups' are explained as the result of mutual aid (Glassman & Kates, 1990; Gitterman, 1989, 2004; Gitterman & Shulman, 2005; Greif & Ephross, 1997; Kurland & Salmon, 1992; Middleman & Wood, 1990b; Northen & Kurland, 2001; Schwartz, 1961, 1976, 1977; Shulman, 1979, 2006; Steinberg, 1997, 2004; Wasserman & Danforth, 1988). Gitterman (2006), a contemporary group work expert, contends that "mutual aid offers the major rationale for the provision of group services" (p.93). Gitterman (2006) elaborates on mutual aid in the small group noting that "as members become involved with one another, they develop helping relationships and become invested in each other and in participating in the group" (p.93). The mutual aid processes that unfold help group members "to experience their

concerns and life issues as universal", to "reduce isolation and stigma", to "offer and receive help from each other", and to "learn from each other's views, suggestions and challenges" (Gitterman, 2006, p.93).

Since early incarnations, social group work, with roots in the group work found in Settlement Houses, the play and recreation movement, and progressive education, has prioritized mutual aid (Alissi, 1980; Gitterman, 2004; Lee & Swenson, 2005). Schwartz (1961) brought primacy to the concept in social work practice with groups (Papell & Rothman, 1966). Schwartz (1961) suggested that the group was an "enterprise in mutual aid, an alliance of individuals who need each other in varying degrees, to work on certain common problems" (p. 18). Papell and Rothman (1966) cited this conceptualization of the group encounter as one of the most important contributions that group work could make to the larger field of social work. Mutual aid would come to be regarded as a hallowed concept by social group workers (Tropp, 1977); as central to generic group work practice (Hartford, 1976); as a universal concept in all of group work practice (Papell & Rothman, 1980); and as a definitional parameter of what would constitute social work practice with groups (Middleman & Wood, 1990).

Schwartz (1961, 1971, 1976) had suggested that mutual aid include problem solving; authentic, spontaneous communication; the expression of difference; and discussion of 'taboo' topics. Shulman (1979, 1986, 2006), building on the work of Schwartz, advanced a widely referenced conceptual framework that includes 10 types of

processes: sharing data; the dialectic process; discussion of taboo topics; the all in the same boat phenomenon; developing a universal perspective; mutual support; mutual demand; individual problem solving; rehearsal; and the strength in numbers phenomenon. Shulman's conceptualization of mutual aid is most typically associated with the model presented by Schwartz (1961), often referred to as the Mutual Aid Model (Gitterman, 2004), and has been widely utilized by social workers in discussing the concept (Gitterman & Shulman, 2005; Steinberg, 2004; Wasserman & Danforth, 1988).

There is scant empirical evidence documenting mutual aid processes in social work practice with groups (Feldman, 1987; Northen, 1987). The insufficient attention to research of social work practice with groups has been long lamented (Anderson, 1987; Feldman, 1987). An explanation for this gap as it relates to mutual aid has been the absence of suitable measurement instruments (Garrett, 2005). Consequently, the evidence that exists is most typically anecdotal articulated through practice illustrations (Gitterman & Shulman, 2005; Schwartz & Zalba, 1971).

The single specific mutual aid processes that will be identified in the subsequent section are drawn largely from those processes identified by social work scholars. The discussion for each mutual aid process is drawn from several streams of literature, including: social work with groups (Gitterman, 2004; Gitterman & Shulman, 2005; Northen & Kurland, 2001; Schwartz, 1961; Shulman, 1979, 1986, 1999, 2006); the

group psychotherapy change mechanism theoretical and empirical literature (Butler & Fuhriman, 1983; Crouch, Bloch & Wanlass, 1994; Fuhriman & Burlingame, 1990; Hill, 1975; Holmes & Kivlighan, 2000; Yalom, 1995); process studies of mutual aid/self-help groups (DiClemente, 1993; Droge et al, 1986; Hatzidimitriadou, 2002; Levy, 1976, 1979; Mok, 2001; Paine et al, 1992; Rappaport et al, 1985; Roberts et al, 1999; Wollert, 1986; Wollert et al, 1982); theoretical discourse on substance use disorder group treatment (Freeman, 2001; Flores, 1997; Matano & Yalom, 1991; Milgram & Rubin, 1992; Rugel, 1991; SAMHSA, 2005); substance use disorder group treatment studies (Daley et al, 1999; Sandahl & Ronnberg, 1990); and behavioral change studies (Prochaska, DiClemente, & Norcross, 1992). These processes inform the items selected for an author created mutual aid measure which will be further described in the next chapter.

Specific Mutual Aid Processes

This discussion will identify each single mutual aid process. The processes discussed include the following: sharing data; the dialectic process; discussing taboo topics; the all-in-the-same-boat phenomenon; mutual support; instillation of hope; mutual demand; individual problem solving; rehearsal and skill acquisition; and the 'strength-in-numbers-phenomenon'.

Sharing Data

Sharing data can be understood as occurring when members share useful, relevant information (Droge et al, 1986; Hartford, 1976; Hatzidimitriadou, 2002; Levy,

1979; Milgram & Rubin, 1992; Mok, 2001; Parad et al, 1976; Rappaport et al, 1985; Shulman, 1999, 2006; Steinberg, 2004; Wasserman & Danforth, 1988). This process makes use of members' experiential knowledge, wisdom and beliefs (Parad et al, 1976; Shulman, 2006). The group psychotherapy literature has referred to this process as both guidance and imparting information (Crouch, Bloch & Wanlass, 1994; Yalom, 1995). The offering of useful information is also identified by Yalom as an aspect of the TF, altruism (Yalom, 1995).

The Dialectic Process

The dialectic process occurs when members express differing perspectives about the topic under discussion (Shulman, 1999, 2006; Steinberg, 2004; Wasserman & Danforth, 1988). Wasserman and Danforth (1988) have suggested "it is critical that these differences be revealed in the group, where people can think about them and discuss the pros and cons, and where their own affirmations and doubts about a topic can be challenged" (p.139).

Discussing taboo topics

Discussing 'taboo' topics refers to the discussion of subject matter that is typically regarded as more revealing than polite conversation and bears similarity to Yalom's conceptualization of catharsis (Northen & Kurland, 2001; Schwartz, 1961; Shulman, 1999, 2006; Steinberg, 2004; Yalom, 1995; Wasserman & Danforth, 1988). The range of taboo topics might include direct communication about the worker's use of their authority to issues of sexuality, drug use, and experiences that have induced

feelings of shame or guilt (Shulman, 2006; Steinberg, 2004; Wasserman & Danforth, 1988).

The all-in-the-same-boat phenomenon

The 'all in the same boat phenomenon' is resonant with the TF, universality (Anderson, 1985; Daley et al, 1999; Droge et al, 1986; Hatzidimitriadou, 2002; Levy, 1979; Mok, 2001; Northen & Kurland, 2001; Rugel, 1991; Sandahl & Ronnberg, 1990; Shulman, 1999, 2006; Yalom, 1995). In fact, in Yalom's (1995) discussion of universality he describes this as the members' awareness that "we're all in the same boat" (p.74). Northen and Kurland (2001) posit that "the realization that similar feelings and difficulties are common among the members lessens the sense of being unique and alone" (p.25). This discovery is thought to enhance both self-esteem and mutual-esteem (Northen & Kurland, 2001).

Mutual Support

Mutual support is identified with both the supportive, accepting culture of the group as well as member to member supportive interaction (Daley et al, 1999; DiClemente, 1993; Droge et al, 1986; Gitterman, 1989; Hartford, 1976; Hatzidimitriadou, 2002; Levy, 1979; Matano & Yalom, 1991; Milgram & Rubin, 1992; Mok, 2001; Northen, 1951; Northen & Kurland, 2001; Paine et al, 1992; Rappaport et al, 1985; Shulman, 1986, 1999, 2006; Tropp, 1976; Wasserman & Danforth, 1988). The effective communication of support requires both sympathy and empathy and is expressed verbally, non-verbally and through physical gestures like hugging (Levy, 1976,

1979; Shulman, 2006). This process is viewed as buffering against distress caused by personal difficulties (Caplan, 1974; Gottlieb, 1983; Gitterman & Shulman, 2005; Northen & Kurland, 2001; Shulman, 1999; Steinberg, 2004). As Shulman (1986) has pointed out, "carrying a burden is often easier if others express their understanding" (p.55).

The manner in which support is helpful is explained by Northen and Kurland (2001) who note that the supportive, accepting climate "reduces anxiety and facilitates self expression and willingness to try out new ideas and behaviors" (p.25). Resonant with the TF 'altruism', Shulman (1986) opined that "the giving of empathic support is often helpful to the one who gives as the one who receives" (p.55).

Instillation of Hope

Instillation of hope is "crucial in psychotherapy" according to Yalom (1995, p. 4). The instillation of hope occurs through group member action and interaction, as well as therapist intervention (Hatzidimitriadou, 2002; Levy, 1979; Northen & Kurland, 2001; Rugel, 1991; Yalom, 1995). Crouch, Bloch and Wanlass (1994) suggest that "hope operates when the patient simply notes that improvement does occur" (p. 286). When conceptualized as an element of mutual aid focus is on the interaction between group members.

Mutual Demand

Mutual demand**,** in addition to support, is believed to be required for growth and change (Gitterman & Shulman, 2005; Northen & Kurland, 2001; Shulman, 1986,

1999, 2006). The skillful leader will cultivate a group climate that has an appropriate balance of challenge and support (Gitterman & Shulman, 2005). The challenging climate is posited to lead to an internalized sense of accountability to the group and yields member to member challenge and confrontation (Gitterman & Shulman, 2005; Hare, 1962; Northen & Kurland, 2001; Shulman, 1999; Steinberg, 2004). Northen and Kurland (2001) have suggested the expectations of the group, an idea expressed as group control, "serves as a means toward the goal of appropriate self control" (p.26).

Group members, as opposed to the worker or therapist, are believed to be more adept at identifying behavior or attitudes that warrant confrontation (Gitterman & Shulman, 2005; Shulman, 1999). Likewise, it is posited that members are more likely to make better use of the confrontation emanating from a peer as opposed to a worker (Gitterman & Shulman, 2005; Northen & Kurland, 2001; Shulman, 1999).

Individual Problem Solving

Individual problem solving has long been recognized as an important activity in social work groups, as well as self-help groups (Birnbaum & Cicchetti, 2000, 2005; Droge et al, 1986; Hartford, 1976; Schwartz, 1961; Northen, 1976; Paine et al, 1992; Somers, 1976; Shulman, 1999, 2006; Steinberg, 2004). Helping other members solve personal problems is also identified as an element of 'altruism' by Yalom (1995) in his conceptualization of this therapeutic factor.

The social group work approach to problem solving typically draws upon the framework proposed by Dewey (1910) and invites full participation of the group

members (Kurland & Salmon, 1992). The belief among social group workers is that when one member helps another they are helping themselves, an idea Reissman (1965) expressed as the helper-therapy principle (Gitterman & Shulman, 2005; Roberts et al, 1999; Shulman, 1999; Steinberg, 2004; Toseland & Rivas, 1986; Wasserman & Danforth, 1988).

Rehearsal and Skill Acquisition

The group provides the opportunity for acquisition of new skills formally and informally (Northen & Kurland, 2001; Steinberg, 2004). Rehearsal can be understood as the intentional practicing of new skills and ideas in the context of a supportive forum, the group (Hatzidimitriadou, 2002; Levy, 1979; Shulman, 1999, 2006; Steinberg, 2004; Wasserman & Danforth, 1988). While rehearsal can be operationalized overtly as in the use of a role play it can also be understood as an aspect of simply participating in the group (Steinberg, 2004).

The Strength in Numbers Phenomenon

The strength in numbers phenomenon (Shulman, 1999, 2006) has also been identified as 'the strength in us' (Breton, 2004), perhaps a harkening to the book of the same name about mutual aid/self-help by Katz and Bender (1976). Shulman (1986) explained that members "often feel powerless to deal with large institutions and agencies, helping professionals (even the group leader), and apparently overwhelming tasks" (p.58). Consequently, "sometimes it is easier to do things as a group than it would be as an individual" (Shulman, 1999, p. 312).

In sum, this section of the review sought to identify the role of mutual aid as a feature of group approaches. As indicated, while given various appellations, group theorists and practitioners from differing fields identify mutual aid as a distinct advantage of group treatment as compared to individual treatment. The following chart summarizes the mutual aid processes discussed and identifies the conceptually resonant therapeutic factors. The priority afforded mutual aid in general and specific processes, in particular, is informed by a variety of factors (Northen, 1987). These factors can include, but are not limited to the following: group leader education and ideology; elements of group structure; and membership characteristics (Hare, 1976; Lieberman, 1983; Northen, 1987; Shulman, 2006). The next section of the review will address these factors.

Chart 1: Mutual Aid Processes and Resonant Therapeutic Factors

(Shulman, 1999, 2006)	**Northen and Kurland (2001)**	**Yalom (1995); Hill (1975)**
All in the same boat phenomenon	Universality	Universality
Sharing data	Acquiring information	Guidance/Imparting of Information
Mutual Demand/Culture for Work	Reality Testing; group control; quality of relationships	Family reenactment; Interpersonal learning input and output
Mutual Support	Mutual Support; quality of relationships	Altruism; family reenactment
Universal Perspective; Consciousness-raising		
Rehearsal	Acquiring New Skills	
Taboo Topics	Catharsis	Catharsis; Self-disclosure
Strength in Numbers		
Dialectic Process/debate		
	cohesiveness	cohesiveness
	hope	hope
		Existential Factors
Problem Solving	Altruism; information	Guidance; altruism

Factors that Influence Mutual Aid Processes

Various factors that potentially influence the process and outcome of the group encounter have been both hypothesized and studied (Cartwright & Zander, 1953; Hare, 1976; Hare et al, 1994; Lieberman, 1983; Northen, 1987; Shulman, 2006). Despite this, insufficient empirical evidence exists documenting the impact of these factors on specific mutual aid processes, in large part due to the absence of appropriate measurement instruments (Garrett, 2005).

For the purpose of this study select factors will be highlighted, including: worker attributes such as amount and type of group work/therapy education; components of group structure, such as setting, temporal elements, and related factors, such as group size; and member attributes, such as gender, the condition for which the members sought group treatment, and the volitional status of group members.

Worker Attributes

Several interrelated worker attributes that potentially influence the amount and presence of specific mutual aid processes in group treatment include the amount and type of group work education and the worker's ideology of care (Goldberg & Lamont, 1988; Lieberman, 1983; Paine et al, 1992; Steinberg, 1992). A point of departure in this review is that the potential for mutual aid exists within any group (Lieberman, 1983; Northen, 1987; Rose, 1990; Schwartz, 1961, 1976; Shulman, 2006; Steinberg, 2004; Yalom, 1995). To elaborate, the stimulation of mutual aid is not incongruous with the purpose and/or other processes found in group work, group therapy, and structured

group approaches, such as psychoeducational groups (Rose, 1990; Schwartz, 1961, 1976; Yalom, 1995). In sum, specific worker activities and a mindset, or ideology, are thought to be needed in order to stimulate these processes (Flores, 1997; Middleman & Wood, 1990; Rose, 1990; Steinberg, 2004).

Ideology

Ideology can be understood as a "specialized set of beliefs about the nature of client problems and the best practices or strategies for preventing or alleviating such problems" (Burke & Clapp, 1997, p.553). Lieberman (1983), in his critique of the change mechanism literature made the point that the therapist' beliefs, value systems, and ideology of help "bear great weight on the clients' belief about what it was that helped them" (p.199). Lieberman (1983) posited that the beliefs of the therapist "must, to some extent, be accepted by the client" (p.199). For example, Lieberman (1983) suggested, the likelihood that insight will occur "is enhanced if the therapist generates the information required to explore this area" (p.199). Lieberman (1983) proposed that therapists emphasize events and processes that are "under their control" (p.194). Accordingly, insight, feedback, and the expression of and experience of strong affect were often elements stressed in therapy and encounter groups (Lieberman, 1983)). These items were "subject to specific leader interventions, in contrast, for example to altruism" (Lieberman, 1983, p.194). This belief has caused Lieberman (1983) to posit that this act of influence "clouds and makes it empirically difficult to examine phenomenological information in a change-induction study and distinguish it from the

inculcation of a specified belief system that is not necessarily a true reflection of the client's experience" (p.200).

Ideology is largely informed by the education and training received by the group leader (Burke & Clapp, 1997). In addition to possessing knowledge and skill in working with groups, workers should also be aware of the specific factors associated with the needs and strengths of the clients who comprise the group (Doel, 2006; Flores, 1997).

Group Practice Model Education

The mindset and skill-set required to stimulate mutual aid processes has been argued to stem from group specific education and training, within the field of social work, psychology, and substance abuse treatment (Flores, 1997; King & Lorenson, 1989; Steinberg, 1992, 1993; van Wormer, 1987). However, the role of the educational background of the group leader on the presence of mutual aid processes has been insufficiently studied. With regard to social workers' group work education and practice, Steinberg (1993) noted that despite "widespread concern over this professional practice crisis…there has been …virtually no research of leadership with the express intent of exploring practitioners' conceptualization and implementation of method" (Steinberg, 1993, p.26). This theme echoes a long standing complaint in group psychotherapy research in general (Burlingame et al, 1994). Burlingame et al (1994) note that "increased precision in describing the therapist's treatment orientation and rationale, leadership style and relationship with group members is a recommendation spanning five decades" (p.47-48).

While there are notable gaps in the literature about the impact of education and training on the presence of mutual aid, evidence supports the belief that group work specific education enhances perceived skill and knowledge of group leaders (Goldberg & Lamont, 1987); and that the amount of education about social group work contributes to the primacy placed on mutual aid by social workers (Steinberg, 1992).

A study conducted by Goldberg and Lamont (1987) of first and second year social work students (n=150) at the Wayne State University School of Social Work indicated that students in the social group work sequence demonstrated significantly more perceived skill and higher knowledge test scores about social group work than their counterparts from other social work method sequences. Thirty-six percent of the first year and forty-four percent of the second year students in the group work sequence perceived themselves to be more skilled than their peers in other concentrations and more than ninety percent viewed themselves as "as skilled" (Goldberg & Lamont, 1987). Additionally, students in the Social Group Work sequence were more knowledgeable about the social group work literature.

For the study, students were asked to match the author of an article or text with the title. The score range was zero to eight with a mean of 1.9 (Goldberg & Lamont, 1987). A score of four to eight was deemed a "high" score; two to three a "medium" score; and zero to one, a "low" score. Social group work majors scored higher than their counterparts in the other sequences. More than fifty percent of first year majors and

thirty-seven percent of second year majors scored in the "high" range (Goldberg & Lamont, 1987). Analysis of variance of differences in mean scores for first and second year students indicated statistical significance ($p<.001$). Additionally, students who viewed themselves as more skilled in working with groups than peers from other sequences were more likely to have high scores on knowledge tests ($X^2 = 13.6$, $df=4$, $p<.009$) (Goldberg & Lamont, 1987, p.102).

Only one study of the impact of the amount of group work education on social work practice with groups has been conducted to date (Steinberg, 1992, 1993). Doctoral research conducted by Steinberg (1992) examined the impact of the amount of group work specific semesters of education received by social workers on their approach to group work practice. In this qualitative inquiry, Steinberg interviewed thirty social workers, half of whom had two or fewer semesters of group work specific courses with the other half having had three or more semesters. Respondents were asked about their approach to practice with special attention to priority afforded mutual aid. This research identified differences in the approach to practice of those social workers with more than two semesters of group work specific education compared to those with fewer semesters. Group workers who had taken at least three group work courses were more likely to cultivate mutual aid and possessed both the skill-set and an ideology of help that supported the group in working through obstacles to mutual aid (Steinberg, 1992, 1993). An additional finding suggested that group workers with three

or more semesters of group work education were more comfortable and adept at facilitating group conflict (Steinberg, 1992, 1993).

The concern about the impact of the amount of group work education reflected in Steinberg's (1992) study emerged out of a larger concern in the field about the erosion of group work education in social work. This erosion has often been traced to the policy shift made in 1969 by the Council on Social Work Education which called for a generalist approach to social work education rather than a method specific approach (Andrews, 2001; Steinberg, 1992).

Since the 1960s there has been a steady decline in the number of social work schools in the United States offering group work concentrations (Birnbaum & Auerbach, 1994). In 1963 76% of MSW programs offered a group work concentration; in 1981 the percentage dropped to 22%; and in 1992 only 7% of MSW programs offered a group work concentration (Birnbaum & Auerbach, 1994). Research conducted in 1991 indicated only 19% of schools required students to take at least one group work course, leaving most students to obtain their knowledge from the generalist foundation courses (Birnbaum & Auerbach, 1994).

Survey research of faculty teaching generalist practice courses, however, indicated that meaningful group work concepts are not being taught sufficiently (Birnbaum & Wayne, 2000). A survey of 190 faculty teaching generalist practice revealed that while most respondents identified themselves as "knowledgeable" or

"very knowledgeable" about group work, more than one third did not identify any group work concepts being taught (Birnbaum & Wayne, 2000). "Furthermore, concepts essential for informing social work practice with groups were identified by only a small number of respondents. For example, only 21% identified mutual aid, 13% identified the planning process for group formation, and 7% identified group conflict", according to Birnbaum and Wayne (2000, p.352).

Theoretical Framework

As both social group workers and group therapists have pointed out, there is a myriad of group work and therapy models (Alissi, 1980; Dies, 1992). Despite this, mutual aid processes are potentially available in any group model and/or type (Crouch, Bloch & Wanlass, 1994; Schwartz, 1961, 1977; Holmes & Kivlighan, 2000). What may vary, however, is the primacy placed on the stimulation of certain mutual aid processes.

Many interactive social group work models tend to place greater primacy on mutual aid, as compared to structured group approaches and interactive group therapy approaches (Lieberman, 1983; Middleman & Wood, 1990; Northen & Roberts, 1976; Papell & Rothman, 1980; Rose, 1990, 2004; Yalom, 1995). Mutual aid, for the most part, is regarded as a hallowed concept in social group work and is widely regarded as a defining element of social group work practice (Birnbaum & Auerbach, 1994; Birnbaum & Wayne, 2000; Middleman & Wood, 1990; Papell & Rothman, 1980; Schwartz, 1961, 1977; Shulman, 2006; Steinberg, 2004; Tropp, 1977).

The concept of mutual aid in social work with groups gained prominence when Schwartz (1961) presented a conceptualization that viewed the group as an "enterprise in mutual aid, an alliance of individuals who need each other in varying degrees, to work on certain common problems" (Schwartz, 1961, p. 18).

Schwartz (1961) elaborated on the group unit:

> "This is a helping system in which clients need each other as well as the worker. This need to use each other, to create not one but many helping relationships, is a vital ingredient of the group process and constitutes a need over and above the specific tasks for which the group was formed" (Schwartz, 1961, p.18).

To illuminate the importance of this quote for the purpose of this inquiry, two points need to be highlighted: 1) help is derived from the other members as well as the worker; and 2) the cultivation of these many helping relationships is posed as a task in addition to other specific tasks for which the group was formed. From this we can derive that cultivating mutual aid is not posed as a process in contrast to other processes or that mutual aid exists at the expense of the treatment professional utilizing his/her expertise to provide help. Noting the importance of the practice theory proposed by Schwartz, Papell and Rothman (1966) stated "its outstanding contribution" is as "the construct of a mutual aid system with professional interventions" (p.130).

Interactive group psychotherapy models, of which the most well-known is that developed by Yalom (1995), may place primacy on stimulating catharsis and insight

(Lieberman, 1983) but that is not to say that the model does not allow for mutual aid. This model proposes that the group leader actively cultivate member interaction to promote such therapeutic factors as group cohesion, altruism, universality ("all in the same boat"), and instillation of hope (Yalom, 1995, p. 74). Members are viewed as agents of help, as well as recipients (Yalom, 1995). The group therapy encounter provides members with the opportunity to be both help provider and help seeker (Holmes & Kivlighan, 2000), what Hill (1975) referred to as "peer agency" (p.26). Finally, Yalom (1995) has underscored the belief that "the group functions best if its members appreciate the valuable help they can provide one another" (p.125).

This model has been modified to meet the clinical needs of people with SUDs (Matano & Yalom, 1991). In this model the view of the group as a social microcosm in which pathology will unfold is replaced by the view of the group as a mutual aid system (Matano & Yalom, 1991). The leader's approach is argued to be active and focused on cultivating mutual support, mutual challenge, and instillation of hope in service of helping the group achieve common abstinence based recovery oriented goals (Flores, 1997; Matano & Yalom, 1991; Rugel, 1991).

Structured group approaches, for example cognitive-behavioral groups and psychoeducational groups, are not incongruous with the stimulation of mutual aid (Rose, 1990). Structured groups often rely upon worker expertise and the imparting of information and/or skill building (Rose, 1990). Some group treatment researchers have

conceptualized the application of cognitive-behavioral therapy as that of an individual treatment approach in a group setting, emphasizing the cost savings of the group format (Graham et al, 1996; Schmitz et al, 1997). However, Rose (1990) indicated that there is no inherent conflict between small group strategies that stimulate mutual aid and classic cognitive-behavioral techniques like didactic presentation. Furthermore, Rose (1990) indicated that he believes the work of cognitive-behavioral groups is enhanced when small group strategies that stimulate mutual aid are integrated. In his critique of approaches to cognitive-behavioral group treatment, Rose (1990) has argued that "the group might be more effective if the group practitioners were also making use of the group as an inherent resource in treatment" (p.72) and that the failure to do so is a likely factor in "low cohesion, poor participation, high drop-out rates, and a lower probability of achieving treatment goals" (p.72).

In sum, worker ideology and the amount and type of education are potentially important factors in the extent to which a group leader seeks to stimulate mutual aid processes. Evidence, while scant, indicates that group work education contributes to a knowledge base and perceived skill set necessary for group practice (Goldberg & Lamont, 1987). Furthermore, the amount of education may have a role in the extent to which a group leader places primacy on cultivating mutual aid (Steinberg, 1992, 1993). Finally, while mutual aid is potentially available in any group type, depending on the leader's ideology of practice, (Crouch, Bloch, & Wanlass, 1994; Middleman & Wood,

1990; Schwartz, 1961, 1976) certain models may afford these processes different levels of priority.

Group Related Factors

The concept of group structure refers to elements of time and place (Northen & Kurland, 2001). Temporal elements include the length of each group session, the frequency of meetings, and the duration of the group (Northen & Kurland, 2001). The degree of openness of the group (Schopler & Galinsky, 1990) and group size may also impact mutual aid (Bales & Borgatta, 1965; Coyle, 1930; Hare, 1953, 1976; Hartford, 1972; Northen & Kurland, 2001; Yalom, 1995).

Time

The impact of time on a group is addressed within the context of group development (Bennis & Shepherd, 1956; Berman-Rossi, 1992, 1993; Birnbaum & Cicchetti, 2005; Garland, Kolodny & Jones, 1978; Schwartz, 1961; Shulman, 2006; Tuckman, 1965; Tuckman & Jensen, 1977). The intersection of time and gender has also been addressed (Schiller, 1995, 2003); time and open groups (Schopler & Galinsky, 1990); and time and mandated clients (Behroozi, 1992; Breton, 1993; Lacoursiere, 1980; Milgram & Rubin, 1992; Rooney & Chovanec, 2004).

Stage development has implications for the fostering of mutual aid (Berman-Rossi, 1992, 1993). Berman-Rossi (1992, 1993) suggested a framework for understanding the implications of the impact of developmental schema on mutual aid. Her approach drew most prominently from the Bennis and Shepherd model (1956) and

the Garland et al (1978) model. The Garland et al (1978) model proposes a linear stage theory that indicates a group moves through five stages: pre-affiliation; power and control; intimacy; differentiation; and separation. While presented as a linear model, Berman-Rossi (1992) suggested that often groups move back and forth between stages, especially in open-ended groups.

In examining the interplay between stage theory and mutual aid development Berman-Rossi (1992) drew five conclusions. The first is that stage theory can be used to guide the sequence of worker activity so as to match the developmental needs of the group and the individual members. Related to this some mutual aid processes may be more salient and appropriate depending on the group's developmental stage (Berman-Rossi, 1992, 1993; Birnbaum & Cicchetti, 2005; Glassman & Kates, 1990; Schiller, 1995). For example, emotionally charged self-disclosure, i.e. taboo topics, and individual problem solving may be more suitable to middle stages of group development after a preliminary sense of safety and trust has been established in the group (Birnbaum & Cicchetti, 2000, 2005; Glassman & Kates, 1990; Schiller, 1995). The second is that the worker should understand that the members may need to negotiate the "authority theme" as explicated in the Bennis and Shepherd model before developing intimacy. The worker should take the opportunity to model acceptance of "examination and scrutiny" (Berman-Rossi, 1992, p. 251). The third point of this framework is that the worker should support member connections and address obstacles to mutual aid (Berman-Rossi, 1992). The fourth point is that promoting movement through the stages

of group development simultaneously helps the group to become a mature helping system (Berman-Rossi, 1992). Finally, empowerment oriented practice "demands a helping strategy designed to increase members' experience of mastery, competence, power and influence" (Berman-Rossi, 1992, p. 251).

Most conceptualizations of group development are predicated on the belief that the group is closed and comprised of an unchanging set of members (Schopler & Galinsky, 1990). The findings of an exploratory study conducted by Schopler and Galinsky (1990) concluded that movement beyond beginnings is possible. However, the impact of open membership is likely to result in a more cyclical pattern of group development with regression occurring when members enter and/or leave the group (Schopler & Galinsky, 1990).

As a concept, open-endedness exists along a continuum dependent upon the duration of the group (Gitterman, 1989; Schopler & Galinsky, 1990; Shulman, 2006). When membership is open but the group is of a long duration a core group of members is likely to emerge (Schopler & Galinsky, 1990; Shulman, 1999, 2006). When this occurs the core group assumes responsibilities for indoctrinating new members (Gitterman, 1989; Schopler & Galinsky, 1990; Shulman, 1999).

Size

The impact that the size of a group has on group process has received considerable attention empirically (Bales & Borgatta, 1965; Hare, 1953, 1976; Hartford, 1972). Simmel, in 1908, was the first to discuss the importance that group size had on

group interaction (Hare, 1976; Hartford, 1972; Simmel, 1965). Hartford (1972), in her review of this literature , suggested that groups should be "small enough for each person to be heard and contribute" but "not be so small as to over-expose members" (p.162). Yalom (1995) has indicated a preference of seven or eight members, with an acceptable range of between five to ten members. Some evidence indicates member dissatisfaction and greater discord in groups including more than 12 members (Hare, 1953).

In sum, a variety of factors exist in dynamic interaction informing the presence of mutual aid processes in the small group. Thus far, worker attributes and elements of group structure have been reviewed. This section will conclude with a discussion of member attributes that may potentially influence mutual aid, including the mandated status of members and gender of members.

Member Attributes

Several member attributes are likely to impact the presence and importance ascribed to specific mutual aid processes (Gitterman & Shulman, 2005; Shulman, 2006). For example, sharing a common condition or problem is thought to be both a prerequisite for mutual aid based group work (Tropp, 1977) and to lend itself to the discovery that one is not alone, or the all-in-the-same boat phenomenon, referred to as universality in the Therapeutic Factor construct (Shulman, 2006; Yalom, 1995). While many aspects of personhood potentially inform the presence and importance ascribed to mutual aid processes, for the purpose of this study, attention will be focused on

gender and mandated status of members. The implications of having a substance use disorder will be addressed in the subsequent section.

Gender

A starting point in the discussion of gender is that a binary categorical system is unrepresentative of people's lived reality. A more representative discussion of gender moves beyond the gender categories of male and female and considers people who identify as transgender male, transgender female, and genderqueer, a label claimed by some who feel that "male" and/or "female" as labels do not sufficiently describe their experience of gender (Seil, 1996; Vidal-Ortiz, 2008). Having stated this, the extant research and clinical discourse about gender and group process typically considered gender as a binary variable (Aries, 1976; Ciardiello, 2007; Cohen & Mullender, 2003; Hare et al, 1994; Saulnier, 2003; Schiller, 1995, 2003).

The findings of a study of all-male, all-female and mixed gender groups provided information about the impact that gender has on group process and mutual aid (Aries, 1976). In this study, five 90 minute groups were tape recorded and analyzed with regard to gender's impact on group process. Participants of all-male groups were less likely to speak directly to other members, instead speaking to the group as a whole (Aries, 1976). This finding stood in contrast to members of all-women groups who were more likely to speak directly to individual members of the group. Additionally, women were more likely in all-women groups to reveal more personal information about themselves than their counterparts in all-male groups (Aries, 1976). In mixed gender

groups, men were more likely than women to speak in the group and interact with other members. In mixed gender groups, men spoke less often to the group as a whole and more often directly to other members, as contrasted with interaction in the all-male group (Aries, 1976).

Another observation with regard to gender emerges out of Schiller's (1995, 2002, 2003) practice with all-women groups and her critique of the developmental stage theories of group development that were based on observation of all-male groups, i.e. the Boston Model as developed by Garland et al (1978). Schiller (1995) has proposed a developmental stage model that incorporates Feminist theory. The Relational Model considers the developmental needs of women, places primacy on cultivating safety and views power and control issues as less important to the group's growth as compared to the Boston Model (Schiller, 1995). Schiller (1995), echoing the findings of Aries (1976), has suggested that women are more likely to share intimate information earlier in a group's development than the Boston Model would suggest.

Mandated Status

The impact of mandated attendance of members on group process has received scant empirical attention. The dynamics of working with involuntary group members has been addressed in the social work with groups' literature in general (Behroozi, 1992; Rooney & Chovanec, 2004) and with regard to the group treatment of people with SUDs in particular (Milgram& Rubin, 1992). Mandated group members may engage in a

superficial manner in group treatment truncating the presence of mutual aid (Milgram & Rubin, 1992).

The involuntary client can be understood as someone who is pressured by some external source to seek social services (Rooney & Chovanec, 2004). Mandated involuntary clients are pressured to seek services as a result of the legal system (Rooney & Chovanec, 2004). Behroozi (1992) has noted tensions between the concept of working with mandated clients and professional ethics, such as the belief in fostering self determination. The chief concern is whether or not "involuntary applicants" are in fact "clients", as to become a client of a professional social worker requires "mutual agreement" (Behroozi, 1992, p.224). The primary task given this issue is to help the applicant "transform to clienthood" (Behroozi, 1992, p.224). In the absence of this transformation, the mandated "client" is likely to be superficially compliant and deny they have any problems warranting social work attention (Behroozi, 1992; Breton, 1993; Milgram & Rubin, 1992). With regard to group treatment, Lacoursiere (1980) has suggested a developmental stage model which identifies an additional pre-treatment stage identified as 'negative orientation' which is characterized by open hostility and suspicion. The work of this stage includes helping members identify and express their feelings; "examine the reasons for their reluctance"; "consider what would happen if they were not in the group"; and help participants "appreciate the usefulness of the group experience" (Behroozi, 1992, p.235).

In sum, this section attended to various factors that potentially inform the presence and importance ascribed to mutual aid processes in the small group. Factors addressed included worker attributes, such as the amount and type of group work education; elements of group structure and group size; and member attributes such as gender and volitional status. The condition for which a person enters a group is also thought to inform the salience of specific mutual aid processes (Northen, 1987). The demands of substance use disorder treatment resonate with the benefits available from mutual aid (Flores, 1997, 2001; Freeman, 2001; Khantzian et al, 1999; SAMHSA, 2005). In the next section of the literature review, the clinical and empirical literature related to group treatment of people with SUDs will be examined to identify the importance ascribed to specific mutual aid processes.

The Role of Mutual Aid in Group Treatment for People with SUDs

Evidence has indicated that group treatment is provided in 95% of abstinent-based treatment programs in the United States (Stinchfield et al, 1994) and is effective in helping members achieve abstinence and other treatment goals (Panas et al, 2003). Despite the use of different group types and models, the primary clinical rationale for the use of group treatment with this population is the resonance of group member needs with the opportunities for mutual aid that potentially arise through peer interaction (DiClemente, 1993; Flores, 1997; Freeman, 2001; Golden et al, 1994; Matano & Yalom, 1991; SAMHSA, 2005). The phenomenological discovery of the healing power

of mutual aid processes as experienced by the originators of Alcoholics Anonymous is thought to have lent credence to the use of group treatment with this population (Alcoholics Anonymous, 1976; Blume, 2002; Flores, 1997). The earliest published account of group treatment with this population noted the benefit of the "all-in-the-same-boat" phenomenon only available through the group experience (McCarthy, 1946). McCarthy (1946) observed that "the patient, perhaps for the first time, recognizes that his problem is not unique, with a resulting breakdown of his isolation and a reduction in tension" (p.101).

The theme of the healing power of connection with others who share a common condition is echoed throughout the practice literature. Golden, Khantzian, and McAuliffe (1994) have advanced the perspective that all group approaches share "an appreciation for the healing power of the connection with others" (p.303). Building upon the work of traumatologist, Judith Herman (1992) Golden et al (1994) have suggested that "the restoration of social bonds begins with the discovery that one is not alone" (Herman, 1992, p.215 as cited in Golden et al, 1994, p.303). Developing healthy attachments and relationships is seen as therapeutic, supportive and empowering for people with SUDs (Albanese & Khantzian, 2002; Deleon, 1994; Fisher, 2004; Flores, 1997, 2001, 2002; Freeman, 2001; Galanter et al, 1998; Kaufman, 1973; Khantzian et al, 1990; Milgram & Rubin, 1992; Nealy, 1997; Rawson & Obert, 2002; SAMHSA, 2005; Velasquez et al, 2001; Washton, 1992). Furthermore, empirical evidence indicates that group members of SUD treatment groups of varying types find opportunities for mutual

aid meaningful (Crits-Christoph et al, 1999; Sandahl & Ronnberg, 1990; Siqueland et al, 2004).

According to Freeman (2001), "one of the primary tools" in recovery is "mutual aid, which is available in counseling groups, education and prevention groups, informal self-help groups, and social networks, and through individual sponsors and mentors" (p.212). Developing mutual aid systems in treatment affords clients the opportunity to "practice work on recovery and related issues" (Freeman, 2001, p.212). Furthermore, Freeman (2001) has suggested the mutual aid system can teach members how to develop healthier, collaborative relationships and in turn foster affiliative bonds and greater problem solving in service of promoting recovery.

Mutual Aid in Different Types of Groups in SUD Treatment

Various group types are utilized in substance abuse treatment (SAMHSA, 2005). Structured group approaches and supportive group therapy models are typically utilized to accomplish early and mid-stage treatment needs (Banys, 2002; Flores, 1997; Nealy, 1997; SAMHSA, 2005; Straussner, 1997). Interactive group psychotherapy techniques are often reserved for people who have between 12 to 18 months of sobriety (Banys, 2002; Flores & Mahon, 1993; Straussner, 1997) and may be contraindicated for clients in early recovery (Getter et al, 1992). For work with clients in early recovery, the practice literature suggests that practitioners typically modify interactive group psychotherapy approaches to support the attainment and maintenance of sobriety (Banys, 2002; Flores, 1997; Matano & Yalom, 1991; Rugel, 1991; SAMHSA, 2005; Straussner, 1997) or

to a lesser extent, draw from social group work models (Gilbert & Beidler, 2001; Hutton, 2002; Shulman, 2003, 2006). The work of this phase is primarily cognitive and behavioral as opposed to being insight oriented (Matano & Yalom, 1991; SAMHSA, 2005; Straussner, 1997).

While the work of this phase is cognitive and behavioral in nature, the work can occur in both cognitive-behavioral groups as well as interactive groups that utilize purposeful group discussion and mutual aid processes (SAMHSA, 2005). Furthermore, mutual aid processes can be integrated with structured group interventions in such as way as to reinforce learning and engage group members (Rose, 1990).

With regard to interactive group approaches, including social group work and group psychotherapy, priority is typically afforded to the development of mutual aid. This focus on mutual aid is apparent in the practice descriptions of the application of social group work to the treatment of people with SUDs (Freeman, 2001; Gilbert & Beidler, 2001; Guida et al, 2004; Hutton, 2002; Milgram & Rubin, 1992; Shulman, 2003, 2006; Plasse, 2000). Shulman, (2003, 2005) underscored the healing power of support, challenge and discussion of taboo topics within a climate of safety and trust. Shulman (2005) stated, “I have seen the powerful way in which clients who are different in so many ways can reach out to each other in aid of their mutual recovery” (p.288). Shulman (2005) observed that “the concept of mutual aid is a crucial element in helping this population” (p.288).

Gilbert and Beidler (2001), writing about the use of an integration of social group work with narrative therapy, reported that "by telling stories in the group, otherwise isolated women connect with each other, receive understanding and validation, and claim their unique identities" (p.105). Noting the commonly occurring condition among people in early recovery from SUDs, alexithymia, Gilbert and Beidler (2001) observed "the mother has been so out of touch with her own feelings that she can often not label them" (p.108). While not labeling the processes as such, the authors seem to describe the following mutual aid processes: mutual support and the all-in-the-same-boat phenomenon. Narrative therapy within the context of group work, according to these authors, helps the women "practice honesty and trust", "feel connected to the recovering community" and begin to "put some of her feelings into words" (Gilbert & Beidler, 2001, p.110).

Nealy (1997) indicated that using a "group work model", albeit unidentified, was "crucial" to his agency's program (p.11). According to the conceptualization of the group in this model, "the group offers an opportunity to experience oneself in the presence of others, thus breaking down the isolation, fear and shame which surrounds so many of the participants" (p.11). Nealy (1997) continued by pointing out that as members help one another each member becomes a "peer educator" and that helping others enhanced self-esteem and self-efficacy (P.11).

As previously indicated, interactive group therapy models have been modified to meet the needs of this population (Albanese & Khantzian, 2002; Flores, 1997; Golden et al, 1994; Khantzian et al, 1999; Matano & Yalom, 1991; Nealy, 1997; SAMHSA, 2005; Straussner, 1997). Brown and Yalom (1977) were the first to describe the application of interactive group psychotherapy to work with alcoholics. This model viewed the discussion of alcohol related topics as resistance to the insight oriented activity of focusing on the 'here-and-now' (Brown & Yalom, 1977). In this model, the attainment of insight is afforded priority (Brown & Yalom, 1977). The application of the model was studied and indicated limited success (Yalom et al, 1978). A subsequent study indicated this model may contribute to group member relapse due to the focus on release of strong affect (Getter et al, 1992). Matano and Yalom (1991) presented a further modification of this model that placed primacy on helping members attain and maintain abstinence by drawing upon mutual aid processes, chiefly mutual support and peer challenge, as opposed to insight oriented activities. This model has been further modified by substance abuse treatment experts (Flores, 1997; Khantzian et al, 1999; Vannicelli, 1992; Washton, 1992).

For Flores (1997, 2001), the importance ascribed to mutual aid is related to the healing power of healthy attachment. The implication of attachment theory for group treatment of people with SUDS is that the ability to develop interdependent, non-exploitive relationships is viewed as the ideal goal (Flores, 2001). Group therapy "allows for patients to become part of something greater, larger, and more satisfying than their

isolated existences" (Flores, 2001, p.69). Flores (2001) identifies the potential power of the effective treatment group: "the group develops into a secure base-a transformational object-that enables patients to shift their objects of attachment from substances to the group and its members" (p.69).

As previously indicated the use of structured group approaches does not need to be viewed as incompatible with mutual aid. In support of this perspective, the SAMHSA consensus panel has indicated with regard to psychoeducational groups, that "adults in the midst of crises in their lives are much more likely to learn through interaction and active exploration than they are through passive listening" (SAMHSA, 2005, p.15). With regard to cognitive-behavioral groups, this panel also points out that the opportunity for social support makes delivery of cognitive-behavioral interventions in a group setting beneficial for people with SUDs and PTSD (SAMHSA, 2005). Furthermore, many group members are likely to possess the necessary knowledge and coping strategies with regard to substance use disorders, treatment tasks, and recovery due to prior treatment episodes and recovery attempts (Milgram & Rubin, 1992). The SAMSHA consensus panel has suggested that educational strategies include leader efforts to foster full participation in group discussion (SAMHSA, 2005).

In sum, while expressed in different manners, the group approaches with people in the early stages of recovery from SUDs place priority on helping members connect with one another within the context of a supportive environment. Members are

encouraged to interact, discuss shared concerns and help one another. The benefits that result from this interaction have been described as bolstering self-esteem and self-efficacy (Nealy, 1997); fostering the capacity for healthy attachment (Flores, 2001); acquiring needed knowledge (SAMHSA, 2005); and feeling less alone and/or isolated (Nealy, 1997; Shulman, 2005; Straussner, 1997). To further the discussion, specific mutual aid processes may be more or less salient depending on the stage of recovery and stage of group development (Rugel, 1991; SAMHSA, 2005).

The Importance of Specific Mutual Aid Processes for SUD Treatment Groups

More than 75 publications describing group practice with this population were reviewed by this author. By far the most frequently referenced mutual aid processes include mutual support (35 references), peer challenge or confrontation (31 references) and the "all-in-the-same-boat" phenomenon (universality) (21 references). The least referenced process was "the strengths-in-numbers" phenomenon with only one reference. Some mutual aid processes have been indicated to be of more salience to the beginning phase of treatment, such as the instillation of hope (Rugel, 1991; SAMHSA, 2005), the all-in-the-same-boat phenomenon (Golden et al, 1994) and the acquisition of knowledge (Milgram & Rubin, 1991).

Supportive Processes

Several seemingly inter-related supportive processes have been argued to be of importance in SUD treatment. These supportive processes are the instillation of hope, mutual support, and the "all-in-the-same-boat" phenomenon. The instillation of hope

has been described by the SAMHSA (2005) consensus panel as crucial to the work with people in early recovery. Related to this, a supportive, accepting climate in the early recovery group has been argued to be of importance in both behavior change and the development of self-esteem (Khantzian et al, 1999; Rugel, 1991).

The all-in-the-same-boat-phenomenon arises out of the interrelated processes of mutual identification, group acceptance, and an empathic milieu and is believed to contribute to a sense of belonging (Banys, 2002; Deleon, 2002; Fisher, 2004; Flores, 1997; Freeman, 2001; Galanter et al, 1998; Rawson & Obert, 2002; SAMHSA, 2005; Vannicelli, 1992; Washton, 1992). This sense of belonging provides relief by ameliorating isolation and stigma (Golden et al, 1994; Fisher, 2004; Khantzian et al, 1999). Acceptance needs to be predicated not only upon similarities but the mutual respect of difference (Freeman, 2001; SAMHSA, 2005). Furthermore, Khantzian et al (1999) and Rugel (1991) have suggested that it is in the warm glow of the accepting group, rather than through harsh confrontation, that defenses melt and denial erodes.

Rugel (1991) posits that group acceptance is especially responsive to the needs of clients in the contemplation stage of the stage of change model. Building upon the work of Rogers, Rugel (1991) postulates that if the group is an environment "that contains unconditional positive regard, empathy and genuineness, the client will feel understood and accepted and move toward a more immediate experiencing of, expression of, and acceptance of previously rejected alcoholic or drug addicted aspects

of the self" (p.480). Rugel (1991) has speculated that group acceptance contributes to self-acceptance, self-disclosure, higher member retention and involvement in group treatment.

The strengths-in-numbers process is rarely mentioned in the practice literature. This process is essentially supportive in nature. A description of this process in action is offered by Cicchetti (in press), "the worker stimulated the strengths in numbers phenomenon when the group agreed to accompany one member to his first A.A. meeting as he had been afraid to go on his own". Arguably, the work of the group is enhanced when members' strengths and contributions are called upon and recognized (Cicchetti, in press).

Mutual Demand/Challenge

Peer challenge and confrontation are also thought to be of importance with this population, although, as indicated above, without consensus among practitioners. Arguably peer challenge is better received within the context of supportive peer relationships than from a treatment professional (Fisher, 2004; Shulman, 2005). The affiliative bonds that develop as a group matures allow members to develop leverage with one another and consequently exert influence and pressure for abstinence and the attainment of other recovery oriented goals (Deleon, 2002; Fisher, 2004; Flores, 1997; Galanter et al, 1998; Kaufman, 1973; Milgram & Rubin, 1992; SAMHSA, 2005; Washton, 1997).

Perhaps where there is greatest controversy is the manner in which confrontations are made. Reported styles range from challenging questioning, to very powerful confrontation, to brutal attacks (Fisher, 2004; Kaufman, 1973; Matano & Yalom, 1991; Milgram & Rubin, 1992). The confrontation described as "brutal attacks" is most typically associated with the encounter group approach typically used in Therapeutic Communities (Deleon, 2002; Kaufman, 1973; Lieberman et al, 1973). Evidence has indicated that there is potential for this type of confrontation to result in psychological injury (Garvin & Bellamy, 2000; Lieberman et al, 1973).

Evidence has indicated that confrontation with people with SUDs may contribute to treatment drop-out and/or cause harm (Annis, 1979; Pomerlau et al, 1978). For example, a study conducted by Annis (1979) of a highly confrontational group intervention indicated that group members' self-esteem may have been damaged as a result of the intervention. The study by Pomerlau et al (1978) indicated that a group approach utilizing the hot-seat confrontation approach had a drop-out rate of 43% compared to 11% for a more didactic (and by extension, less confrontational) group.

The Dialectic Process

The dialectic process requires purposeful stimulation on the part of the worker (Shulman, 2006; van Wormer & Davis, 2003). According to van Wormer and Davis (2003) "the trained leader makes use of effective group interventions at key points in the group process" (p.166). With regard to work in the beginning stage of group development with groups of people in the earliest stage of recovery these authors

recommend the use of the dialectic process. These authors suggest that the group leader engage the group in discussion about changing drinking and/or drug use versus "continue the way I am now" (van Wormer & Davis, 2003, p.166). The anticipated outcome according to the authors is increased motivation for behavior change (van Wormer & Davis, 2003). In my opinion, this process resonates with the principles of motivational interviewing, an intervention designed to foster behavior change (Miller & Rollnick, 1991).

Mutual Aid Based Problem Solving

As group members wrestle with common problems the group is thought to be a repository of aid in identifying solutions (Daley et al, 1999; SAMHSA, 2005). The SAMHSA (2005) consensus panel points out that problem solving can occur in both cognitive-behavioral groups and support groups. While full participation is sought in helping members resolve immediate problems, the SAMHSA (2005) panel cautions that the group leader should evaluate the desirability of the suggested solution.

Taboo topics

Self-disclosure of taboo topics is likely to occur as both the group and abstinence mature (Shulman, 2005; Straussner, 1997; van Wormer, 1989). This process may not be appropriate to a newly forming group and/or a group comprised of members in early recovery (SAMHSA, 2005). While the concept of catharsis is not synonymous with that of taboo topics, some taboo topics may accompany the expression of strong affect, i.e. discussing rape trauma. Evidence indicates that stimulating the related process of

catharsis prematurely with regard to sobriety and group development may even lead to group member relapse (Getter et al, 1992).

In a companion study of two group types, coping skills and interactive group psychotherapy as developed by Brown and Yalom (1977) conducted by Kadden and colleagues (1989), Getter et al (1992) examined the impact of group process on group outcome. Group behaviors associated with reports of problems with drinking include expression/exploration of strong feelings (r_s=-.81, p<.05, n=10) and the insight oriented use of the 'here and now' focus (r_s=-.66, p<.05, n=10). The authors concluded that "newly abstinent alcoholics in our study were not ready to manage effectively the consequences of intensive here and now interaction and heightened emotional expression" (Getter et al, 1992, p.428).

A search of the literature resulted in identification of 30 outcome and/or process studies. Of these 30 studies, 23 attended to group treatment outcome (Albrecht & Brabender, 1983; Annis, 1979; Blachly et al, 1961; Crits-Christoph et al , 1999; Ends & Page , 1957; Graham et al, 1996; Ito et al, 1988; John et al , 2003; Kadden et al, 1989; Linehan et al, 1999; Litt et al, 2003; Marques & Formigoni, 2001; McKay et al, 1997; Najavits et al, 1998; Pomerlau et al, 1978; Oei & Jackson, 1982; Ross et al, 1974; Sandahl et al, 1998; Sandahl & Ronnberg, 1990; Schmitz et al , 1997; Telch et al, 1984; Wells et al, 1994; Yalom et al, 1978). Six studies explored aspects of group process (Campbell &

Page, 1993; Getter et al, 1992; Gillaspy et al, 2002; Lovett & Lovett, 1991; Page et al, 1989; Siqueland et al, 2004). One study was an analysis of discharge records and offers no discussion of group process or type (Panas et al, 2003). These studies will be drawn upon to present the evidence that illuminates the role of mutual aid in the group treatment of people with SUDs.

A limit in usefulness of this outcome literature in illuminating the role of mutual aid in group treatment of this population is that most studies neglected discussion of group process (Greene, 2002; NIDA, 2003). This is an often neglected element of intervention research as researchers rarely peer into the 'black box' of treatment (Messina et al, 2001; Weiss, 1998). Of the 23 available outcome studies, 16 offer no meaningful discussion of group process (Albrecht & Brabender, 1983; Annis, 1979; Blachly et al, 1961; Ends & Page , 1957; Graham et al, 1996; John et al , 2003; Kadden et al, 1989; Linehan et al, 1999; Marques & Formigoni, 2001; McKay et al, 1997; Oei & Jackson, 1982; Ross et al, 1974; Sandahl et al, 1998; Schmitz et al , 1997; Telch et al, 1984; Wells et al, 1994).

Of these 16 studies, a few offer limited discussion of group process. For example, Graham et al (1996) indicated the group was conducted in a "truly group approach" (p.1132). McKay et al (1997) reported that the group process involved "meaningful interaction between group members" (p.779). Group members of one group approach studied were told that they would "explore themselves mentally with

the therapist's assistance" (Oei & Jackson, 1982, p.536). Telch et al (1984) indicated that the group engaged in discussion supportive of abstinence.

Of these 23 outcome studies, 15 focused on the use of structured groups, such as cognitive-behavioral groups or skills building groups. Three studies examined the outcome of a single group intervention (Linehan et al, 1999; Najavits et al, 1998; Sandahl & Ronnberg, 1990). Of these 15 studies four compared the application of cognitive-behavioral interventions to compare group versus individual formats (Graham et al, 1996; John et al, 2003; Marques & Formigoni, 2001; Schmitz et al, 1997). Of these the primary finding is that delivery of CBT in the group format was as effective as in individual sessions (Graham et al, 1996; John et al, 2003; Marques & Formigoni, 2001; Schmitz et al, 1997) and may reinforce treatment retention (Graham et al, 1996). Schmitz et al (1997) suggested that the group format "may provide greater opportunity for social support" (Schmitz et al, 1997, p.406). Of these study reports, three suggest that an additional benefit of the group intervention is that it is cheaper than individual treatment (Graham et al, 1996; Marques & Formigoni, 2001; Schmitz et al, 1997).

Given the finding regarding treatment retention and perceived social support of group members, the study conducted by Graham et al (1996) will be discussed further. Graham et al (1996) conducted a randomized field study comparing two aftercare protocols, a group delivery versus an individual therapy delivery of a structured relapse prevention program. The protocol was administered at two sites: a 12-Step oriented, 26

day residential program (N=119; Site A) and the other, an outpatient evening program (N=151; Site B), both in Ontario, Canada. The major findings of this study were that clients in the group format were more likely to remain in treatment longer and had an increase in perceived social support by group subjects as compared to subjects in the individual treatment cohort. Evidence regarding attendance at Site A indicated that 82.6% of the group subjects remained in treatment until the "final stages" compared to 61.9% for those in the individual cohort (x^2=4.7, *df*=1, p.<.05) and at Site B, 74% for group and 64.7% for individual, x^2=1.0, *df*=1, NS). Those in the group condition reported significantly higher social support from friends than the individual cohort F (1,131) =4.1, p. <0.05). The authors concluded that "the findings suggest that this group approach is as successful as the individual approach" (Graham et al, 1996, p.1137).

Of the studies that examined cognitive-behavioral groups, eight compared CBT to another group model (Kadden et al, 1989; Litt et al, 2003; Ito et al, 1988; McKay et al, 1997; Oei & Jackson, 1982; Sandahl et al, 1998; Telch et al, 1984; Wells et al, 1994). Of these studies, four compared CBT to a model based on either the work of Brown and Yalom (1977) (Ito et al, 1988; Kadden et al, 1989; Litt et al, 2003) or that of Foulkes (Sandahl et al, 1998). Four compared CBT to group models that had no identified theoretical framework (McKay et al, 1997; Oei & Jackson, 1982; Telch et al, 1984; Wells et al, 1994). One study compared a CBT group plus an individual session versus group discussion (McKay et al, 1997).

The findings shed little light on the superiority of group model. Kadden et al (1989) indicated that coping skills training was more effective than interactional group psychotherapy for subjects with higher levels of sociopathy and psychopathology, but not neuropsychological impairment. The primary finding from Litt et al (2003) indicated no significant difference between group models. The primary finding from Ito et al (1988) was that there was no difference between group types studied. McKay et al (1997) found no significant difference between approaches at 4-6 months and had the highest over-all drop-out rate reported at 57%. Oei and Jackson (1982) concluded that structured groups were superior to the support groups. Sandahl et al (1998) indicated no difference in outcome between conditions. Telch et al (1982) reported that the support group was superior to the structured group. Wells et al (1994) indicated no difference between group protocols.

Of the studies above two provide commentary on the role of mutual aid in structured group interventions for this population (Najavits et al, 1998; Sandahl & Ronnberg, 1990). Sandahl and Ronnberg's (1990) findings support the integration of mutual aid within structured groups with this population; whereas, those presented by Najavits et al (1998) do not.

Sandahl and Ronnberg (1990) studied the impact of brief group psychotherapy on 53 subjects with an alcohol use disorder in a study design with no randomization or control. While the authors used the terms "group work" and "group psychotherapy" to

describe the intervention, the model presented was a cognitive-behavioral group presented to patients as a “course”. The approach was described as primarily cognitive-behavioral with instructional sessions, homework assignments, and opportunities for role play. In theory, role-play can involve mutual aid, as will be seen in the next study reviewed it can also involve the therapist working with one member at a time (Najavits et al, 1998). Sandahl and Ronnberg (1990) did not indicate the nature of their role-play process. Subjects attended 8 weekly-90 minute group sessions at one of four outpatient programs and one day program in Stockholm, Sweden. Of the four therapists who participated in the study, one had group treatment training in group analysis. The treatment goals included increasing self efficacy, and client selected goals of moderated drinking or abstinence.

Improvement, identified as either abstinence maintenance or alcohol use reduction, was evidenced in 20 subjects at twelve months. The findings of the alcohol habit scale indicated that 20 patients had a “positive” drinking pattern; and 15 had a “negative” pattern. Altogether 19 patients were indicated to have improved. When comparing overall results compared to pretreatment data 57% of the subjects had a “positive” drinking pattern after treatment compared to 20% in the pretreatment group and 40% in the comparison group. Nineteen percent of participants dropped out prior to treatment completion.

For the purposes of this study, the qualitative data is especially salient as it indicates that opportunities for mutual aid among members can be integrated with cognitive-behavioral interventions. Participants were asked to provide written feedback about helpful aspects of the treatment approach. Feedback that supports the belief that mutual aid processes are helpful with this population included the following comments: "I discovered how different we were"; "I got the opportunity to meet people with the same problems, and was able to talk about it without being ashamed"; "To meet others and discover that you are not alone. To see how different people think. Learned how to be open to others. One could put a question and get an answer"; "very good to be able to sit down and share experiences. You need to talk to people who have been through the same"; "That you are not alone. It made an impression on me that one had been sober for two years and still he felt that he could not rely on himself"; "the cohesiveness was positive"; "good to hear about others. Learned where the dangers are"; "it was good to be able to talk without lying"; "felt good that somebody cared about me" (Sandahl & Ronnberg, 1990, p.469-470). To translate into the argot of mutual aid, the respondents identified the benefits of mutual support, sharing data, and the all-in-the-same boat phenomenon and that these processes resulted in a reduction of shame and isolation.

Sandahl and Ronnberg (1990) suggested that "at this stage it is only possible to speculate regarding the curative factors" in group treatment but that the subjects' spontaneous feedback is important information in determining these factors (p. 473).

Sandahl and Ronnberg (1990) concluded that patients can be helped by both the content of the sessions as well as group process.

On the other hand, and with a population affected by both SUDs and PTSD, Najavits et al (1998) report findings that do not support the use of mutual aid in group treatment. Najavits et al (1998) conducted a study of a manualized cognitive-behavioral group treatment specifically designed for women with both an SUD and Post Traumatic Stress Disorder (PTSD), referred to as "Seeking Safety". The appellation, "seeking safety", refers to the overarching goal of the intervention which is designed to help patients attain abstinence and reduce PTSD symptoms (Najavits et al, 1996, 1998; Najavits, 2002). The intervention included 24-90 minute group sessions occurring at the rate of two sessions per week over the course of 12 weeks. The sessions were highly structured, didactic and supportive in tone (Najavits et al, 1996). The structure included a check-in; attendance, abstinence, and homework tally; quote of the day; topic presentation and rehearsal; homework review; and a closure (Najavits et al, 1996). The therapist remained available after each session and was available by phone to provide individualized support (Najavits et al, 1996). Patients were encouraged to call each other for support and paired with other members to be support partners (Najavits et al, 1998).

The sample included 27 women who had attended at least one session of the treatment. Patients were identified as "completers" if they attended at least six

sessions (n=17). Patients who attended five or fewer sessions were identified as “drop-outs” (n=10). Three treatment groups were conducted, two by the senior author and one by a licensed clinical social worker. The group work educational background of the research therapists is not identified.

The study sought to measure both patient outcome and satisfaction with various treatment elements. Of the 27 patients in the sample 63% were completers (n=17) and 37% were identified as drop-outs (n=10). However, when including all patients who had met the criteria for the study the drop-out rate becomes 45.2%, 14 drop-outs out of a sample size of 31. The mean percentage of sessions attended was 67% (SD=.18).

This group protocol did not require members to be abstinent. Treatment success with regard to substance use included fewer using days. The main measure for substance use was the weekly Substance Use Inventory, a self-report instrument. Urine and breath analysis tests were administered as well. The results showed a significant increase in abstinence over time, using generalized estimating equations ($p<.008$). Pre-test data indicated that this sample used substances on average 8 days within the 30 days prior to treatment. Approximately, 20% of those that completed treatment reported abstinence from all substances during the first week of treatment. Approximately 55% of treatment completers reported abstinence from all substances at

the end of treatment, week 12. Toxicology tests were consistent 73% of the time with self-report measures.

Patient satisfaction with treatment was high. On the client satisfaction questionnaire, scaled 1-4 with 4 the highest, the mean was 3.03 at session number 15 (SD=.44, n=10). Patient alliance with treatment, scaled 1-6 with 6 the highest, showed a mean of 4.75 (SD=.67, n=13). The end of treatment questionnaire provided information on the extent to which patients perceived certain aspects of treatment to be helpful. Items were scaled as -3 (very harmful) to +3 (very helpful). The mean for "treatment overall" at 3-month follow-up was M= 2.33 (SD=1.07, n=12). At the three month follow-up, the most favorably ranked items included "focus on abstinence", M= 1.92 (SD=1.08, n=12); "the therapist overall", M= 2.17 (SD=1.19, n=12); "the focus on coping skills", M= 2.33 (SD=.78, n=12); and "the option to reach the therapist outside of the session", M= 1.67 (SD=1.3, n=12).

The three most negative elements of the treatment protocol according to participants were the session length, M=.60 (SD=2.07, n=10) stating it was too short; the option to call other members M=.33 (SD=1.37, n=12); and the assignment of a group partner, M=-.20 (SD=.45, n=5). The "support of other members" received a rating of M=.92, (SD=1.08, n=12) at three month follow-up. Najavits et al (1998) concluded that "these findings belie the notion that group treatment is primarily effective because of support by others with similar problems" (p.452).

Of the 23 outcome studies, 15 addressed the application of structured groups, while 8 attended to the use of interactional groups (Albrecht & Brabender, 1983; Annis, 1979; Blachly, 1961; Crits-Christoph et al, 1999; Ends & Page, 1957; Pomerlau et al, 1978; Ross et al, 1974; Yalom et al, 1978). Of these eight studies, only two are clearly grounded in a group therapy theoretical frame (Albrecht & Brabender, 1983; Yalom et al, 1978). The other study reports failed to indicate the theoretical model of group treatment (Annis, 1979; Blachly, 1961; Crits-Christoph et al, 1999; Ends & Page, 1957; Pomerlau et al, 1978; Ross et al, 1974). Of these studies the most informative regarding the relevance of mutual aid for group treatment of this population is provided by the NIDA funded outcome study conducted by Crits-Christoph et al (1999) and the companion process study reported on by Siqueland et al (2004). The study conducted by Pomerlau et al (1978) also provides some information about mutual aid processes as the group approach sought to sequence group processes.

Crits-Christoph et al (1999) conducted a NIDA funded multi-site study in which 487 cocaine dependent patients were randomly assigned to one of four manualized treatment conditions: Group Drug Counseling (GDC) plus individual drug counseling (IDC) vs. GDC plus individual cognitive therapy (CT) vs. GDC plus supportive-expressive therapy (SE) vs. GDC alone. Individual Drug Counselors were identified as being more experienced with this population than other individual counselors in this study. The treatment consisted of a six month active phase and a three month booster (Crits-Christoph et al, 1999). Group counseling sessions were 90 minutes in length and held

once per week for the active phase of treatment. Patients in the GDC alone cohort met with the group counselor individually once per month for 30 minutes during the booster phase. The individual sessions were 50 minutes in length and held twice per week during the first 12 weeks, once per week during weeks 13-24 and once per month during the booster phase.

The group treatment protocol was developed by Daley et al (1999). The group approach highlighted mutual support, peer challenge, sharing information, and mutual aid based problem solving (Daley et al, 1999). Daley et al (1999) used a phased approach in conceptualizing the group intervention with a psychoeducational focus in the first 12 weeks, followed by a problem solving oriented group for weeks 13-24. The psychoeducational group focused on providing information about addiction, the recovery process, relapse prevention, and the role of self-help and other support systems (Daley et al, 1999). Of the group processes used in this phase of the intervention, Daley et al (1999) noted: "Often the most effective teaching is done in an interactive format because clients learn most from what they think about and contribute in the group" (retrieved at www.nida.nih.gov/TXManuals/DCCA/DCCA3.html on October 7, 2007).

In the problem solving group the counselor's role was described as fostering peer interaction and supporting members in working on meaningful problems or issues (Daley et al, 1999). In this approach the group counselor is encouraged to attend to

individual concerns, the group-as-a-whole; interpersonal interaction, problem identification, and identification and working through of obstacles to effective group process (Daley et al, 1999). The counselor stimulated peer interaction including mutual support and challenge (Daley et al, 1999).

The group format was identified as including the following components: pre-group milling about; beginning with a check-in; identification of lapses and relapses; problem identification; group prioritizing of sessional content; group participation in individual problem solving; and a sessional ending (Daley et al, 1999). Typical problems or issues identified in group were identified as including: motivation, cravings, relapse, problems in attending 12-Step programs, family and other interpersonal problems, upsetting emotions, and other concomitant psychiatric conditions (Daley et al, 1999).

The measures included the Addiction Severity Index, the ASI Drug Use Scale, the ASI Psychiatric Severity Composite Score, the Beck Anxiety Inventory, the Helping Alliance Questionnaire and urinalysis. Assessments were completed at intake, the end of orientation, monthly during the active phase of treatment, and then at months 9, 12, 15 and 18.

All treatments yielded decreased cocaine use after baseline ($F_{6, 2503}$=4.3; P<.001). Regarding the ASI-Drug Use Composite score, IDC plus GDC was significantly better than GDC plus SE and GDC plus CT ($F_{1, 458}$ =7.76; P=.006) and significantly better than GDC alone ($F_{1, 458}$=6.8; P=.009). Crits-Christoph et al (1999) measured the number

of days until 50% of a cohort had dropped out of treatment: 46 for IDC; 56 for GDC; 72 for SE; and 77 for CT. Despite the increased likelihood to drop out, the authors concluded that IDC plus GDC produced “superior reductions” of overall drug use compared to the other interventions in the study (Crits-Christoph et al, 1999, p.499).

All treatments showed significant improvements from baseline to post-treatment on past 30 days cocaine use measures ($F\ 6, 2503=4.3$, $P<.001$). Cocaine use in the past 30 days improved from a mean of 10.4 (SD=7.8) days at baseline to 3.4 (6.5) days at 12 months. By month 6, 39.8% of patients in the IDC/GDC cohort reported cocaine use; 50.3% in SE/GDC; 58.2% in CT/ GDC; and 52% in GDC alone.

The study conducted by Siqueland et al (2004), a companion to the NIDA Collaborative Cocaine Treatment Study reported on by Crits-Christoph et al (1999), sought to identify patient perception of meaningful aspects of treatment (N=487). Of the 487 patients treated, 375 completed the Helpful Aspects of Treatment Measure and other assessments for this study. The assessment instruments included the Helpful Aspects of Treatment (HAT) questionnaire, the Addiction Severity Index, the Brief Symptom Inventory, and the Helping Alliance Questionnaire.

The HAT questionnaire included 27 items regarding aspects of treatment including individual therapy, individual drug counseling and group drug counseling. The respondents rated the items on a Likert-like scale with options ranging 1 to 5 (not helpful to very helpful) (Siqueland et al, 2004). The group items and mean totals

included: “being in a group where I could share information or get ideas from other people struggling with addictions” (M=3.85, SD=1.24); “being in a group where others seemed to care about each other and be supportive of me” (M=3.85, SD=1.29); “attending a group where other people expressed their personal thoughts, feelings, and emotions” (M=3.79, SD=1.29); and “attending a group where I was supposed to talk about whether or not I abstained and why” (M=3.69, SD=1.26) (Siqueland et al, 2004, p.173). While not labeled as such, these processes reflect the following mutual aid processes: mutual support, mutual demand, and sharing data.

Pomerlau et al (1978) reported on a study of group treatment for middle-income problem drinkers in which subjects were randomly assigned to a “multicomponent positive reinforcement procedure emphasizing moderation” (N=18) versus a “traditional denial-confrontation therapy emphasizing abstinence” (N=14) (p.187). For both conditions therapy was conducted in groups with 3 to 7 members in once weekly 90 minute sessions for 3 months and in 5 additional sessions over 9 months following discharge (Pomerlau et al, 1978). The behavioral intervention included the charge of a $300.00 commitment fee as well as a prepaid treatment fee of $85.00 to $500.00. The traditional treatment group members were charged from $5.00 to $30.00 per group session for 17 sessions which was not prepaid; they were not charged a commitment fee.

The behavioral intervention included moderated drinking as a goal with treatment emphasis placed on assertion training, emotional coping skills, deep muscle relaxation and development of hobbies (Pomerlau et al, 1978). The group process was not clearly described but was indicated to be primarily didactic. The traditional treatment was focused on helping participants achieve total abstinence (Pomerlau et al, 1978). The group process considered stages of group development and focused on stimulating peer interaction. The first phase, described as the first three sessions, focused on promoting group cohesion and mutual trust. The second phase focused on stimulating member to member confrontation using a hot seat approach. The work of this phase was reported as inducing strong emotions including anger, sadness, and guilt. The third phase lasting two to three sessions focused on stimulating mutual support. The therapists were reported as having expertise with either behavioral treatment or traditional treatment, but not both.

The behavioral treatment outcome was measured by use of patient self-reports and other program record keeping and a retrospective questionnaire. The traditional treatment outcome was measured by the retrospective questionnaire and program record keeping. Treatment improvement was measured by reduction or abstinence depending on the treatment condition. Drop-out was defined as “missing at least the last session of treatment and not attending follow-up” (Pomerlau et al, 1978, p.194).

In the behavioral intervention 72% were improved as measured by drinking reduction at one year with 11% dropping out (Pomerlau et al, 1978). In the traditional treatment group 50% were identified as improved with 43% dropping out (Pomerlau et al, 1978). At one year follow-up 6% of participants in the behavioral condition were abstinent compared to 14% in the traditional treatment. The authors suggested that the commitment fee charged in the behavioral intervention may have enhanced attendance compliance (Pomerlau et al, 1978). The researchers suggested that the demand of abstinence in the traditional treatment as opposed to the use of group processes may have accounted for a significant proportion of treatment benefit (Pomerlau et al, 1978).

Of the 30 studies identified in this literature review, 6 attended to aspects of group process (Campbell & Page, 1993; Getter et al, 1996; Gillaspy et al, 2002; Lovett & Lovett, 1991; Page et al, 1989; Siqueland et al, 2004). As Siqueland et al (2004) has already been reported, the remaining five process studies will be addressed. Two of these studies utilized the Hill Interaction Matrix to examine process of marathon groups (Campbell & Page, 1993; Page et al, 1989); one used a researcher created instrument to examine the types of processes that occur in different group types (Getter et al, 1996); one sought to identify therapeutic factors using Yalom's Q-sort instrument (Lovett & Lovett, 1991); and one studied the impact of group alliance on outcome (Gillaspy et al, 2002).

Two studies indicated that member to member interaction was found in marathon groups (Campbell & Page, 1993; Page et al, 1989). Page et al (1989) utilized the Hill Interaction Matrix to measure the content and quality of interaction among group members of a 12 hour marathon group. The authors indicated that the group included six black and six white adult men with substance use disorders as well as three therapists. The therapists included a doctoral level psychologist, a counselor with a M.Ed. and one with a B.A. The study report did not indicate the therapists' training or the theoretical framework.

The Hill Interaction Matrix is comprised of 16 cells that provide a "graded measurement for both the level of therapeutic work occurring in the group and the content of verbal interactions" (Page et al, 1989, p.222). The level of work is divided into four categories that range from least emotionally threatening to most threatening: "conventional, assertive, speculative, and confrontive" (Page et al, 1989, p.222). The level of content ranges from least member-focused to most member-focused: "topic, group, personal, and relationship" (Page et al, 1989, p.222). In addition to rating interaction the instrument allows for measurement of therapist initiated interaction and member refusal of participation.

The findings indicated that the most group time (48% of the time) was spent in the relationship/speculative and personal/speculative categories. The highest levels of work occurred in the middle six hours of the group. The group in this study was highly

confrontational and “unusually assertive” (Page et al, 1989, p.225). The group was not hostile and did not spend time speculating about the causes of people’s problems. The leader initiated interaction 5%-10% of the time in the relationship category; interaction was refused 1%-5% of the time (Page et al, 1989). The authors concluded that marathon groups can afford participants the opportunity to “engage in direct and honest relationships, to examine feelings and concerns, and to receive feedback on personal problems” (Page et al, 1989, p.225).

Campbell and Page (1993) conducted a similar study as that conducted by Page et al (1989) utilizing the Hill Interaction Matrix as the primary means of assessment of group process. This study examined the group process of a 12 member, all male 17-hour marathon group in a residential treatment program. The authors provided no information about the therapist (s) facilitating the group.

The findings indicated that the group spent the most time in the relationship content category (31%), viewed as the “most therapeutic“(Campbell & Page, 1993, p.41). The group spent 56% of the time in content categories deemed of “higher therapeutic value” (Campbell & Page, 1993, p.41). The authors concluded that “the treatment value of the marathon group is supported” (Campbell & Page, 1993, p.43).

Getter et al (1992) in a companion study to that conducted by Kadden et al (1989) evaluated the groups in those protocols to determine the extent to which the treatments were delivered as designed. The coping skills group was based on cognitive-

behavioral principles (Getter et al, 1992; Kadden et al, 1989) and the interactional group was based on the work of Brown and Yalom (1977). The researcher designed rating system, the Group Session Rating Scale, evaluated seven items. Raters were instructed to indicate if any of the seven items occurred at least once in each one minute period. The seven items included: skill training; problem solving; role playing; high risk situation identification; interpersonal learning; exploration and expression of feelings; here and now focus (Getter et al, 1992).

The findings indicated that those activities related to the coping skills group, such as skill training, role playing, and problem solving, occurred more often in the coping skills group than the interactional group and conversely, interpersonal learning, expression of feelings and the here and now focus occurred more frequently in the interactive group (Getter et al, 1992). The identification of high risk situations was the exception as it occurred with equal frequency in both group formats (Getter et al, 1992). Spearman rank order correlations were used to judge the relationship between group activities and the percentage of abstainers or those reporting no drinking related problems at discharge (Getter et al, 1992). Group behaviors associated with reports of problems with drinking included less expression/exploration of feelings (r_s=-.81, $p<.05$, n=10) and less exploration of the here and now focus (r_s=-.66, $p<.05$, n=10). The authors concluded that "newly abstinent alcoholics in our study were not ready to manage effectively the consequences of intensive here and now interaction and heightened emotional expression" (Getter et al, 1992, p.428).

One study of interactive group psychotherapy indicated that group members perceived worker initiated processes to be more helpful than those derived from peer interaction (Lovett & Lovett, 1991). Lovett and Lovett (1991) reported on a study of the perception of patients on an alcohol treatment in-patient unit regarding their perception of group therapeutic factors using an adaptation of Yalom's therapeutic factor questionnaire (N=70). The treatment program offered a wide variety of group treatment services, among other treatment interventions. Participants were asked to consider all treatment groups in responding to the survey instrument. The questionnaire was administered at four points, in the introductory program (N=34), after 2 weeks in the main treatment program (N=12), 4 weeks into that program (N=26), and at the 6th week, discharge (N=4). Fourteen therapists were asked to rank the factors as well. The factors were ranked from 1-12, with 1 representing the most helpful and 12 the least.

The factors perceived as most helpful were self-understanding, existential issues and cohesiveness. The factors perceived as least helpful were identification, guidance, family reenactment, and instillation of hope. The reports of 14 therapists who completed the questionnaire echoed this ranking. The authors concluded that the "therapist working with alcoholic in-patients should be exploring existential issues and promoting self understanding and cohesiveness in group therapy" (Lovett & Lovett, 1991, p.369).

One process study indicated that group alliance may have no impact on outcome (Gillaspy et al, 2002). Of note, this study does not indicate the extent to which mutual aid occurred. Gillaspy et al (2002) studied the relationship between patient perception of group alliance and group cohesion on the impact had on outcome for men attending group therapy 3 times per week in a 21 day residential substance abuse treatment program (n=49). Group alliance was defined as "the active collaboration on therapeutic issues that occurs between members, between members and therapist(s), and between members and the group as a whole" (Gillaspy et al, 2002, p.216). Cohesion was defined as "the sense of close association within and emotional commitment to the group" (Gillaspy et al, 2002, p.216). The group treatment was a modified version of Yalom's 1995 approach to group psychotherapy. The researchers do not indicate in what manner the approach was modified. The groups were led by two psychologists, a social worker and a nurse. The study report does not indicate the leaders' group training or education.

The patient outcome measures included the Beck Depression Inventory-II, the Outcomes Questionnaire, the Inventory of Drug Use Consequences (Gillaspy et al, 2002). The process measures included the GTAS, a self-report measure of group therapy alliance. Sample items provided include "All the other clients in the group are helping me", "All the other members in the group are in agreement with the therapists about the way the therapy is being conducted", and "The other clients and I are in agreement with each other about the goals of the therapy group" (Gillaspy et al, 2002, p.220). The

GAS was used to measure cohesion, system maintenance, and conformity (Gillaspy et al, 2002). The GAS and GTAS were completed at the fourth and eighth sessions, but due to low response on the eighth session, feedback from the fourth was used exclusively (Gillaspy et al, 2002). The personal measures were administered at admission, the 4th and 8th sessions of group treatment, and at 30 days post discharge. Using hierarchical regression analyses predicting treatment outcome using group alliance and cohesion, the authors concluded that "group alliance does not…seem to be significantly predictive of change in alcohol and drug use consequences" (Gillaspy et al, 2002, p.224).

In sum, of the process studies reported, three suggest the presence and importance of mutual aid processes (Campbell & Page, 1993; Page et al, 1989; Siqueland et al, 2004). One suggests that strong emotional catharsis may lead to relapse (Getter et al, 1992). Another indicated that worker initiated processes, such as self-understanding, were found to be important to both group therapists and patients (Lovett & Lovett, 1991). Finally, one study suggested that some aspects of group process, such as group alliance, may have no significant bearing on outcome (Gillaspy et al, 2002).

Of all the reported studies, one makes a compelling argument in favor of the use of group treatment as compared to individual treatment (Panas et al, 2003). This study involved the review of the Massachusetts Substance Abuse Information System (SAMIS) database. The data set for the study "consisted of 17,016 clients accounting for 17, 618 discharges from 63 outpatient programs in fiscal year 1998" (Panas et al, 2003, p.272).

Due to missing discharge data, the records of 10, 297 individuals were removed from the sample, leaving 7,815 cases included in the analysis.

The goal of the study was to "examine the relationship between type of substance abuse treatment, defined as individual and group counseling, and two measures of treatment performance: Treatment Completion and Goal Achievement" (Panas et al, 2003, p.272). Treatment completion was identified as a dichotomous variable indicating 'yes/no' as to whether the client completed the "contracted length of time" and "does not necessarily indicate that the client is in recovery" (Panas et al, 2003, p.273). Goal achievement reflected the counselors' perception of the client's attainment of goals regarding the following: "alcohol use, drug use, educational/vocational plans, social functioning, emotional functioning, family situation, illegal behavior, and length of stay" (Panas et al, 2003, p.273). Treatment mix, that is the type of treatment, was identified as No Group Treatment, Light Group Treatment, and Heavy Group Treatment. Light group treatment was defined as receiving 2/3rds of their treatment in a group format; Heavy Group Treatment was defined as receiving 2/3rds or more of one's treatment in a group format. Additionally the data was analyzed according to the number of treatment sessions received. Treatment mix was described as the amount of treatment received in group format. The data was further analyzed in terms of the number of treatment episodes received, or the amount of treatment received. These categories included 1-3 sessions; 4-12 sessions; 13-21 sessions; 22-30 sessions; and 31+ sessions.

Over a third (37%) of the 7, 815 completed treatment. Half of all (50%) discharges received only individual treatment; 18% were in the Light Group Treatment Mix; and 32% were in the Heavy Group Treatment Mix. Chi-square analysis indicated that clients receiving Heavy Group Treatment were more likely to attain better Treatment Completion and Goal Achievement rates than those in the No or Light Group Treatment cohorts . Clients who received either between 4-12 sessions, 13-21 sessions, or 22-30 sessions (55% of the total sample) were likely to have performed better if they received the Heavy Group Treatment mix than the other two treatment mixes. For both Treatment Completion and Goal Achievement, the findings of chi-square analysis were significant at the $p<.01$ level for 4-12 sessions; for 13-21 sessions; for 22-30; and for 31 or more. Clients who received 31 sessions or more (11% of the sample) achieved the same results regardless of the treatment mix.

Using General Estimating Equations models, findings indicated that clients who received between 4-30 sessions and were in the Heavy Group Treatment mix were more than twice as likely as those in other mixes to complete treatment. Clients receiving between 4-12 sessions and 22-30 sessions of Heavy Group Treatment were more than twice as likely as counterparts to achieve treatment goals. Clients in the Heavy Group Treatment mix and received 13-21 sessions were 50% more likely to have achieved their treatment goals. Adjusted odds ratios were as follows for Treatment Completion for Heavy Group Treatment by the number of sessions was as follows: for 1-3 sessions (1.62), for 4-12 sessions (2.23) , for 13-21 sessions (2.31) , for 22-30 sessions (2.70), and

for 31 or more sessions (1.12). Adjusted odds ratios were as follows for Goal Achievement for Heavy Group Treatment by the number of sessions was as follows: for 1-3 sessions (1.00), for 4-12 sessions (1.99), for 13-21 sessions (1.46), for 22-30 sessions (2.44), and for 31 or more sessions (1.10). Finally, the researchers indicate that additional research is needed to determine the attributes of group treatment that are associated with better outcomes. The authors also report that a limitation of their study was that the concept of "treatment completion" and "goal achievement" may have varied among clinicians.

Conclusion

To conclude this review of the literature, key points will be highlighted regarding both mutual aid as group treatment technology in general and the role of mutual aid in SUD treatment groups in particular. As previously indicated, mutual aid as group treatment technology can be understood as an exchange of help wherein the group member is both the recipient as well as provider of help in service of attaining common individual and group goals (Borkman, 1999; Gitterman, 2006; Lieberman, 1983; Northen & Kurland, 2001; Schwartz, 1961; Shulman, 2006; Steinberg, 2004; Toseland & Siporin, 1986). The nature of this help is understood as including several inter-related and distinct processes, such as the all-in-the-same-boat phenomenon, mutual support, peer challenge, individual problem solving, the dialectic process and the instillation of hope (Northen & Kurland, 2001; Shulman, 2006; Yalom, 1995).

Often proposed as unique to social group work (Kurland & Salmon, 1992), evidence suggests that mutual aid can occur within a variety of group approaches, including cognitive-behavioral therapy (Sandahl & Ronnberg, 1990) and group therapy (Holmes & Kivlighan, 2000; Matano & Yalom, 1991; Schleifer, 2007; Yalom, 1995). While mutual aid occurs spontaneously within self-help groups of various types, arguably some mutual aid processes may warrant special group facilitation skills in order to be realized (Levy, 1979). Furthermore, as indicated in the first chapter, the group leader who does not actively cultivate mutual aid may use interventions that truncate the presence of mutual aid (Flores, 1997; King & Lorenson, 1989). These interventions have been referred to as casework (Steinberg, 1997) and/or individual work in a group setting (Greene, 2002) and are often explained as the result of insufficient group specific education of group leaders (Flores, 1997; King & Lorenson, 1989; Steinberg, 1992).

Several factors interact with the presence and priority of mutual aid processes. These factors can include member characteristics, such as mandated status and/or difficulty forming healthy attachments, characteristics not uncommon among people in SUD treatment (Flores, 1997, 2001; SAMHSA, 2005). Consequently purposeful leader intervention is warranted to stimulate clinically salient mutual aid processes (Steinberg, 1992; van Wormer & Davis, 2003).

The clinical literature suggests that mutual aid is a key tool in SUD treatment and a primary reason for the use of group interventions (Freeman, 2001; SAMHSA,

2005). The reason that mutual aid is an important tool in SUD treatment is best explained by the resonance between mutual aid processes and the treatment tasks of early and mid-stage recovery. The treatment tasks for people with SUDs are largely cognitive and behavioral and can be accomplished in interactive groups that employ mutual aid (Matano & Yalom, 1991; Crits-Christoph et al, 1999) as well as cognitive-behavioral group therapy (Sandahl & Ronnberg, 1990). Mutual aid processes stimulate cognitive and behavioral processes (Levy, 1979) and can be drawn upon in service of promoting behavior change (DiClemente, 1993). While no study clearly demonstrates that a mutual aid based group approach is superior to other group models, the beneficial role of peer connection can be extrapolated from the empirical evidence. Evidence indicates that as compared to individual treatment, group interventions contribute to better attainment rates of treatment goals (Panas et al, 2003); treatment completion (Panas et al, 2003); treatment retention (Graham et al, 1996; Panas et al, 2003); and increased perceived social support (Graham et al, 1996).

The literature fails to suggest the superiority of any particular model, which is an observation noted by NIDA (2003) and indicated by the absence of any particular model identified as an evidence-based approach (SAMHSA, retrieved on Friday, November 23, 2007 at http://www.nrepp.samhsa.gov/). While the empirical literature would suggest that models are meant to be compared, programs that have been identified as "evidence-based" involve the use of multiple group models. The Matrix Model (Rawson & Obert, 2002), for example, is identified as being an evidence-based program that

includes a variety of group approaches including support, education, and cognitive-behavioral group treatment in addition to individual and family treatment (retrieved on Friday, November 23, 2007 at http://www.nrepp.samhsa.gov/).

Despite the absence of strong evidence indicating the superiority of a particular model, there is evidence that suggests that group efforts to stimulate insight and catharsis for clients in early recovery may contribute to relapse (Getter et al, 1992). There is also evidence that excessively confrontational groups may erode a client's self esteem (Annis, 1979) and contribute to drop-out (Pomerlau et al, 1978). Finally, there is strong evidence that opportunities for mutual aid processes within various group models are perceived to be important to group members (Sandahl & Ronnberg, 1990; Siqueland et al, 2004).

While mutual aid processes seem to be viewed as clinically important (Furhiman & Burlingame, 1990; Holmes & Kivlighan, 2000), most studies ignored discussion of group process (Albrecht & Brabender, 1983; Annis, 1979; Blachly et al, 1961; Ends & Page , 1957; Graham et al, 1996; John et al , 2003; Kadden et al, 1989; Linehan et al, 1999; Marques & Formigoni, 2001; McKay et al, 1997; Oei & Jackson, 1982; Ross et al, 1974; Sandahl et al, 1998; Schmitz et al , 1997; Telch et al, 1984; Wells et al, 1994). This shortcoming in this body of literature echoes observations made about intervention research in general (Messina et al, 2001; Weiss, 1998). This limitation of the literature makes theory building and interpretation of the findings difficult.

While no truly satisfying explanation for the absence of process information is forthcoming, a careful review of these studies indicates that few identified the educational background of the group leader as well as the theoretical framework of the group. Only the study conducted by Sandahl and Ronnberg (1990) identified that a practitioner had had extensive group treatment training. The insufficient attention to information about group theory, worker education, and group process resonates with the critique of this body of literature that suggests it represents the application of individual interventions in group settings (Greene, 2002).

Of the studies that examined interactive group work, most drew upon the model proposed by Brown and Yalom (1977) which viewed substance use as the result of intrapsychic conflict and consequently placed primacy on developing insight (Albrecht & Brabender, 1983; Ito et al, 1988; Kadden et al, 1989; Litt et al, 2003; Yalom et al, 1978). The view of substance use as the result of intrapsychic conflict no longer holds currency among most treatment professionals (SAMHSA, 2005). Furthermore, evidence has indicated that the processes associated with insight oriented techniques may stimulate relapse (Getter et al, 1992).

Several of the group treatment studies in the SUD field examined cognitive-behavioral interventions. Of these studies, four indicated that the group treatment was the setting rather than the means of the intervention (Graham et al, 1996; John et al, 2003; Marques & Formigoni, 2001; Schmitz et al, 1997). With the exception of John et al

(2003) these researchers suggest the primary benefit was the cost-savings of the group format.

Two studies clearly suggested that the help of the worker was perceived to be more important to group members than that available through peer interaction (Lovett & Lovett, 1991; Najavits et al, 1998). The findings of Lovett and Lovett (1991) run counter to the clinical literature (Khantzian et al, 1999; Rugel, 1991; SAMHSA, 2005) which suggests that identification among members would be important in early recovery as opposed to self-understanding, sometimes referred to as "insight". Of note, the findings indicated congruence between both therapists and group members as to the importance of specific therapeutic factors. This fact highlights the salience of the observation made by Lieberman (1983) who suggested that therapist ideology clouds the findings of patient perception studies.

That group members enter group treatment with intrapsychic obstacles to interaction is widely recognized by group treatment experts in general (Schwartz, 1961; Shulman, 2006) and in the SUD field (Flores, 1997, 2001). Arguably people with SUDs have difficulty forming healthy, trusting relationships. Related to this then is the belief that special worker skills are needed to facilitate mutual aid processes (van Wormer & Davis, 2003). Consequently, one could wonder if the women in the groups conducted by Najavits et al (1998) were not skillfully helped to connect with one another; that the

mere suggestion to connect with each other is not sufficient to ensure that mutual support ensues.

In sum, mutual aid is thought to be an important element of group treatment. At the same time, the presence and importance ascribed to mutual aid has not been sufficiently examined, in part due to the lack of measurement instruments (Garret, 2005) and perhaps in part due to research utilizing practitioners who are insufficiently trained in group approaches where the group is the means, not simply the setting. While addressed in the clinical literature, additional gaps in the empirical literature can be found regarding the impact of gender, time, mandated status, and length of sobriety.

Chapter Three: Research Design and Methodology

This section will identify key features of the research design and methodology of this study. The key features addressed include the following: the type of and rationale for the selected research design; target population and sampling; data collection procedures; study variables and instrumentation; the plan for data analysis; and the human subject safety protocol.

Research Design and Rationale

This study employed a quantitative design that utilized an anonymous, internet delivered survey instrument to those 6,000 members of NAADAC that possessed an email address. Given the lack of data about the amount and type of mutual aid processes in group treatment in the SUD field, this study was conceptualized as primarily exploratory in nature. The survey, designed through and hosted at Survey Monkey, was administered two times to NAADAC members by a representative of the association in an informational email that contained a link to the survey. This email was delivered on May 5, 2008 and again on May 19, 2008 to ensure that all NAADAC members that wanted to participate had the opportunity. Data collection ceased on June 6, 2008.

The key rationale for employing a quantitative research design was the potential to generate data that could provide information about the extent to which mutual aid processes occur in group treatment in the SUD field. Of equal importance, the data provides information about factors that interact with the amount and type of mutual aid

processes, such as the amount and type of education and training received by the group leader.

Major Questions and Hypotheses

This study is designed to explore the several questions related to mutual aid in group treatment for people with Substance Use Disorders and the impact of social work education on the presence of mutual aid. Questions include:

- To what extent do specific mutual aid processes occur in treatment groups for people with Substance Use Disorders? Are some processes more likely to occur than others?
- Will respondents reporting at least one semester of social group work specific education yield a higher total score on the Mutual Aid Processes measure when compared to group leaders with other educational backgrounds?
- Will social workers with three or more semesters of group work specific course work yield a higher total score on the Mutual Aid Processes measure when compared to social workers with less than three semesters of group work specific coursework?
- What is, if any, the relationship between respondents' 12 Step participation and the presence of specific mutual aid processes and the total score on the Mutual Aid Processes measure?
- What variables are associated with high levels of mutual aid?

Hypotheses examined through this inquiry included:

- Respondents who are social workers that possess an MSW with at least one semester of group work specific education will yield higher total scores on the Mutual Aid Processes Scale (MAPS) as compared to those with other professional degrees and at least one semester of group work specific education.
- Respondents who are social workers that possess an MSW with three or more semesters of group work specific education will yield a higher total score on the MAPS as compared to MSW social workers with 2 or fewer semesters.
- There will be no statistically significant difference on the mean total score of the MAPS between respondents who report that they participated in a 12 Step program versus respondents reporting no participation in a 12 Step program.

Target Population, Unit of Analysis, Sampling

Resonant with the exploratory nature of this study, data was collected from a sample derived purposively. Non-probability, purposive sampling indicates that a sample was selected for reasons that reflect the researcher's knowledge of the population and the resonance with the study's goals (Rubin & Babbie, 2005). The members of NAADAC that possessed an email address were selected as the sampling frame as it is they comprise the largest association of addiction professionals in the

United States and heterogeneous with regard to demographic and educational variables (see Appendix B). Of the 10, 000 members of NAADAC, 6,000 possessed a current email address as of May 2, 2008. All 6,000 members with an email address were invited to participate in the survey. A trigger question querying if a respondent had facilitated an SUD treatment group within the past two years, which if answered affirmatively, led the respondent to additional questions about the group on which they were reporting and the presence of amount and types of mutual aid processes in that group.

Data Collection Procedures

The survey was designed and hosted through the website, Survey Monkey (see Appendix A). Data collection procedures consisted of the distribution of an email alert, followed by an email with a link to the survey with instructions about study participation and survey completion. The email alert and the link to the on-line survey were emailed to a staff member of NAADAC on May 2, 2008 who in turn emailed the alert on May 2, 2008 and the email with link on both May 5, 2008 and May 19, 2008 (see Appendix D). Potential respondents were informed in the email alert that the study was anonymous, voluntary and unlikely to cause harm, points underscored in the informed consent page of the survey.

The survey was distributed twice to maximize the response rate and to ensure that all who might be interested had the opportunity to participate. A benefit of a high response rate is that it can be said to be representative of the sample (Rubin & Babbie, 2005). Sills and Song (2002) indicate that the response rates for internet based surveys

have ranged from 0% to 70%. Because a small number responded the first time, a second email with link was distributed to get a larger sample. In consultation with the project advisor it was determined that further distribution of additional emails with the link to the survey was unlikely to yield additional responses. Data gathering occurred over a five week period from May 5′ 2008 to June 6, 2008.

Study Variables

This section includes discussion of conceptual and operational definitions of the variables. The variables are classified as dependent, independent, and demographic according to their relationship to the study question. Selected variables emerged out of review of the group treatment literature in general and with regard to SUDs in particular, as well as through consultation with group work experts. This discussion will describe these variables and will be followed by a review of the key issues related to instrument development and refinement.

Mutual Aid

Mutual aid, the dependent variable in this study design, conceptually refers to the phenomenon of group members engaging in an exchange of help, wherein they are both the provider and the recipient of help in service of achieving common group and individual goals (Levy, 1979; Gitterman, 2004; Schwartz, 1961; Shulman, 2006; Steinberg, 2004; Wollert et al, 1982; Wollert, 1986). Conceptually, mutual aid is understood as a complex concept with several types of helpful processes (Shulman, 2006; Wollert et al, 1982; Wollert, 1986). For example, Shulman (1979, 1986, 1992,

1999, 2006) advanced a conceptual framework of mutual aid processes comprised of the following factors: sharing data; the dialectic process; entering taboo areas; the 'all in the same boat' phenomenon; developing a universal perspective; mutual support; mutual demand; individual problem solving; rehearsal; and the strength in numbers phenomenon. These specific processes will be operationally defined.

Many conceptual discussions allude to both the observable transactions and activities that occur between members of mutual aid groups as well as the unobserved intrapsychic benefits (Northen & Kurland, 2001; Shulman, 2006; Wollert et al, 1982; Wollert, 1986). That is to say, for example, that one can both feel supported by a group and observe that supportive, empathic comments and gestures were exchanged between members. For the purpose of this study focus will be on what practitioners have observed in group. Due to the lack of adequate measurement instruments, the Mutual Aid Processes Scale was developed by this author and is comprised of 30 mutual aid processes.

Validity was enhanced by selecting items for this scale based on an in-depth review of the following literature streams, including: social work with groups literature (Gitterman, 2004; Gitterman & Shulman, 2005; Northen & Kurland, 2001; Schwartz, 1961; Shulman, 1979, 1986, 1999, 2006); the group psychotherapy change mechanism theoretical and empirical literature (Butler & Fuhriman, 1983; Crouch, Bloch & Wanlass, 1994; Fuhriman & Burlingame, 1990; Hill, 1975; Holmes & Kivlighan, 2000; Yalom, 1995);

process studies of self-help groups (DiClemente, 1993; Droge et al, 1986; Hatzidimitriadou, 2002; Levy, 1976, 1979; Mok, 2001; Paine et al, 1992; Rappaport et al, 1985; Roberts et al, 1999; Wollert, 1986; Wollert et al, 1982); theoretical discourse on substance use disorder group treatment (Freeman, 2001; Flores, 1997; Matano & Yalom, 1991; Milgram & Rubin, 1992; Rugel, 1991; SAMHSA, 2005); substance use disorder group treatment studies (Daley et al, 1999; Sandahl & Ronnberg, 1990); and behavioral change studies (Prochaska, DiClemente, & Norcross, 1992). In addition to a review of the literature the items selected for this instrument were discussed, reviewed and modified with the aid of five group work experts.

The group work experts are all social workers who possessed an earned doctorate and have published extensively about group work topics, including group work and substance abuse treatment. All group work experts are white; three are female and two are male. Four of the experts were either current or retired group work instructors. One of the experts included Dr. Lawrence Shulman who developed the mutual aid construct widely utilized by social workers writing about group work practice (Gitterman & Shulman, 2005; Steinberg, 1997, 2004; Wasserman & Danforth, 1988). The range of years in the field of these experts was from 10 years to more than 40 years. Operational definitions are provided below.

Sharing Data

Sharing data can be understood as occurring when members share useful, relevant information. This process includes both the request for and provision of ideas and information.

- Group members request ideas from each other about how to handle a situation.
- Group members provide ideas about how to handle a situation.
- Group members request information from each other about topics relevant to the group.
- Group members provide information to one another about topics relevant to the group.

The Dialectic Process

The dialectic process occurs when members express differing perspectives about the topic under discussion. This is often characterized as debate and may include a review of the pros and cons or simply the expression of differing perspectives.

- Group members discuss the pros and cons of an issue or topic.
- Group members discuss or debate differing perspectives about a topic or concern.

Discussing taboo topics

The discussion of taboo topics can be understood as being more revealing than what might occur in polite, every day conversation. In general the concept of "taboo" is understood to be context specific. Topics might include sexuality, abortion, and candid feelings. The idea here is that some degree of discomfort is likely to be evoked by discussion of the topic.

- Group members express candid feelings about the group leader directly.
- Group members express candid feelings about each other directly.

- Group members discuss topics that may be regarded as taboo for some reason.

The all-in-the-same-boat phenomenon

The all-in-the-same-boat phenomenon indicates that members have the awareness that they are not alone or unique in experiencing their problems, feelings or experiences. This realization occurs through assurance and identification of commonalities.

- Group members assure each other that their experiences, feelings and/or thoughts are not unique.

Mutual Support

Mutual support is identified with both the supportive, accepting culture of the group as well as member to member supportive interaction. Members reveal their need for support, hear the need for support, offer support and are the objects of members' support.

- Group members listen attentively when a member shares feelings, problems or concerns.
- Group members provide empathic responses to each other indicating understanding and/or care.
- Group members validate and affirm each other.
- Group members provide each other with physical gestures of care, like hugging.
- Group members reveal personal, intimate experiences, thoughts, feelings or difficulties.

Instillation of Hope

Hope is stimulated in direct and indirect manners. Direct manners might include realistic reassurance that problems will get resolved and through sharing personal successes.

- Group members provide realistic reassurance to each other that their problems will be resolved positively.
- Group members share their personal successes in working through or overcoming problems.

Mutual Demand

Mutual demand denotes the ways in which members challenge each other to grow and behave in socially desirable ways. Members are both providers and objects of this challenge.

- Group members encourage each other to behave in ways, both inside and outside of the group, that promote personal growth and/or are socially desirable.
- Group members challenge each other to respect group ground-rules.
- Group members challenge or confront each other's problematic behavior or attitude.
- Group members evaluate the performance of their group in the group.

Individual Problem Solving

Individual problem solving, as contrasted with offering advice, calls for members to help one another identify potential solutions by sharing solutions that have worked for them when faced with a similar situation. The several steps in this process include asking for help, exploration and clarification of the problem, identifying potential solutions by revealing solutions that worked when faced with a similar problem

- Group members ask other members for help with a problem or concern.
- Group members ask clarifying questions of the person who had raised the problem under discussion.
- Group members help a member identify a potential solution to their problem by identifying a solution that worked for them when faced with a similar problem.
- Group members help a member anticipate obstacles to resolving a problem once potential solutions have been identified.

Rehearsal and Skill Acquisition

Rehearsal can be understood as the intentional practicing of new skills and ideas in the context of a supportive forum, the group. This practicing can occur organically and in structured activities, such as role plays.

- Group members practice new behavior in the group.
- Group members role play situations in order to practice new behaviors.
- Group members provide constructive feedback about a member's new behavior.

The Strength in Numbers Phenomenon

This process reflects the notion that it is sometimes easier or more powerful to do things as a group than it would be as an individual. The rationale can be to accomplish a shared objective or to aid an individual in doing something that would be hard to do alone.

- Group members take action as a group to help a member accomplish an individual task that is hard for the person to do alone.
- Group members take action as a group on behalf of shared interests or concerns.

Worker Education, Training and Primary Group Practice Model Studied

The education, training and primary group practice model studied on the part of the worker, the primary independent variables in this study, are conceptualized as a program of instruction that may have occurred as both formal education in an academic institution and training obtained either in a certificate program or some other venue. The survey instrument allowed for respondents to identify their highest degree or

certification awarded; the amount and location of their group work education and/or training; and the primary group work model studied.

For the purposes of this study, highest level of training was operationalized on the survey instrument by having participants respond to the statement “Please select the item that best indicates your highest degree earned” and select from amongst the following responses: High School Diploma/G.E.D; Associates of Arts; B.A./B.S.; B.S.W.; M.S.W./M.S.S.W.; M.A./M.P.H.; Ph.D.; D.S.W.; Ed.D; M.D.; and other. Participants were asked to write in the year their highest degree was awarded. Participants were asked to indicate if they had received certification designating them as a substance abuse counselor by selecting either yes or no.

The amount and location of the group work/therapy education received was operationalized as “one semester”, “two semesters”, “three semesters” or “four semesters of a group work/therapy specific course”; “no more than a few class sessions in a course not specific to group work/therapy”; and “no group work/therapy coursework in an academic setting”. Respondents were asked to identify the amount of group work/therapy training they may have received. The potential responses included “none”; “one session of a workshop or training”; “a few sessions of a workshop or training”; and “many sessions of a workshop or training”.

For the purpose of this study, the respondent’s primary group work theory or model studied was identified by having participants select the single best answer from

amongst the following options: mutual aid based social work with groups; cognitive behavioral social work with groups; interactive group psychotherapy; group psychoanalysis; cognitive behavioral therapy; psychodynamic group psychotherapy; and other, which could include education about multiple models, with a request to describe or explain.

Demographic Variables

A set of demographic variables is identified that will be used to describe the sample. These variables include gender of worker, professional discipline and primary work descriptor.

Group Leader Activity

Six group leader activities were used in this study and were separate variables. Several streams of literature were reviewed to ascertain various perspectives on the role of the group leader, including social work with groups (Glassman & Kates, 1990; Kurland & Salmon, 1992; Middleman & Wood, 1990b; Schwartz, 1961; Shulman, 2006; Steinberg, 1997, 2004), group psychotherapies (Flores, 1997; Matano & Yalom, 1991; Stone, 1994; Yalom, 1995), cognitive-behavioral group work (Marlatt & Barrett, 1994; Rose, 1990; Sandahl & Ronnberg, 1990), and psychoeducational group work (Roffman, 2004) in general and in SUD treatment in particular.

Respondents were asked to indicate the frequency with which specific group leader activities occurred in the group about which they were reporting. Using a matrix type question items were rated “very important”, “important”, “somewhat important”

and “of little importance” in a Likert-like scale. Options included “providing the group practical information about addiction, recovery, and relapse prevention” (psychoeducation); “helping each group member, one at a time, work on their problems, concerns or issues” (casework in a group); “helping the group members talk directly to each other so that they can work on their problems, concerns or issues together” (mediation or facilitation); “confronting or challenging group members” (confrontational); “helping the group members understand themselves more fully by helping them develop insight (therapist); “teaching the group members specific coping or recovery skills” (CBT, Skill Development). The mediator/facilitator activity is most typically associated with the development of mutual aid (Coyle, 1935; Daley et al, 1999; Matano & Yalom, 1997; SAMHSA, 2005; Schwartz, 1961; Shulman, 2006; Steinberg, 2004).

Group and Member Related Variables

For the purpose of this study the additional predictor variables included attributes of the group structure and membership. Group structure attributes included the following: treatment setting; group purpose; group type; group communication pattern; group size; group length; group frequency; whether the group is open or closed; description of membership for open ended groups; and the duration of the group’s meeting (Northen & Kurland, 2001; Shulman, 2006). Member attributes included the following: the percentage of mandated members; the length of abstinence

from alcohol and drugs for members; and the gender of members (Ciardiello, 2007; Rooney & Chovanec, 2004; Rugel, 1991; Shulman, 2006).

Treatment Setting

Agency context potentially impacts the small treatment group (Gitterman, 2004; Lovett & Lovett, 1991; Northen & Kurland, 2001; Schwartz, 1961; Yalom, 1995). Abstinence based treatment is provided in a wide range of settings in the United States (Frances & Miller, 1998; Smyth, 1995; Straussner, 1993). The respondents were asked to indicate the location of their group from amongst the following options: outpatient program; residential therapeutic community; short-stay residential program; hospital in-patient program; prison, private practice and other.

Group Purpose

The purpose of a group could be understood as "an ultimate aim, end, or intention" (Northen & Kurland, 2001, p.37). Purpose informs communication patterns, norms of participation, goal selection, and group activities (Northen & Kurland, 2001; Steinberg, 2004). Typically in substance abuse treatment group purpose is related to recovery oriented goals, including: achieving abstinence; preventing relapse; or work on non- recovery specific life issues (SAMHSA, 2005). This approximately parallels the nature of the work of early, middle and advanced treatment (Flores, 1997; SAMHSA, 2005). The respondents were asked to select the descriptor that best described their conceptualization of the purpose of the group about which they were reporting: enhance motivation for treatment/treatment readiness; achieve abstinence and work

on early recovery tasks; maintain abstinence and develop relapse prevention skills; work on non-recovery specific life issues; and other, with a request to describe.

Group Type

The types of groups typically employed in substance abuse treatment include psychoeducational groups; skills development groups; cognitive-behavioral groups; support groups; and interpersonal process groups (SAMHSA, 2005). Psychoeducational groups "are designed to educate clients about substance abuse and its consequences" (SAMHSA, 2005, p.12). Skills development groups are designed to "cultivate the skills people need to achieve and maintain abstinence" (SAMHSA, 2005, p.16). Cognitive-behavioral groups "work to change learned behavior by changing thinking patterns" (SAMHSA, 2005, p.18). Support groups help "bolster members' efforts to develop and strengthen the ability to manage their thinking and emotions and to develop better interpersonal skills" (SAMHSA, 2005, p.20). Interpersonal process groups, also referred to as interactive group psychotherapy, draw upon a psychodynamic understanding of people "to promote change and healing" (SAMHSA, 2005, p.23).

Respondents were asked to identify the descriptor that most closely resembled their group's type from amongst the above identified types. Options included: support; interactive group therapy; skills development; cognitive-behavioral; eclectic; and psychoeducational. The option to select and describe "other" was included.

Group Size

Group size was defined as the number of members that comprise the group (Northern & Kurland, 2001) and was operationalized with the following choices: 4 members or less; 5-7 members; 8-12 members; and 13 or more members.

Group Length

The session length of substance abuse treatment groups have been reported to range from 15 minutes to 2 hours (SAMHSA, 2005). Consequently, group length was operationalized in the following ways: less than one hour; one hour; ninety minutes; two hours; and more than two hours; and other.

Group Frequency

The frequency with which a group meets varies, although the once a week format is most common in general (Northen & Kurland, 2001). In substance abuse treatment the frequency of meetings may be higher with as much as five times per week, in day treatment programs and intensive outpatient programs (Washton, 2002). Frequency was operationally defined as including: once per week; twice per week; three times per week; four times per week; five times per week and other, with a request to identify the frequency in numerical terms.

Open-Ended/Closed

Groups can be open-ended with ever changing membership with procedures for identifying entry and departure of members (SAMHSA, 2005; Schopler & Galinsky, 1990; Shulman, 2006). Groups can also be closed with fixed membership (Shulman, 2006).

Respondents were asked to identify if their group had a fixed membership (closed group) or changing membership (open-ended group).

Duration of Group Meeting

Group duration is defined as the length of time the group has been in existence (Northen & Kurland, 2001). Respondents were asked to select the item that best described the duration of the group about which they were reporting with regard to the majority of the present members. Options included the following: “less than one month”; “one month but less than three months”; “four to six months”; “seven to twelve months”; and “more than twelve months”

Percentage of Mandated Members

The involuntary client can be understood as someone who is pressured by some external source to seek social services (Rooney & Chovanec, 2004). Mandated involuntary clients are pressured to seek services as a result of the legal system (Rooney & Chovanec, 2004). Voluntary status is conceptualized as a group member that has entered treatment volitionally without being court mandated. Respondents were asked to select the response that best describes the percentage of members who have been mandated to treatment. The options included “most members are court mandated”; “most members are voluntary”; “equal or almost equally mixed with regard to mandated status”.

Length of Abstinence for Members

For the purpose of this study, abstinence will be identified as the worker's perception, to the best of their knowledge, of the member's absence of consumption or use of alcohol and other drugs aside from prescribed medications taken as directed by the group member. The length of abstinence as it best described the membership of the group as a composite was solicited by asking the respondent to select the statement that best described the group as a whole at the time of the last session held. The response options included: "most members are not abstinent"; "most members are abstinent for less than one month"; "most members are abstinent from one to three months"; "most members are abstinent from four to six months"; "most members are abstinent from seven to twelve months"; "most members are abstinent more than twelve months"; "group members' length of abstinence varies widely"; and other, with a request to specify.

Gender of Members

An expansive view of gender informed the construction of this variable (Seil, 1996; Vidal-Ortiz, 2008). The development of gender variable categories was designed to be inclusive, not exhaustive. Respondents were asked to describe the gender composition of the group by selecting from among the following options: all female (including transgender women); all male (including transgender men); mostly female (including transgender women); mostly male (including transgender men); and equally or almost equally mixed with regard to gender (including transgender people).

Instrumentation

For the purposes of this survey a quantitative survey instrument was developed that identified previously identified demographic, independent and confounding variables and included a 30-item Mutual Aid Processes Scale. In this section the development of the Mutual Aid Processes Scale and the Mutual Aid Processes in SUD Treatment Groups Questionnaire will be addressed.

Mutual Aid Processes in SUD Treatment Groups Questionnaire

The Mutual Aid Processes in SUD Treatment Groups Questionnaire was designed to ascertain the presence and amount of specific mutual aid processes in a wide variety of SUD treatment groups and to examine the relationship between those processes and several factors that potentially influence these processes. The questionnaire included the following sections: an informed consent page; worker demographic variables; a trigger question that either led to a thank you page or the next set of questions; questions related to group structure; questions related to group membership characteristics; questions related to group leader activity and the worker's perception of the importance of those activities; and the Mutual Aid Processes Scale.

The items selected for this questionnaire emerged out of review of several streams of literature, including: small group research; group psychotherapy; social group work and social work with groups; group change mechanism studies; and the substance abuse group treatment clinical and empirical bodies of literature.

Expert and Peer Review of the Questionnaire/Pre-testing/IRB Approval/Pilot Study

The first draft of the questionnaire was reviewed by two group work experts, including the dissertation committee's group work expert, Dr. Martin Birnbaum, for comprehensiveness of potential group related variables. Dr. Birnbaum suggested the removal of a scale that would have measured the group leaders' perception of importance of specific mutual aid processes indicating that it begins to make completion of the survey cumbersome. The first draft of the questionnaire was also reviewed by this project's advisor, an expert researcher, Dr. Michael Smith, who made recommendations that led to the change of question type and greater clarity in the wording of specific items. As a result of this feedback, for example, single item selection for one question about group leader activity was changed to the use of a Likert-like scale to measure the frequency of that activity.

The informed consent page and the on-line survey itself was developed upon review of the Hunter College instructions for the IRB approval process, in particular with regard to the use of on-line surveys. For example, the Hunter College IRB website indicates that on-line surveys, in order to maximize choice, should not utilize the Survey Monkey option of forcing a respondent to make a choice before they can proceed to the next page as that is deemed coercive.

On January 22, 2008 the questionnaire was reviewed by ten alcohol and other drug counselors at an outpatient abstinence-based substance abuse treatment program. The counselors were asked to complete the questionnaire and provided feedback about

the questionnaire's clarity, comprehensiveness, and ease of completion. These reviewers were asked to both provide positive and negative feedback. The survey was completed by all between 9 and 17 minutes with an average of 14 minutes. Reviewers found the survey to be easy to complete. One reviewer pointed out that she thought the section entitled "group leader activity" was instructive. The primary critique was that the survey was "too long" despite a relatively brief completion time. Another critique was that some sections appeared redundant; for example, the items in the section entitled "group leader beliefs" are the same as those found in "group leader activity".

Upon review with Dr. Martin Birnbaum, it was concluded that the section entitled "group leader beliefs" would be removed from the final draft of the questionnaire thus reducing the appearance of redundancy. Of note, no reviewers reported distress in completing the survey.

This study protocol was approved by the Hunter College of CUNY Committee for the Protection of Human Subjects from March 31, 2008 to March 30, 2009, protocol number HC-020810867 (see Appendix C). The study was piloted on April 8-15, 2008 with five participants who completed the survey and provided feedback. No significant changes were indicated as a result of this process.

Mutual Aid Processes Scale

This questionnaire includes an author created measurement scale, the Mutual Aid Processes Scale (MAPS). The decision to create MAPS emerged after an extensive

review of the available change mechanism and group process instruments failed to indicate a satisfactory measurement instrument. The therapeutic factor construct (Yalom, 1995), while the most widely used instrument of its type, fails to focus attention to the helpful processes that occur between group members. One survey instrument, the Helping Processes Questionnaire (Levy, 1979) which was developed to measure mutual aid in self-help groups was considered. Upon review with this dissertation project's advisor, Dr. Michael Smith, it was deemed inadequate for its failure to represent some processes that may occur in a professionally led group, poor wording of items, and insufficient attention to validity and reliability.

The balance of this discussion will attend to item generation; selection and refinement; scoring of the scale; feedback from pre-testing/peer review and validity and reliability.

Item Generation

Initially 33 items were generated from review of the relevant literature and included ten types of mutual aid processes. Face, content, and construct validity of these types and items was demonstrated by having five group work experts review these items and categories. Of note, the process identified as "Developing a Universal Perspective" which Shulman (1999) has suggested is a special form of the "all in the same boat phenomenon" was eliminated due to its overlap with that concept. Also, the concept of "instilling hope" suggested by Northen and Kurland (2001) but not Shulman (1999, 2006) was included.

Item Refinement

The items that were selected for the Mutual Aid Processes Scale were anchored in the conceptualization of Mutual Aid Processes that occur in group work as articulated by Shulman (1979, 1986, 1999, 2006) and Northen and Kurland (2001) who draw upon the work of Shulman, Yalom, Corsini and Rosenburg, amongst others. As indicated a review of the literature streams previously described informed item generation as well. Initially the concept of "strengths in numbers" was not included in this scale due to lack of clarity as to how to operationally define it. Upon consultation with this expert panel two operational definitions were generated.

The initial 33 items comprising this scale were reviewed by the expert panel previously identified. The suggestions and feedback led to the elimination of two items that reflected intrapsychic benefit of mutual aid and the inclusion of two items that relate to the "strengths in numbers phenomenon". Seven items were modified so as to strengthen the conceptual clarity of the item.

Once this process of soliciting feedback occurred the list of mutual aid processes was reviewed with this committee's group work expert, Dr. Martin Birnbaum, who suggested the elimination of three items due to redundancy. The final scale contains 30 mutual aid processes reflecting 10 types of processes.

Scoring

The instrument measures the frequency with which 30 mutual aid processes occur utilizing Likert scaling. The 7 item response categories include never, very rarely,

rarely, sometimes, frequently, almost always, and always. The weight ascribed to each selection ranges from 0-6, with "always" equaling 6. The scale can be scored by summing the raw score with a minimum score of zero and a maximum score of 180 divided by the total amount of processes to derive the mean score.

Validity

There are different ways in which validity of a construct can be expressed (Rubin & Babbie, 2005). This discussion will address face validity, content validity, construct validity and factorial validity. Face validity and content validity are established in large part on the basis of judgments (Rubin & Babbie, 2005). As Rubin and Babbie (2005) indicate, face validity is determined by the subjective judgment of the researcher and other experts. Toward the goal of determining face validity of the mutual aid processes selected for this scale, the items were reviewed by group work experts and scholars who indicated consensus with the items selected. As Rubin and Babbie (2005) indicate establishing face validity is not sufficient. Content validity refers to the degree to which the "measure covers the range of meanings included in the concept" according to Rubin and Babbie (2005, p.189). Content validity was cultivated by review of several streams of literature and expert panel review.

As Rubin and Babbie (2005) indicate construct validity is based on the way a measure relates to other variables bound within a system of theoretical logic. Construct validity was strengthened by utilizing the literature and expert review to determine the

items used in this scale. Also, factorial validity was identified with factor analysis procedures (Rubin & Babbie, 2005). As Rubin and Babbie (2005) indicate factorial validity refers to "how many different constructs a scale measures and whether the number of constructs and the items in that make up those constructs are what the researcher intends" (p. 191-192).

Reliability

Reliability is the degree to which a measure is free from error and consequently able to yield consistent results (Rubin & Babbie, 2005). The reliability of the scale was determined with the split-halves method and determination of Chronbach's alpha (Rubin & Babbie, 2005). This method of determining reliability was selected as it is regarded as the most practical method as it relies on a one-time administration of an instrument to study participants (Rubin & Babbie, 2005).

Data Analysis Plan

Data was gathered through Survey Monkey, a website used to design and host internet based surveys. Discrete data was downloaded into an Excel spreadsheet. Each variable was provided a label within the Excel spreadsheet which in turn was imported into SPSS on June 7, 2008. Univariate, bivariate, multivariate and factor analyses were conducted in June and July 2008.

Frequency distributions and descriptive statistics were generated for all demographic variables describing the sample and sample sub-sets and the dependent

variables. Bivariate and multivariate analysis, including correlational analysis and multiple regressions, was conducted to examine the relationship between key independent and dependent variables.

Four multiple regression models were studied. Model one examined the impact of worker education, training, and level of group facilitation on the MAPS score. Model two explored the impact of group setting, length of session, frequency of meetings, and group size on the MAPS score. Model three explored the impact of voluntary status and mandated status on the MAPS score. Model four included the three most significant variables from the three previous models including level of facilitation, frequency of meetings and mandated-voluntary status of members.

Data Storage

Data will be maintained for three years at the password protected website, Survey Monkey. Downloaded data was stored on a password protected computer and flash drives that were stored in a locked cabinet.

Time Frame

The survey, designed through and hosted at Survey Monkey, was administered two times to NAADAC members by a representative of the association in an informational email that contained a link to the survey. This email was delivered on May 5, 2008 and again on May 19, 2008 to ensure that all NAADAC members that wanted to participate had the opportunity. Data collection ceased on June 6, 2008. Data was

downloaded to an Excel spreadsheet and then imported into SPSS on June 7, 2008. Data was analyzed during June through August, 2008.

Human Subject Protection Protocol

The ethical principles that guided this study were informed by the Belmont Report (retrieved on-line at www.hhs.gove/ohrp/humansubjects/guidance/belm. on 1/4/2008 and the NASW code of ethics (NASW, 1999). Every effort was made to demonstrate respect, privacy and beneficence. Of all the ethical mandates, priority was given to ensure that no harm would come to study subjects.

Participants were given an email alert prior to receiving the link to the on-line survey. In that email participants were informed of the purpose and nature of the inquiry. Limits to complete anonymity due to the potential for "hacking" were explained as well as the measures taken by Survey Monkey to prevent hacker crime. Participants were notified that the anticipated level of risk was not more than that encountered in everyday life. The link to the survey brought participants to the Informed Consent page. The concluding statement on this page indicated that consent was implied by completing the survey. No protocol violations occurred and no adverse effects were reported during the course of this study.

In conclusion, this chapter identified salient aspects related to the design of this research study. The conceptual and operational definitions of the variables and the related survey instruments were presented. The data analysis procedures that were conducted were described in this chapter. The next chapter will provide the key

findings evident as a result of data analysis conducted with SPSS software (Version 11.5).

Chapter Four: Findings

Introduction

Evidence has indicated that group treatment is provided in 95% of abstinent-based treatment programs in the United States (Stinchfield et al, 1994) and is effective in helping members achieve abstinence and other treatment goals (Panas et al, 2003). Despite the use of different group types and models, the primary clinical rationale for the use of group treatment, as opposed to individual treatment, with this population is the resonance of group member needs with the opportunities for mutual aid that potentially arise through peer interaction (DiClemente, 1993; Flores, 1997; Freeman, 2001; Golden et al, 1994; Matano & Yalom, 1991; SAMHSA, 2005). There is scant empirical evidence demonstrating the presence and importance of mutual aid processes in SUD treatment groups (Crits-Christoph et al, 1999; Sandahl & Ronnberg, 1990). Consequently this exploratory study was conducted to further examine the presence of mutual aid processes in abstinence-based SUD treatment groups in the field and the variables that are associated with higher amounts of mutual aid.

Members of NAADAC with email addresses were surveyed in order to identify the following: the presence of mutual aid processes in abstinence-based treatment groups for people with SUDs; the impact of group work specific education for respondents with an MSW degree on the amount of mutual aid processes; and factors associated with a high mean score on the Mutual Aid Processes scale. In this chapter, the findings of this survey are presented. The topics addressed include a description of

the total and main samples; a review of the major hypotheses and questions informing this study; a description of the groups and the membership of the groups about which respondents were reporting; and univariate, bivariate, and multivariate analysis. Additionally, since an author-created instrument was utilized, the results of reliability and factor analysis testing are identified. Data analyses were conducted by using the Windows format of the Statistical Package for the Social Sciences (SPSS Version 11.5, by SPSS Company Incorporated, 2002).

The sample

In the proposal for this study, it was indicated that there were approximately 11,000 members of NAADAC with email addresses. When it was time to administer the survey, the NAADAC representative charged with this task reported that there were only approximately 6,000 members with current email addresses (in part due to reduction in membership in the past two years) of a larger total membership of 10, 000. An approximate 6,000 emails with a link to the electronic survey designed through and hosted at Survey Monkey were distributed twice spaced two weeks apart with a data collection period spanning five weeks. A total of 484 electronic surveys were received providing an 8% response rate.

Major Questions and Hypotheses

The major questions examined in this study included the following:

- To what extent do specific mutual aid processes occur in treatment groups for people with Substance Use Disorders? Are some processes more likely to occur than others?
- Will respondents who are social workers reporting at least one semester of group specific education yield a higher total score on the Mutual Aid Processes Scale (MAPS) when compared to group leaders with other educational backgrounds?
- Will social workers with three or more semesters of group work specific course work yield a higher total score on the Mutual Aid Processes scale when compared to social workers with less than three semesters of group work specific coursework?
- What is, if any, the relationship between respondents' 12 Step participation and the total score on the Mutual Aid Processes Scale?
- What variables account for higher than average scores on the MAPS?
-

Hypotheses examined through this inquiry included:

- Respondents who are social workers that possess an MSW with at least one semester of group work specific education will yield higher total scores on the Mutual Aid Processes Scale (MAPS) as compared to those with other professional degrees and at least one semester of group work specific education.
- Respondents who are social workers that possess an MSW with three or more semesters of group work specific education will yield a higher total score on the MAPS as compared to MSW social workers with 2 or fewer semesters.

- There will be no statistically significant difference on the mean total score of the MAPS between respondents who report that they participated in a 12 Step program versus respondents reporting no participation in a 12 Step program.

Description of the Study Sample

A trigger question in this study inviting participants to provide data about the group with which they worked and to complete the Mutual Aid Processes Scale was asked. This question, "Have you facilitated a group in an abstinence-based treatment setting that has met for at least three (3) sessions and either concluded within the past two years or is currently meeting", yielded 371 affirmative responses. Upon review of the data, two cases from this sample were removed because respondents reported group work with people with family members of treatment program clients or were located in a methadone maintenance agency. This reduced the cases in this sub-sample to 369.

The main sample (76.2%, N=369) comprised of those who answered the trigger question affirmatively will be referred to as the "main study sample". All other respondents comprised what will be referred to as the "no group sample" (23.8%, N=115).

Table 1: Two Samples

Type of Sample	Frequency	Percent
Main Study Sample	369	76.2
No Group Sample	115	23.8
Total	**484**	**100**

Demographics

Main Group Sample (N=369)

Of the 369 NAADAC members with an email address who reported working with a group in an abstinence-based treatment setting within the past two years the amount of experience in group work with this population spanned an amazing range from less than one year to 38 years. The average amount of time was 12.08 years with a median of 10 years (SD=8.034). Almost more than half of this sample reported considerable experience with working with groups in this field, in terms of years in the field. More than half, 50.4% (N=186), reported having 10 or fewer years experience; 32.8% (n=121) reported from between 11-20 years experience; 14.4% (n=53) reported more than 21 years experience providing group work with this population. In Tables 2, 3, and 4 the respondents' reported professional discipline, highest earned degree and possession of an SUD related credential will be identified.

Table 2: Professional Discipline

Professional Discipline	Frequency	Percent
Alcohol & Drug Counselor	302	81.8
Social Worker	36	9.8
Other	23	6.2
Psychologist	5	1.4
Nurse/Nurse Practitioner	2	.5
Clergy	1	.3
Total	**369**	**100**

As indicated in Table 2, almost 82% (n=302) of the respondents identify as an Alcohol and other Drug Counselor; followed by a distant second group in size of almost 10% (n=36) of respondents who identified as Social Workers, despite the fact that more respondents reported possessing an MSW degree (12.5%, n=46). The remaining professional disciplines represented included Psychologist (1.4%, n=5), Nurse/Nurse Practitioner (.5%, n=2), and Clergy (.3%, n=1). Of those in the "other" category two were Nurses/Nurse Practitioners who had identified that they were both nurses and AOD counselors and two were social workers indicating a similar response. For the purpose of this study they were identified with nursing and social work categories respectively and removed from the "other" category. Of those remaining in the "other" category, further descriptors included "Marriage and Family Therapist", "general counselor", "researcher", and agency titles, such as "Director" or "Clinical Director".

Table 3: Highest Earned Degree

Highest Earned Degree	Frequency	Percent
Masters Degree (non-MSW)	126	34.2
Bachelors Degree (non-BSW)	75	20.3
MSW	46	12.5
Associates	40	10.8
H.S. /G.E.D.	36	9.8
Ph.D.	17	4.6
Other	17	4.6
BSW	9	2.4
Ed.D.	1	.3
DSW	1	.3
Missing	1	.3
Total	**369**	**100**

As indicated in Table 3, this is reported to be a fairly well educated sample with almost 52% (n=191) of the sample indicating they possess a Masters degree at a minimum. Most participants reported possessing a counseling oriented Masters degree that was not an MSW (34.2%, n=126) followed by Bachelors degree (20.3%, n=75), MSW (12.5%, n=46), Associates (10.8%, n=40), H.S. Diploma/GED (9.8%, n=36), Ph.D. (4.6, n=17), other (4.6%, n=17), BSW (2.4%, n=9), Ed.D. (.3%, n=1), and DSW (.3, n=1). All of these degrees were earned between 1951 and 2008, with two modal years of 2002 and 2007 (n=44). Of the 17 “other” responses most respondents indicated that they possessed an AOD credential rather than indicating an alternate degree.

Table 4: SUD Credential

SUD Credential	Frequency	Percent
Yes	314	85.1
No	45	12.2
Missing	10	2.7
Total	**369**	**100**

This tended to be a credentialed sample with most reporting an SUD credential. As indicated in Table 4, most respondents, 85%, reported possessing an SUD credential (n=314).

Table 5: Amount of Group Work Specific Education

Amount of Group Work Education	Frequency	Percent
Four semesters	110	30.4
Three semesters	34	9.4
Two semesters	87	24.1
One semester	51	14.1
No group specific semester	80	22.0
Total	**362**	**100**

As Table 5 indicates this sample has reported a high number of semesters of group work specific education, with almost 40% reporting 3 or 4 semesters (n=144). Clearly this finding does not reflect the assessment made by critics of group work in substance use disorder treatment who suggest that group leaders are inadequately prepared to lead groups, nor the social work literature which laments the erosion of group work education. This may have reflected a flaw in the survey language, a

misunderstanding of the word “semester” and “academic institution” on the part of survey respondents, or the effect of social desirability bias. For this reason, responses for respondents who reported a High School diploma or GED as their highest earned degree and did not indicate “some college” who had indicated they had received two, three or four semesters of group work specific education were changed to “No Group Specific Course” taken (n=14). The amount of group work specific education reported is as follows: four semesters (30.4%, n=110), two semesters (24.1%, n=87), one semester (14.1%, n=51), three semesters (9.4%, n=34), and no group specific coursework (22%, n=80).

To further explore the amount of group work education this variable was examined by respondents with less than a Masters degree and for those with a Masters degree or higher. For respondents with a highest earned degree less than a Masters (n=159) the amount of group work specific education is as follows: four semesters (21.4%, n=34); three semesters (9.4%, n=15); two semesters (20.1%, n=32); one semester (11.4%, n=18) and no group specific course (37.8%, n=60). For respondents with a highest earned degree of a Masters or higher (n=185) the amount of group work specific education is as follows: four semesters (39.1%, n=72); three semesters (9.1%, n=17); two semesters (28.7%, n=31); one semester (16.7%, n=31) and no group specific course (6.4%, n=12). These findings indicate that the cohort with a Masters or higher were more likely to have had at least one semester of course work that provided instruction about a group practice model than those respondents with a highest earned

degree less than a Masters. Tables 6 and 7 will address the amount of training received and the primary group model studied respectively.

Table 6: Amount of Group Work Specific Training

Amount of Group Work Training	Frequency	Percent
Many sessions	279	75.6
A few sessions	66	17.9
None	11	3.0
One	10	2.7
Missing	3	.8
Total	**369**	**100**

As Table 6 indicates, about 75% of the respondents reported having taken "Many" workshops or training sessions devoted to group work or group therapy (n=279). Approximately 18% reported having taken "a few sessions" (n=66), 2.7% reported taking "one" group work training session (n=10), and only 3% reported having taken no group work training (n=11). Overall, it would seem that this is a well educated and trained sample.

Table 7: Primary Group Model Studied

Primary Group Model Studied	Frequency	Percent
Cognitive-Behavioral	216	58.6
Interactive Group Psychotherapy	54	14.6
Social Group Work	32	8.7
Other	30	8.1
Psychodynamic Group Psychotherapy	25	6.8
Not Applicable	7	1.9
Group Psychoanalysis	1	.3
Missing	4	1.1
Total	**369**	**100**

Of the group practice models participants reported as having studied as indicated in Table 7, most, at 58.6%, reported studying a cognitive-behavioral practice model (n=216). This is quite significant for the purposes of this study as this practice model does not typically seek to stimulate mutual aid processes. Some have noted that this is largely an individual treatment model applied in a group setting. At the same time, as the literature review suggests, the use of this model does not need to preclude the purposeful stimulation of mutual aid. This practice model was followed in frequency by 14.6% reporting they studied Interactive Group Psychotherapy (n=54) and 8.7% studying the (Mutual Aid Model) Social Group Work (n=32). Respondents who indicated "other" (8.1%, n=30) for model studied indicated either having studied multiple models, that they were not sure or could not remember, or studied another model such as Adlerian or Gestalt therapy.

As this study sought to examine the impact of group specific education on mutual aid processes, in particular for social workers, additional data will be reported. Interestingly, of the 32 respondents who reported studying social group work (Mutual Aid Model) only 22% (n=7) identified themselves as a social worker. The largest group that reported studying this model indicated they were Alcohol and Other Drug Counselors (72%, n=23). All 7 of the social workers also possessed an MSW. For those that identified as an Alcohol and Other Drug Counselor (n=23) degrees ranged from High School diploma to PH.D. with respondents reporting the following degrees: BA/BS degree (39.2%, N=9), followed by AA/AS (26.2%, n=6), Masters other than MSW (8.7%, n=2), other (8.7%, n=2), High School diploma (4.3%, n=1), DSW (4.3%, n=1), MSW (4.3%, n=1) and Ph.D. (4.3%, n=1).

Additionally, the group practice models studied by respondents who reported possessing an MSW are presented. Of the 46 respondents who indicated they possessed an MSW the most commonly studied model was cognitive-behavioral (47.8%, n=22), followed by interactive group psychotherapy (21.7%, n=10) and then social group work (Mutual Aid Model) (15.2%, n=7).

Table 8: Worker Role

Primary Worker Role	Frequency	Percent
Direct Service Provider/Clinician	273	74.0
Supervisor/Administrator	72	19.5
Other	13	3.5
Missing	11	3.0
Total	**369**	**100**

Most respondents reported they spent more than half of their time at work in the role of “Direct Service Provider/Clinician”, (74%, n=273). This was followed in size by those who reported acting chiefly as “Supervisor/Administrator”, (19.5%, n=72). Those who reported “other” accounted for 3.5% (n=13). For those who reported “other” further specification indicated worker roles such as educator and researcher.

Table 9: Gender

Gender	Frequency	Percent
Female	199	53.9
Male	164	44.4
Genderqueer	1	.3
Transgender Male	1	.3
Missing	4	1.1
Total	**369**	**100**

As seen in Table 9, this study employed a more expansive conceptualization of gender than the binary system of “male” and “female”, in order to reflect the complexity of people’s lived experience. Options included male, female, transgender male, transgender female and genderqueer. Most respondents reported they were female (53.9%, n=199), followed by male (44.4%, n=164), genderqueer (.3%, n=1), and transgender male (.3%, n=1).

Finally, as Table 10 shows, more respondents than not reported 12 Step participation (78%, n=288). Only 20.3% indicated they had not participated in a 12 Step Fellowship (n=75).

Table 10: 12-Step Fellowship Participation

12-Step Fellowship Participation	Frequency	Percent
Yes	288	78.0
No	75	20.3
Missing	6	1.6
Total	**369**	**100**

No Group Sample (N=115)

There were similarities to be found between the two samples. As with the main sample, the no group sample was primarily composed of Alcohol and Drug Counselors (62.6%, n=72), followed by Social Workers (10.4%, n=12) and those reporting "other" (17.4%, n=20). Slightly more than 59% indicated they possessed a Masters level degree at a minimum (n=68), with most reporting a non-MSW masters degree (33%, n=38), followed by those with a Ph.D. (13%, n=15) and then those with an MSW (11.3%, n=13). This sample would seem to possess more respondents with graduate level education as compared to the main sample (59% versus 52%). As with the main sample, most respondents reported that they possessed an AOD credential, (78.3%, n=90) with 19.1% reporting no credential (n=22). This sample included 63.5% who identified as Direct Service Providers (n=73), with 26.1% reporting that they were a Supervisor/Administrator (n=30). Due to limitations of the survey it is not possible to

determine which criterion respondents failed to meet in order to complete the balance of the survey, i.e. having led a group and/or work in an abstinence based setting.

With regard to group specific education, 28.7% reported having taken two semesters (n=33), 21.7% reported one semester (n=33), 17.4% reported four semesters (n=20) and 9.6% reported three semesters (n=11). Almost 21% reported taking no group work specific course (n=24). Most respondents in this sample reported taking "many" training sessions about groups (60.9%, n=70), followed by those reporting taking a "few" sessions (25.2%, n=29), and one (7%, n=8) and none (7%, n=8). As with the main sample the predominant model studied was cognitive-behavioral, (50.4%, n=58), followed by Interactive Group Psychotherapy (14.8%, n=17), Psychodynamic Group Psychotherapy (9.6%, n=11) and Mutual Aid Model/Social Group Work (7.8%, n=9). As with the main sample, most respondents identified as female (65.2%, n=75); with those identifying as male accounting for 33% (n=38). Finally, as with the main sample, more respondents reported 12 Step participation than not (62.6%, n=72 vs. 35.7%, n=41).

Group Related Variables

The following section will identify the frequencies for variables related to group structure and other group related variables. The variables reported in this section include the setting, purpose, approach, length of session time, frequency of meetings, duration, size, and whether the group was open or closed. This section will be followed by a report of the findings with regard to group composition factors.

Table 11: Group Setting

Group Setting	Frequency	Percent
Outpatient Program	199	53.9
Residential Therapeutic Community	66	17.9
Other	25	6.8
Short-Stay Residential	20	5.4
Prison	19	5.1
Private Practice	18	4.9
Hospital In-patient	18	4.9
Missing	4	1.1
Total	**369**	**100**

As indicated in Table 11, more than half of the group sessions reported on occurred in an outpatient setting (53.9%, n=199). This setting was distantly followed by Residential Therapeutic Community (17.9%, n=66). Remaining settings reported included short-stay residential (5.4%, n=20), prison (5.1%, n=19), private practice (4.9%, n=18) and hospital in-patient (4.9%, n=18). Of those reporting “other” as a setting, adolescent facility, school and all of the above were identified as responses by subjects.

Table 12: Group Purpose

Group Purpose	Frequency	Percent
Relapse Prevention and maintain abstinence	146	39.6
Early recovery tasks and achieving abstinence	142	38.5
Enhance readiness and motivation for	34	9.2
treatment	28	7.6
Other	16	4.3
Non-recovery specific life issues	3	.8
Missing		
Total	**369**	**100**

As Table 12 indicates, most respondents reported that the purpose of their group was oriented towards the early and mid-stage treatment tasks of achieving and maintaining abstinence (78.1%, n=288) as reflected in the combined scores of the items "work on relapse prevention" and "work on early recovery tasks". Few respondents reported that the purpose of the group was oriented towards treatment readiness (9.2%, n=34) or non-recovery life issues (4.3%, n=16). Of those who reported "other" most indicated that the group purpose was conceptualized as including the combined aforementioned purposes.

Table 13: Group Approach

Group Approach	Frequency	Percent
Cognitive-Behavioral	115	31.2
Interactive Group Psychotherapy	97	26.3
Eclectic	72	19.5
Psychoeducation	32	8.7
Skills development	28	7.6
Support	19	5.1
Other	5	1.4
Missing	1	.3
Total	**369**	**100**

As Table 13 suggests, less than half of the respondents utilized what is typically regarded as a structured group, which draws upon the expertise of the group treatment professional. The combined percentage of structured group approaches including cognitive-behavioral (31.2%, n=115), psychoeducation (8.7%, n=32), and skills development (7.6%, n=28) is 47.5% (n=175). More respondents reported using non-structured approaches that potentially rely on group interaction, including mutual aid, as an important element of group process. Non-structured group approaches include interactive group therapy (26.3%, n=97), support (5.1%, n=19) and eclectic approaches (19.5%, n=72). Those who reported "other" indicated both vague descriptors such as "facilitative" and less common specific models such as Adlerian.

To further illuminate the approach utilized by the group leader respondents were asked to identify the level and amount of six different group leader activities. For each of the six activities respondents selected from among a 7 item Likert scale with options including never (0), very rarely (1), rarely (2), sometimes (3), frequently (4),

almost always (5), and always (6). What follows are the mean scores and standard deviations for these six activities. The activities are ordered by mean score in descending order. The two activities reported to most frequently occur are psychoeducational in nature. The first activity, "*I offer the group practical information about addiction, recovery, and relapse prevention*", yielded a mean score of 5.1 (n=354, SD=1.074). This was followed by a similar activity meant to reflect a more didactic activity, "*I teach the group members specific coping or recovery skills*", which yielded a mean score of 5.01 (n=355, SD=1.093). These were followed by the activity associated with developing insight, *I help the group members understand themselves more fully by helping them develop insight*, which yielded a mean score of 4.8 (n=354, SD=1.077). The activity perhaps most associated conceptually with the stimulation of mutual aid followed; "I *help the group members talk directly to each other so they can work on their problems, concerns or issues together*" yielded a mean score of 4.7 (n=355, SD=1.077). The statement regarding confrontation, "*I confront or challenge group members*", yielded a mean score of 3.8 (n=354, SD=1.44). Finally, the statement most reflective of individual work in the group setting, "*I help each group member, one at a time, work on their problems, concerns of issues*", yielded the lowest mean score of 3.7 (n=355, SD=1.37). Of note, regardless of how the respondent conceptualized their approach to the group intervention, they seemingly utilize an eclectic array of in-group interventions and seek to stimulate group interaction, including mutual aid.

The following tables (14, 15, 16) will report findings related to temporal factors such as length of group session, frequency of meetings, and the duration of the group.

Table 14: Length of Group Session

Group Session Length	Frequency	Percent
More than 120 minutes	60	16.3
120 minutes	48	13.0
90 minutes	126	34.1
60 minutes	123	33.3
Less than 60 minutes	6	1.6
Other	4	1.1
Missing	2	.5
Total	**369**	**100**

As reported in the above table, the most frequently reported amount of time for group sessions was 90 minutes (34.1%, n=126), closely followed by one hour (33.3%, n=123). Almost 30% reported that the group session length was two or more hours (n=108).

Table 15: Frequency of Meetings

Frequency of Meetings	Frequency	Percent
5x per week	49	14.0
4x per week	37	10.5
3x per week	73	20.9
2x per week	57	16.3
1x per week	134	38.3
Total	**350**	**100**

Table 15 reports the frequency with which the group facilitated or led by the respondent met. The most reported frequency was once per week (38.3%, n=134).

However, most respondents indicated the group about which they were reporting met in multiple sessions each week (61.7%, n=216).

Table 16: Duration of the Group

Duration of the Group	Frequency	Percent
More than 12 months	78	21.2
7-12 months	56	15.3
4-6 months	73	19.9
1-3 months	131	35.7
Less than 1 month	29	7.9
Total	**367**	**100**

The ability to determine the "stage of group development" was decidedly beyond the scope of this survey. While the stage of group development is not reducible to the amount of time the group has been meeting, the concept of the duration of a group provides some information about whether or not a group is just beginning or has been meeting with regularity over time. As Table 16 indicates, the most reported group duration is 1-3 months (35.7%, n=131). When this response is combined with the "less than one month" group, it would seem that 43.6% of the groups about which are being reported on are likely to be in an early stage of group development (n= 160). While a group might be meeting for several months, time alone does not indicate that the group has moved beyond the beginning stage. The duration of the group does not provide this information. The remaining frequencies with regard to duration include "more than 12 months" (21.2%, n=78), 4-6 months (19.9%, n=73), and 7-12 months (15.3%, n=56).

Table 17: Open or Closed Group

Open or Closed Group	Frequency	Percent
Open Group	315	86.8
Closed Group	48	13.2
Total	**363**	**100**

As Table 17 indicates most respondents reported that the group about which they were reporting was an open group with changing membership (86.8%, n=315). A much smaller percentage reported that the selected group was closed, with fixed membership (13.2%, n=48).

Table 18: Group Size

Group Size	Frequency	Percent
13 or more members	64	17.4
8-12 members	209	56.9
5-7 members	87	23.8
4 members or less	7	1.9
Total	**367**	**100**

As can be seen in Table 18, most respondents reported that the group about which they were reporting included 8-12 members (56.6%, n=209) which is often identified as an ideal group size (Yalom, 1995). The remaining group sizes reported include 5-7 members (23.6%, n=87), 12 or more members (17.3%, n=64) and 4 members or fewer (1.9%, n=7). Of note, the literature suggests that a large group with more than 13 members or a small group of fewer than five potentially strains the group and negatively impacts group process.

Membership characteristics

In this section the findings with regard to membership characteristics for the groups about which respondents reported will be identified. The gender mix of groups will be reported in Table 19. The perceived length of abstinence of the predominant portion of group members will be identified in Table 20. Finally, in the mandated status of group members will be identified in Table 21.

Table 19: Gender Mix

Gender Mix	Frequency	Percent
Equally or almost equally mixed	136	36.9
Mostly male	98	26.6
Mostly female	60	16.3
All female	47	12.7
All male	16	4.3
Missing	12	3.3
Total	**369**	**100**

The data reported in Table 19 reflects an inclusive conceptualization of gender wherein male and female include both transgender and non-transgender men and women. While inclusivity was sought, the data does not indicate the percentage of group members who identified as transgender. Most respondents reported that the group about which they reported were comprised of equally mixed groups with regard to gender (36.9%, n=136); followed by mostly male (26.6%, n=98); all male (16.3%, n=60); all female (12.7%, n=47); and mostly female (4.3%, n=16).

Table 20: Length of Abstinence

Length of Abstinence	Frequency	Percent
More than 12 months	22	6.0
7-12 months	19	5.1
4-6 months	52	14.1
1-3 months	110	29.8
Less than 1 month	91	24.7
Varies widely	60	16.3
Primarily not abstinent	8	2.2
Other	6	1.6
Missing	1	.3
Total	**369**	**100**

As Table 20 suggests, most members of groups about which respondents reported were abstinent for less than 3 months (54.5%, n=201), with 24.7% reportedly abstinent for less than one month (n=91). This response was followed by "length of abstinence varies widely" (16.3%, n=60); "most group members are abstinent 4-6 months" (14.1%, n=52); "most group members are abstinent more than 12 months" (6%, n=22); "most group members are abstinent 7-12 months" (5.1%, n=19); and "most group members are not abstinent" (2.2%, n=8).

Table 21: Mandated Status of Group Members

Mandated Status	Frequency	Percent
Most are voluntary	131	36.5
Most are court mandated	123	34.3
Equally mixed	105	29.2
Total	**359**	**100**

Table 21 indicates, respondents indicated that of the groups about which they were reporting most were groups where "most members are voluntary" (36.5%, n=131);

followed by “most members are court mandated (34.3%, n=123); and an equal mix of mandated and voluntary members (29.2%, n=105).

Mutual Aid Process Scale

A major focus of this study was to query respondents about the amount of specific mutual aid processes that could potentially occur in a group session. The 30 items selected for this study and used in the Mutual Aid Processes scale were drawn from the general group work literature as well as the substance use disorder group treatment literature and were utilized in this scale in consultation with an expert panel of social workers. Respondents of this survey were asked to assess the level of frequency for each group activity by selecting from 7 items on a Likert scale, with options including never (0), very rarely (1), rarely (2), sometimes (3), frequently (4), almost always (5), and always (6) with a maximum mean score of 6.

This section of the findings report will identify the frequencies and mean score with standard deviation for each mutual aid process. This discussion will include finding such as reliability testing, factor analysis and the computation of a composite total score for the 30-item scale used for bivariate analysis and hypothesis testing.

Validity and Reliability

The 30 items comprising the Mutual Aid Processes Scale were selected based on a review of the general group treatment literature and the substance use disorder group treatment literature, as well as expert review, demonstrating face, content and construct validity. Factor analysis suggested factorial validity as well, indicating that the

30 items related as a unitary construct. Reliability testing of these 30 items yielded a Chronbach's alpha score of .96, a very high score. An additional measure of reliability, the Guttman split-half correlation, yielded a score of .92. Both scores indicate the 30 item scale demonstrates high reliability.

Factor Analysis

A principal components factor analysis with varimax rotation was performed with all 30 items to learn whether the items related together as a unitary construct, in this case, mutual aid. Factor analysis produced a four factor solution wherein the first factor had the highest factor loadings indicating that all 30 items related together as a unitary concept. When the scale was run with a varimax rotation only one underlying component was found, giving additional weight to the use of the 30 items that had high factor loadings in the initial analysis. Factor one had an eigenvalue of 14.045 and explained 47% of the variance.

Table 22: Factor Loading for Mutual Aid Processes

Mutual Aid Process	Factor Loading
1. Provide constructive feedback about a member's new behavior.	.804
2. Validate and affirm each other.	.779
3. Provide ideas to each other about how to handle a situation.	.771
4. Help a member identify a solution by identifying one that worked for them…	.770
5. Request ideas from each other about how to handle a situation.	.757
6. Assure each other that their experiences …are not unique.	.752
7. Request information from each other about topics relevant to the group.	.742
8. Help anticipate obstacles to resolving a problem…	.737
9. Provide realistic reassurance that their problems will be resolved positively.	.734
10. Share their personal successes in overcoming problems.	.729
11. Encourage each other to behave in ways…that promote personal growth…	.726
12. Ask clarifying questions of a member to better understand their concern…	.725
13. Take action as a group to help a member accomplish an individual task…	.723
14. Ask other members for help with a problem or concern.	.722
15. Provide empathic responses to each other indicating understanding/care.	.720
16. Take action as a group on behalf of shared interests or concerns.	.711
17. Practice new behavior in the group.	.701
18. Provide information to one another about topics relevant to the group.	.678
19. Discuss or debate differing perspectives about a topic or concern.	.674
20. Reveal personal, intimate experiences, thoughts, and/or feelings.	.665
21. Challenge or confront each other's problematic behavior or attitude.	.658
22. Discuss topics one might regard as taboo or are uncomfortable to discuss…	.634
23. Discuss the pros and cons of a topic or issue.	.632
24. Listen attentively when a member shares feelings, problems or concerns.	.632
25. Express candid feelings about each other directly.	.629
26. Challenge each other to respect the group ground-rules.	.564
27. Evaluate the performance of the group.	.549
28. Express candid feelings about the group leader directly.	.506
29. Provide each other with physical gestures of care, like hugging.	.504
30. Role play situations in order to practice new behaviors to handle situations.	.420

As can be seen from the above table, the factor loadings for Factor One are quite high and suggest that all 30 items can be regarded as a unitary construct. The mean scores and standard deviations for each item are presented in the Table 23.

Table 23: Mean Score of Mutual Aid Processes

Mutual Aid Process	Mean Score	SD
1. Listen attentively when a member shares feelings, problems or concerns.	4.55	.87
2. Assure each other that their experiences …are not unique.	4.51	.97
3. Share their personal successes in overcoming problems.	4.42	.95
4. Provide ideas to each other about how to handle a situation.	4.37	.88
5. Help a member identify a solution by identifying one that worked for them…	4.32	.93
6. Discuss the pros and cons of a topic or issue.	4.29	1.00
7. Validate and affirm each other.	4.28	1.00
8. Encourage each other to behave in ways…that promote personal growth…	4.25	1.00
9. Provide empathic responses to each other indicating understanding/care	4.18	.94
10. Reveal personal, intimate experiences, thoughts, and/or feelings.	4.15	1.09
11. Discuss or debate differing perspectives about a topic or concern.	4.10	.99
12. Request ideas from each other about how to handle a situation.	4.05	.99
13. Provide realistic reassurance that their problems will be resolved positively.	3.96	.92
14. Provide constructive feedback about a member's new behavior.	3.96	1.04
15. Practice new behavior in the group.	3.95	.90
16. Ask clarifying questions of a member to better understand their concern….	3.94	1.00
17. Provide information to one another about topics relevant to the group.	3.93	.99
18. Help anticipate obstacles to resolving a problem…	3.90	1.02
19. Ask other members for help with a problem or concern.	3.90	1.04
20. Request information from each other about topics relevant to the group.	3.71	1.08
21. Challenge or confront each other's problematic behavior or attitude.	3.70	1.07
22. Discuss topics one might regard as taboo or are uncomfortable to discuss…	3.65	1.19
23. Challenge each other to respect the group ground-rules.	3.64	1.14
24. Express candid feelings about each other directly.	3.54	1.26
25. Take action as a group to help a member accomplish an individual task…	3.53	1.23
26. Express candid feelings about the group leader directly.	3.52	1.10
27. Take action as a group on behalf of shared interests or concerns.	3.42	1.19
28. Evaluate the performance of the group.	3.28	1.40
29. Role play situations in order to practice new behaviors to handle situations.	2.92	1.33
30. Provide each other with physical gestures of care, like hugging	2.74	1.42

This discussion of the findings in Table 23 will highlight the mutual aid processes that are reported to occur frequently, as indicated by a mean score of 4 or above as well as those processes that are reported to occur less than sometimes, if not rarely, as indicated by a mean score of less than 3. As previously indicated, mutual aid, for the purposes of this study was conceptualized as including ten types of processes. These processes and the items with which they are associated as reported in Table 22 include

the following: mutual support (items 1, 7, 9, 10, 30); the all-in-the-same-boat phenomenon (item 2); the instillation of hope (items 3, 13); sharing data (items 4, 12, 17, 20); problem-solving (items 5, 16, 18, 19); the dialectic process (items 6, 11); mutual demand (items 8, 21, 23, 26); rehearsal and skill acquisition (items 14, 15, 29); discussion of taboo topics (items 22, 24, 26); and the strength in numbers phenomenon (25, 27).

As can be seen from Table 23, the mutual aid processes reported to most frequently occur resonate with the clinical literature's recommendations that opportunities for universality or the all-in-the-same-boat phenomenon, mutual support, and the instillation of hope should occur in treatment groups for people in early recovery. The mutual aid process reported to occur with the most frequency is *listen attentively when a member shares feelings, problems or concerns*, which yielded a mean score of 4.56 (n=345, SD=.87). Approximately 40% of the respondents indicated that this process occurred "almost always" (n=149), followed by reports that it occurred "frequently" (29.5%, n=109), always (11.9%, n=44), "sometimes" (11.4%, n=42), and "rarely" (.3%, n=1).

Listening was closely followed by the identification of commonalities, a process referred to as the all-in-the-same-boat phenomenon and argued to be of prime importance in early recovery treatment groups and in the beginning stage of group work. The process, *assure each other that their experiences, thoughts and/or feelings are not unique*, yielded a mean score of 4.5 (n=344, SD=.97). Almost 33% of respondents

reported this process occurs “almost always” (n=121), with 32% reporting “frequently” (n=118), 15.2% reporting “always” (n=56), 11.7% reporting “sometimes” (n=43), and 1.7% reporting rarely or very rarely (n=6). Along with listening and the all-in-the same boat phenomenon, group members reportedly engaged in the instillation of hope with high frequency, according to respondents. The mean score for *share their personal successes in working through or overcoming problems* was 4.42 (n=343, SD=.95). Almost 34% of respondents reported this activity occurred “frequently” (n=125), followed by “almost always” (32%, n=118), “sometimes” (13.6%, n=50), “always” (12.2%, n=45), and “rarely” or “very rarely” (1.4%, n=5).

The next two items reported to occur with frequency relate to handling challenging situations and/or solving problems. The first is referred to as sharing data and the second is associated with the problem-solving process. The distinction is that the first can appear in the form of advice and the second calls for members to draw upon their personal experience. The process, *provide ideas to each other about how to handle a situation* yielded a mean score of 4.37 (n=345, SD=.88). The problem-solving process, *help a member identify potential solutions to their problem by identifying a solution that worked for them when faced with a similar problem,* yielded a mean score of 4.3 (n=344, SD=.93).

Among the processes reported to occur frequently are those associated with both support and challenge. Supportive processes include, “validation” (item 7) which yielded a mean score of 4.3 (n=345, SD=1), “empathy” (item 9) which yielded a mean

score of 4.2 (n=342, SD=1), and “self-disclosure” (item 10) which yielded a mean score of 4.15 (n=346, SD=1.1). A non-confrontational approach to encouraging behavior change (item 8) yielded a mean score of 4.25 (n=351, SD=1).

Dialectic processes, which can aid in enhancing motivation for change, are also reported to occur frequently (items 6, 11). Discussion of pros and cons regarding a topic yielded a mean score of 4.3 (n=346, SD=1). Debating differing perspectives (item 11) yielded a mean score of 4.1 (n=346, SD=.99).

Of all 30 items reported, only two were reported to occur less than sometimes. The use of role play (item 29) and hugging (item 30) yielded mean scores of 2.92 (n=343, SD=1.3) and 2.7 (n=353, SD=1.42) respectively.

Finally, a new dependent variable was created that included all 30 mutual aid processes and was computed to provide the mean of the summed score for the total mutual aid processes. The possible scores ranged from 0 to 6. The mean score for the total mutual aid processes score for 353 respondents was 3.89 (SD=.71) with a median of 3.8. This finding suggests that mutual aid processes are occurring frequently in treatment groups for people with SUDs according to the perceptions of group leaders surveyed. This variable was further utilized for hypothesis testing and other bivariate tests of significance which are presented in the following section.

Hypothesis Testing and Other Bivariate Tests of Significance

Three hypotheses were tested through this study. These hypotheses are presented below, followed by the report of the findings from relevant bivariate tests.

- Respondents who are social workers that possess an MSW with at least one semester of group work specific education will yield higher total scores on the Mutual Aid Processes Scale (MAPS) as compared to those with other professional degrees and at least one semester of group work specific education.
- Respondents who are social workers that possess an MSW with three or more semesters of group work specific education will yield a higher total score on the MAPS as compared to MSW social workers with 2 or fewer semesters.

- There will be no statistically significant difference on the mean total score of the MAPS between respondents who report that they participated in a 12 Step program versus respondents reporting no participation in a 12 Step program.

The first hypothesis predicted that respondents with an MSW and at least one semester of group work specific education would score higher on the MAPS than all other group leaders in this sample with at least one semester of group specific education. In order to test this hypothesis an independent-sample t-test was conducted. The mean score on the MAPS for MSW educated respondents with at least one

semester of group specific education (n=41) was 3.88 (SD=.62). The mean score on the MAPS for those non-MSW respondents with at least one semester of group specific education (n=239) was slightly, but not significantly higher at 3.9 (SD=.71). The mean scores did not differ significantly at the p<.05 level (note: p=.83, for a two-tailed test). These findings fail to confirm this hypothesis.

The second hypothesis predicted that social workers with an MSW degree who also had three or more semesters of group work specific education would yield a higher MAPS score than those social workers with two or fewer semesters of group work specific education. In order to determine if the score on the MAPS would differ significantly for these two groups an independent-samples t-test was performed. The mean score on the MAPS for MSW level social workers with at least one but not more than two semesters of group specific education (n=21) was 3.77 (SD=.62). The mean score on the MAPS for those respondents with at least three semesters of group specific education or more (n=20) was slightly, but not significantly higher at 4.00 (SD=.61). The mean scores did not differ significantly at the p<.05 level (note: p=.229, for a two-tailed test). These findings fail to confirm this hypothesis.

In order to test the third hypothesis an independent-sample t-test analysis was performed wherein the mean score on the MAPS was computed for those respondents with and without 12-Step participation. For respondents with 12-Step participation (n=274) the mean score on the MAPS was 3.91 (SD=.73); for those without 12-Step participation (n=73) the mean MAPS score was 3.75 (SD=.63). The mean scores did not

differ significantly at the p<.05 level (note: p=.053, for a two-tailed test). While this hypothesis was not discounted, the findings just barely missed the level of statistical significance.

In order to further determine the impact of 12-Step Participation an independent-sample t-test was performed comparing the MAPS score for those respondents with 12-Step participation who had at least one group specific course versus those with no group specific courses. The score on the MAPS for 12-Step participants with at least one group work course (n=224) was 3.9 (SD=.71). The mean score on the MAPS for 12-Step participants with no group work course (n=50) was slightly, but not significantly lower at 3.88 (SD=.61). The mean scores did not differ significantly at the p<.05 level (note: p=.753, for a two-tailed test).

In order to further explore the impact of 12-Step participation on the score of the MAPS an independent-sample t-test was performed to compare the difference on the score of the MAPS for respondents with no group work specific education but with 12-Step participation versus those with no group work specific education and no 12-Step participation. The mean score on the MAPS for 12-Step participants with no group work specific education (n=50) was 3.88 (SD=.61). The mean score on the MAPS for group leaders with no group work specific education and no 12-Step participation (n=19) was slightly, but not significantly lower at 3.69 (SD=.66). The mean scores did not differ significantly at the p<.05 level (note: p=.33, for a two-tailed test). Of note, the

cohort of group leaders without both 12-Step participation and group specific education was very small (n=19).

In sum, two of the three hypotheses were not supported by the findings. While not statistically significant, respondents with an MSW and at least 3 semesters of group work education scored a higher mean score than those with an MSW but less than 3 semesters of group specific education (4.00 versus 3.77). Of note, of all the subsamples in this exploration, respondents with an MSW and at least 3 semesters of group work education scored the highest mean score on the MAPS (4.00, SD=.61, n=20).

One hypothesis, that predicting that 12-Step participation would not significantly impact the score on the MAPS, was confirmed. The impact of the respondents' 12-Step participation on the MAPS score failed to reach statistical significance, confirming the hypothesis. However, the finding approached statistical significance and for that reason was further examined by additional tests of significance. To further explore the impact of worker, group, and membership variables on the MAPS score, additional bivariate tests of significance were conducted and are reported below.

Additional Bivariate Tests of Significance

This study sought to explore the impact of various factors that could potentially impact the amount of mutual aid in a treatment group for people with SUDs. This study examined worker, group, and membership factors. Tests of significance are reported in the following sections.

Worker Variables

The impact of the following worker related variables on the MAPS score were evaluated: years of experience working with SUD treatment groups, professional discipline, degree, SUD credential, amount of education, amount of training, the model studied, and gender. Of these, the following demonstrated significance: amount of group work specific education as measured by number of semesters and amount of group work specific training as measured by the report of qualitative descriptors including no, one, a few and many trainings.

With regard to years of experience in working with SUD treatment groups, respondents were grouped in the following manner: those with 10 or fewer years; those with 11 to 20 years; and those with more than 20 years. To learn whether there was a difference on the MAPS among respondents with different amount of years in the field a one-way ANOVA was performed. With regard to years in the field, the score on the MAPS was not found to differ significantly on a one way ANOVA $F(2, 341) = .080$, $p = .923$. A Pearson product-moment correlation was calculated to determine the relationship between the amount of years working with SUD treatment groups and the score on the MAPS. There was no statistically significant correlation between these two variables ($r = .020$) (note: $p = .357$).

To learn whether there was a difference on the MAPS among respondents from differing professional disciplines a one-way ANOVA was performed. With regard to professional discipline, the score on the MAPS was not found to differ significantly on a

one way ANOVA *F*(5, 347) =.783, *p*=.563. To learn if the possession of an SUD credential had an impact on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those with an SUD credential (n=300) was 3.87 (SD=.71). The mean score on the MAPS for group leaders without an SUD credential was (n=43) was slightly, but not significantly higher at 4.02 (SD=.69). The mean scores did not differ significantly at the p<.05 level (note: p=.194, for a two-tailed test).

In order to explore the impact of education and training on the MAPS score, the impact of the following variables were studied: highest earned degree, amount of group specific education, model studied and amount of training. In order to determine the impact of the respondents' degree on the MAPS score, a one-way ANOVA was performed. With regard to degree, the score on the MAPS was not found to differ significantly on a one way ANOVA *F*(9, 342) =.611, *p*=.787. Additionally to learn if the possession of a Masters degree or higher had an impact on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those with a highest earned degree less than a Masters (n=154) was 3.85 (SD=.72). The mean score on the MAPS for group leaders with at least a Master or higher (n=181) was slightly, but not significantly higher at 3.89 (SD=.70). The mean scores did not differ significantly at the p<.05 level (note: p=.578, for a two-tailed test).

In order to determine the relationship between the amount of education and the MAPS score, a Pearson product-moment correlation was performed. Respondents who reported one semester of group specific education yielded a mean score on MAPS

of (M=3.69, SD=.61, n=52); for those with two semesters (M=3.84, SD=.74, n=86); for those with three semesters (M=3.75, SD=.57, n=36); for those with four semesters (M=4.11, SD=.71, n=108); and for those with no specific coursework education about groups (M=3.79, SD=.82, n=66). Amount of education as measured by semesters of group work specific courses and the MAPS score had a significant positive correlation (r =.107, p =.023) (note: p <.05). To further explore whether there was a difference on the MAPS score among respondents with differing amounts of education as measured by semesters of group work specific courses a one-way ANOVA was performed. With regard to amount of education, the score on the MAPS was found to differ significantly on a one-way ANOVA $F(4, 343) = 4.54$, p=.001. To learn if receiving four semesters of group work education, as compared to those with one to three semesters, had an impact on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for group leaders with one to three semesters (n=174) was 3.77 (SD=.67). The mean score on the MAPS for those who had four semesters of group work education (n=108) was significantly higher at 4.11 (SD=.71). The mean scores differed significantly at the p<.05 level (note: p=.000, for a two-tailed test).

In order to determine the relationship between the amount of training and the MAPS score, a Spearman's rho correlation was performed. Respondents who reported no group specific training yielded a mean score on MAPS of (M=3.66, SD=.82, n=11); for those reporting only one training (M=4.22, SD=.74, n=9); for those reporting a few trainings (M=3.88, SD=.84, n=65); and for those reporting many trainings (M=4.05,

SD=.77, n=265). Amount of training as measured by qualitatively worded amounts including “no”, “one”, “few” and “many” group work training sessions and the MAPS score had a significant positive correlation on a Spearman’s rho (r =.121, p =.012) (note: p <.05). To further explore whether there was a difference on the MAPS score among respondents with differing amounts of training, a one-way ANOVA was performed. With regard to amount of training, the score on the MAPS was not found to differ significantly on a one-way ANOVA $F(3, 346) = 1.84$, p=.139. Additionally to learn if receiving “many” group work training sessions had an impact on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those who reported fewer than many training sessions (n=154) was 3.74 (SD=.69). The mean score on the MAPS for group leaders reporting “many” trainings (n=265) was significantly higher at 3.94 (SD=.72). The mean scores differed significantly at the p<.05 level (note: p=.024, for a two-tailed test).

To further explore the impact of education on the MAPS score, a one-way ANOVA was performed with regard to group practice models studied. The scores on the MAPS were not found to differ significantly among the categories of different models studied $F(6, 342) = 1.04$, p=.394.

The final worker related variable examined was gender. In order to examine the impact of gender on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those identifying as male (n=156) was 3.84 (SD=.68). The mean score on the MAPS for those identifying as female (n=191) was slightly, but not

significantly higher at 3.92 (SD=.73). The mean scores did not differ significantly at the p<.05 level (note: p=.305, for a two-tailed test).

In sum, the amount of workers' education and training regarding group work specific content seems to positively affect the amount of mutual aid in the SUD treatment groups about which respondents reported. Additional bivariate testing was conducted to determine the impact of elements of group structure and group membership on the amount of mutual aid as measured by the score on the MAPS. These findings are presented in the subsequent section.

Group Related Variables

The impact of the following group related variables on the MAPS score were evaluated: setting of the group, purpose, group approach, length of session, frequency of meetings, whether the group was open or closed, the duration of the group, and group size. Of these, the following demonstrated significance: setting, purpose, session length, frequency of group sessions, and size.

In order to determine the impact of the setting on the MAPS score, a one-way ANOVA was performed. With regard to setting, the score on the MAPS was found to differ significantly on a one way ANOVA $F(6, 342) = .284$, $p = .010$ at the p<.05 level. The setting associated with the highest score on the MAPS was *short-stay rehab* (M=4.21, SD=.80, n=20). The setting associated with the lowest score was *prison* (M=3.5, SD=.58, n=17). The scores for the remaining settings are presented in descending order:

residential therapeutic community (M=4.06; SD=.78, n=64); *private practice* (M=4.01, SD=.77, n=18); *outpatient program* (M=3.86, SD=.67, n=190); and *hospital* (M=3.67, SD=.74, n=17).

In order to determine the impact of the group purpose on the MAPS score, a one-way ANOVA was performed. With regard to group purpose, the score on the MAPS was found to differ significantly on a one way ANOVA $F(4, 345) = .300$, $p = .019$ at the $p<.05$ level. The purpose associated with the highest score on the MAPS was *other* which was often explained as a combination of the available listed options (M=4.2, SD=.71, n=27). The purpose associated with the lowest score was *work on non-recovery specific life issues* (M=3.5, SD=.86, n=16). The scores for the remaining purposes are presented in descending order: *work on relapse prevention and maintaining abstinence* (M=3.94; SD=.64, n=138); *work on early recovery tasks related to achieving abstinence* (M=3.85, SD=.75, n=136); and *enhance treatment readiness/motivation for treatment* (3.71, SD=.71, n=33).

In order to determine the impact of the group approach on the MAPS score, a one-way ANOVA was performed. With regard to group approach, the score on the MAPS was not found to differ significantly on a one way ANOVA $F(6, 345) = .868$, $p = .519$ at the $p<.05$ level. As indicated, despite report of different approaches, respondents utilized at least 6 different group leader activities. Because of the theoretical association of group facilitation with the presence of mutual aid, the item relating to facilitation was examined. In order to determine if a high amount of facilitation activity

an independent samples t-test was conducted comparing the mean MAPS score for respondents reporting less than high levels of facilitation (n=146) versus those reporting high levels (n=207) as indicated by selecting always or almost always on a Likert scale. The mean score on MAPS was 3.5 (SD=.61) for the less than high levels group and the mean score on MAPS was 4.1 (SD=.68) for the high level group. The mean scores differed significantly at the p<.05 level (note: p=.000, for a two-tailed test). This finding provides additional support for construct validity as these two items, facilitation and the MAPS score, relate according to practice theory.

In order to determine the impact of the length of a group session on the MAPS score, a one-way ANOVA was performed. With regard to session length, the score on the MAPS was found to differ significantly on a one way ANOVA $F(5, 346) = 4.167$, $p = .001$ at the p<.05 level. The length associated with the highest score on the MAPS was *more than two hours* (M=4.14, SD=.62, n=59). The length associated with the lowest score was *one hour* (M=3.75, SD=.67, n=118). The scores for the remaining session lengths are presented in descending order: *two hours* (M=4.03; SD=.76, n=46); and *ninety minutes* (3.86, SD=.73, n=120). To learn if more than 2 hours of group treatment, as compared to all other briefer group session lengths, had an impact on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for groups with session lengths less than "more than two hours" (n=294) was 3.83 (SD=.72). The mean score on the MAPS for those reporting the group session length was more than

two hours (n=59) was significantly higher at 4.14 (SD=.62). The mean scores differed significantly at the p<.05 level (note: p=.003, for a two-tailed test).

In order to determine the impact of the frequency of group sessions on the MAPS score, a one-way ANOVA was performed. With regard to frequency of group sessions, the score on the MAPS was found to differ significantly on a one way ANOVA $F(4, 331) = 2.61$, $p = .035$ at the p<.05 level. The frequency associated with the highest score on the MAPS was *3x per week* (M=3.9964, SD=.63, n=69). The length associated with the lowest score was *1x per week* (M=3.72, SD=.66, n=131). The scores for the remaining frequency of group sessions are presented in descending order: *5x per week* (M=3.993; SD=.77, n=44); *2x per week* (M=3.96; SD=.79, n=56); and *4x per week* (M=3.94; SD=.75, n=36). In order to determine the impact of the duration of the group on the MAPS score, a one-way ANOVA was performed. With regard to duration of the group, the score on the MAPS was not found to differ significantly on a one-way ANOVA $F(4, 346) = 5.26$, $p = .717$ at the p<.05 level.

In order to determine the impact of the size of the group on the MAPS score, a one-way ANOVA was performed. With regard to the size of the group, the score on the MAPS was found to differ significantly on a one way ANOVA $F(3, 347) = 5.642$, $p = .001$ at the p<.05 level. The amount of mutual aid seems to be affected by group size. The size category associated with the highest score on the MAPS was *13 or more members* (M=4.09, SD=.63, n=63). The size category associated with the lowest score was *4 members or fewer* (M=3.38, SD=.45, n=7).

Finally, in order to examine the impact of the closed or open status of the group on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those identifying their group as open (n=301) was 3.89 (SD=.79). The mean score on the MAPS for those identifying their group as closed (n=46) was slightly, but not significantly higher at 3.92 (SD=.79). The mean scores did not differ significantly at the $p<.05$ level (note: p=.801, for a two-tailed test).

Membership Variables

The effects of the following membership variables on the MAPS score were evaluated: gender mix, length of abstinence and mandated status of group members. Of these, only the variable regarding mandated status demonstrated a statistically significant impact on the MAPS score.

In order to determine the impact of the gender mix on the MAPS score, a one-way ANOVA was performed. With regard to gender mix (all female, all male, mostly female, mostly male and equally mixed), the score on the MAPS was found to not differ significantly on a one way ANOVA $F(4, 344) = 2.001$, $p=.094$ at the $p<.05$ level. To further explore the impact of gender on the MAPS score an independent-samples t-test was conducted. The mean score on the MAPS for those identifying their group as comprised of all male members (n=60) was 3.74 (SD=.69). The mean score on the MAPS for those identifying their group as comprised of all female members (n=46) was slightly,

but not significantly higher at 3.99 (SD=.71). The mean scores did not differ significantly at the p<.05 level (note: p=.077, for a two-tailed test).

In order to determine the impact of the length of abstinence on the part of group members on the MAPS score, a one-way ANOVA was performed. With regard to length of abstinence, the score on the MAPS was found to not differ significantly on a one way ANOVA $F(7, 345) = .723$, $p = .652$ at the p<.05 level.

In order to determine the impact of the group members' predominant mandated status on the MAPS score, a one-way ANOVA was performed. With regard to group members' predominant mandated status (mostly mandated, mostly voluntary, and equally mixed), the score on the MAPS was found to differ significantly on a one way ANOVA $F(2, 348) = 6.408$, $p = .002$ at the p<.05 level. The score on the MAPS for respondents reporting that their group was comprised of mostly mandated members was 3.70 (SD=.69, n=121). The score on the MAPS for respondents reporting that their group was comprised of mostly voluntary members was 3.97 (SD=.74, n=127). The score on the MAPS for respondents reporting that their group was comprised of members equally mixed with regard to mandated status was 4.00 (SD=.68, n=103), higher than the mean score of homogenous groups with regard to mandated status.

To further explore the impact of mandated status on the MAPS score an independent-samples t-test was conducted. The score on the MAPS for those identifying their group as comprised of mostly mandated members (n=121) was 3.70 (SD=.68). The mean score on the MAPS for those identifying their group as comprised of mostly

voluntary members (n=46) was significantly higher at 3.97 (SD=.74). The mean scores differed significantly at the p<.05 level (note: p=.004, for a two-tailed test). To further explore the impact of equally mixed mandated status on the MAPS score an independent-samples t-test was conducted. The score on the MAPS for those identifying their group as comprised of all mandated members (n=121) was 3.70 (SD=.68). The mean score on the MAPS for those identifying their group as comprised of an equal mix with regard to mandated status (n=103) was significantly higher at 4.00 (SD=.68). The mean scores differed significantly at the p<.05 level (note: p=.001, for a two-tailed test). To further explore the difference on mean scores on the MAPS between the voluntary groups versus the equally mixed groups with regard to mandated status, an independent-samples t-test was conducted. The mean scores did not differ significantly at the p<.05 level (note: p=.716, for a two-tailed test).

Multiple Regression Models

Drawing upon the significant findings found through bivariate tests of significance four multiple regression models were analyzed using stepwise multiple regression analysis procedures. The first model examined the worker related predictor variables, level of facilitation, amount of education and amount of training and their effects on the mutual aid processes scale. In order to run this analysis dummy variables

were created. The level of facilitation was presented as the group leader activity: *I help the group members talk directly to each other so they can work on their problems, concerns or issues together.* The respondents scored their level of this activity on a 0-6 point Likert scale. For the dummy variables scores of 5 and 6 were coded as "high" levels and equaled 1, with all scores that were less than "high" equaling 0. The amount of group work education indicated by the number of semesters specific to a group practice model had possible options including 0, 1, 2, 3, and 4 semesters. The amount of group model specific training sessions included none, one, a few and many. For the dummy variable "many" equaled 1 and all remaining options equaled 0. The findings of the stepwise multiple regression of this model are presented in table 24.

Table 24: Stepwise Multiple Regression Model of Three Predictors with MAPS

Model	**R**	**R^2**	**R^2 adjusted**	**R^2 change**	**Beta**
Step 1 DFAC	*.413*	*.171*	*.168*	.171	.41***
Step 2 DEDAMT	*.443*	*.197*	*.192*	.026	.16**

***p<.001
**p<.01

Table 24 reflects the findings for the first stepwise multiple regression model with three predictors, level of facilitation, amount of group specific education and amount of group specific training. The amount of group specific training was not included in the model because it did not meet the statistical inclusion criterion of $p < .10$.

Of the three variables considered, the stepwise multiple regression analysis indicated that most of the variance in amount of mutual aid processes was explained by the high level of group leader facilitation and some additional variance explained by number of semesters of group specific education. Overall these two variables explained almost 20% of the variance (adjusted R^2=.19) and 17% was explained by only one variable, the high level of group leader facilitation. The standardized regression coefficients were .41 for facilitation and .16 for the amount of education, both were statistically significant.

The second multiple regression model examined the group related predictor variables: setting, group purpose, length of the meeting, frequency of meetings, and size. In order to run this analysis dummy variables were created. The options for setting included outpatient rehab, residential therapeutic community, short-stay rehab, hospital in-patient, prison, and private practice. For the dummy variable relating to setting "short-stay rehab" was coded as equaling 1 with all other options equaling 0. The options for the purpose of the group included "enhancing treatment motivation", "work on early recovery tasks", "work on relapse prevention", "work on non-recovery

specific life issues", and "other". The option of "other" was included as all who selected this option indicated that the purpose was a combination of the available options. For the dummy variable relating to group purpose the option "other" equaled 0 with all other options equaling 1. The options for the length of the group included less than one hour, one hour, 90 minutes, two hours, and more than two hours. For the dummy variable relating to length, "more than two hours" was coded to equal 0 with all other options equaling 1. The options for the frequency of group sessions included one, two, three, four and five times per week. For the dummy variable the frequency was coded with one time per week equaling 0 and all other options equaling 1. The options for group size included 4 members or fewer, 5-7 members, 8-12 members, and 13 or more members. The dummy variable relating to group size was coded so that the option of 13 or more members equaled 0, with all other options equaling 1. The findings of the stepwise multiple regression of this model are presented in table 25.

Table 25: Stepwise Multiple Regression Model of Five Predictors with MAPS

Model	R	R^2	R^2 adjusted	R^2 change	Beta
Step 1 DFRQNCY	*.174*	*.030*	*.027*	.030	.17***
Step 2 DLENGTH	*.210*	*.044*	*.038*	.014	-.12**

*** p<.01 level
** p<.05 level

Table 25 reflects the findings for the first stepwise multiple regression model with five predictors: setting, group purpose, length of the meeting, frequency of meetings, and size. The setting, group purpose, and size of the group were not included in the model because they did not meet the statistical inclusion criterion of $p < .10$.

Of the three variables considered, the stepwise multiple regression analysis indicated that most of the variance in amount of mutual aid processes was explained by the frequency of meetings being more than once per week, with an additional amount of the variance explained by the length of the meeting being more than two hours. Overall these two variables explained almost 4.4% of the variance (adjusted R^2=.038) and 3% was explained by only one variable, multiple meetings. The standardized

regression coefficients were .17 for frequency and -.12 for the length of the meeting, both of which were statistically significant.

The third multiple regression model examined the impact of the mandated status of group members on the MAPS. In order to run this analysis two dummy variables relating to the predominant mandated status of group members were created. The options for this variable included “most members are court mandated”, “most members are voluntary” and “equal or almost equally mixed with regard to mandated status”. The first dummy variable, DMANDATE, was created so that “mandated” equaled 0 with all other options equaling 1. The second dummy variable, DVOLUNTA, was coded so that “voluntary” equaled 0 with all other options equaling 1. While regressions were run for both variables the findings for DMANDATE are presented in Table 26, as it explained a greater amount of the variance.

Table 26: Stepwise Multiple Regression Model of Two Predictors with MAPS

Model	**R**	**R^2**	**R^2 adjusted**	**R^2 change**	**Beta**
Step 1 DMANDATE	*.187*	*.035*	*.032*	.035	.19***

*** p<.01 level

Table 26 reflects the findings for the third stepwise multiple regression model with two predictors: mandated status and voluntary status. The voluntary status variable was not entered as it did not meet the inclusion criterion of $p < .10$.

Of the two variables considered, the stepwise multiple regression analysis indicated that all of the variance encountered in the amount of mutual aid processes was explained by groups that were not comprised primarily of mandated members. Overall this variable explained almost 3.5% of the variance (adjusted R^2=.032). The standardized regression coefficient was .19, and it was statistically significant. The most significant finding from each model was included in a fourth stepwise regression model, including: level of facilitation, frequency of meetings, and mandated status. The findings of this regression analysis are presented in table 27.

Table 27: Stepwise Multiple Regression Model of Three Predictors with MAPS

Model	R	R^2	R^2 adjusted	R^2 change	Beta
Step 1 DFACILITATION	*.423*	*.179*	*.177*	.179	.42**
Step 2 DMANDATE	*.461*	*.212*	*.207*	.033	.18***
Step 3 DFRQNCY	*.475*	*.226*	*.218*	.013	.12**

*** p<.01 level
** p<.05 level

Table 27 reflects the findings for the fourth stepwise multiple regression model with three predictors: level of facilitation, mandated status of members and the frequency of meetings.

Of the three variables considered, the stepwise multiple regression analysis indicated that most of the variance encountered in the amount of mutual aid processes was explained by a high level of group leader facilitation. Overall this variable explained almost 18% of the variance (adjusted R^2=.177). The standardized regression coefficient was .42, and was statistically significant. Overall these three variables combined explained 23% of the variance (adjusted R^2= .218). The standardized regression

coefficient for mandated status was .18 and that for frequency of meetings was .12, both of which were significant.

Summary

In summarizing the findings, the following data will be reviewed: description of the sample, groups and composition; mutual aid processes reported to occur in SUD groups; the validity and reliability of the MAPS instrument used to measure the amount of mutual aid; review of hypotheses testing; factors associated with higher scores on the MAPS; and results of multivariate regression analysis.

The sample of NAADAC members with email addresses reflected 8% of the total membership base with email addresses (n=484). The sample was divided into two sub-samples, the main study sample (76.2%, n=369) and the no group sample (23.8%, n=115). The findings relating to the main study sample were highlighted in this chapter.

The respondents in the main sample identified their professional discipline primarily as Alcohol and other Drug Counselors (81.8%, N=302), which was followed by the discipline of Social Worker (9.8%, n=36). In general this was an experienced sample, as the findings indicate an average of 12.8 years in the field with a median of 10 years. Almost 46.7% (n=172) reported they possessed a Masters degree as their highest earned degree, with an additional 5.2% (n=19) reporting they possessed a Doctoral

degree. A robust portion of the sample indicated they had at least one semester of group work specific education (78%, n=282), with 30.4% reporting they had four semesters of group practice model education (n=110). The primary models reported to have been studied included cognitive-behavioral treatment (58.6%, n=216), interactive group psychotherapy (14.6%, n=54) and Social Group Work/Mutual Aid Model (8.7%, n=32). In addition to education most respondents, at 76% (n=279), reported they had many sessions of group work training. Most respondents also reported possessing an SUD credential (85.1%, n=216) and had participated in a 12-Step Fellowship (78%, n=288). This was reportedly a well-educated, highly-trained and credentialed sample.

In general this sample was similar to the no-group sample. However, the no-group sample was more likely to have had graduate education (59% vs. 52%). Also, more respondents in the no-group sample identified as supervisors as opposed to direct service providers than the main sample (26% vs. 19.5%). Due to limitations of the survey it was not possible to determine which criterion respondents failed to meet in order to complete the balance of the survey, i.e. having led a group and/or work in an abstinence based setting.

The findings for MSW level respondents were highlighted as they related to study hypotheses. While 9.8% of the sample identified as social workers (n=36), 12.5% reported they possessed an MSW (n=46). Of those who indicated they possessed an MSW, a very large percentage of this cohort reported having studied cognitive-behavioral group treatment (47.8%, n=22) which was followed by interactive group

psychotherapy (21.7%, n=10). A very small percentage, 15.2% reported studying Social Group Work/Mutual Aid Model (N=7). This ranking echoed that for the main study sample as a whole.

The groups about which respondents reported were likely to be in an outpatient setting (54%, n=199) or a residential therapeutic community (18%, n=66). The purposes for which the groups were formed were commonly identified as relapse prevention (39.6%, n=146) or work on early recovery tasks (38.5%, n=142). The approaches most commonly utilized by the group counselor were said to be cognitive behavioral (31.2%, N=115), interactive group therapy (26.3%, n=97), or eclectic (19.5%, n=72). Despite the report of different approaches, respondents reported using a variety of group leader activities which were ranked on a 0-6 Likert scale. The activities and the mean scores included the following: providing information (5.1), teaching (5.0), stimulating insight (4.8), facilitating group interaction (4.7), confronting members (3.8), and providing individual work in a group setting (3.7).

The group sessions were likely to last either 90 minutes (34.1%, n=126) or 60 minutes (33.3%, n=123). Of the 350 respondents who provided information about the frequency of the group meeting, the most reported meeting frequency was once per week (38.4%, n=134). However, with additional options ranging from 2x-5x, more respondents reported multiple weekly meetings (61.7%, n=216). A very large portion reported that their group had been meeting for less than three months (43.6%, n=160).

Additionally, groups were likely to be open (86.8%, n=315) with 8-12 members (56.9%, n=209).

Paralleling the duration of group meetings, the length of sobriety for most group members was reported to be three months or less (54.5%, n=201). Clearly these were by and large newly forming groups comprising newly sober members. Groups were likely to be equally mixed with regard to gender (36.9%, n=136). With regard to gender the next reported gender composition mix was mostly male (26.6%, n=98). With regard to mandated status, 36.5% reported that their groups comprised mostly voluntary members (n=131), followed by mandated members (34.3%, n=123) and an equal mix (29.2%, n=105).

Respondents were queried about their perception of the frequency with which 30 mutual aid processes occurred in the groups about which they were reporting. The frequencies for these 30 items were rated on a Likert scale with options ranging from 0-6. Of the 30 items, 12 yielded a mean score of 4.00 or higher indicating that these items occurred frequently. An additional 7 yielded a mean score of at least 3.9. Combined, these data suggest that 2/3rds of all possible mutual aid processes occurred frequently in the groups about which respondents were reporting. The top ranked processes included listening attentively (a component of mutual support) (4.55); assuring each other that their experiences are not unique (a component of the all-in-the-same-boat phenomenon) (4.51); and sharing personal successes in overcoming problems (a component of the instillation of hope) (4.42).

The 30 items were used in the Mutual Aid Processes scale and tested for reliability and factorial validity. With regard to reliability these 30 items yielded a very high Chronbach's alpha .96 and an almost as high Guttman split-half correlation score, .92. Factor analysis with varimax rotation strongly suggested that these 30 items related to one another and formed a unitary construct. These 30 items were computed into a new variable, the Mutual Aid Processes Scale or MAPS. Computation of this new variable was conducted so as to yield the mean of the summed score of these 30 items. Testing for the total main sample yielded a mean score of 3.89, suggesting that mutual aid processes occur frequently in the groups about which respondents reported. This variable, MAPS, was used for hypotheses testing and other bivariate tests of significance.

In addition to the question, "to what extent do specific mutual aid processes occur in SUD treatment groups", this study examined three hypotheses. The first hypothesis was that respondents who are social workers that possess an MSW with at least one semester of group work specific education would yield a higher score on MAPS as compared to those of with other professional degrees and at least one semester of group work specific education. The second hypothesis was that respondents who are social workers in possession of an MSW with 3 or 4 semesters of group work specific education would yield a higher score on MAPS as compared to social workers with an MSW with 2 or fewer semesters of group work education. The third hypothesis was that there would be no statistically significant difference between respondents with

reported 12-Step Fellowship participation versus those without. Only the third hypothesis was supported by the findings. In order to verify this hypothesis an independent samples t-test was conducted. The mean scores on the MAPS did not differ significantly at the $p<.05$ level (note: $p=.053$, for a two-tailed test), supporting the hypothesis.

Bivariate analysis revealed that the following variables were positively associated with higher MAPS scores: amount of group work education, amount of training, high levels of group leader facilitation, group setting, group purpose, session length, frequency, group size, and voluntary group membership. In order to explore the impact of the amount of group practice model specific education on the MAPS, an ANOVA, Pearson product-moment correlation, and independent-samples t-test was conducted. The findings of all three tests were significant. The comparison of the mean scores between those with 4 semesters (4.11) versus those with between 1-3 semesters (3.77) with the independent-samples t-test demonstrated the difference between the means was significant at the $p<.05$ level (note: $p=.000$, for a two-tailed test).

In order to test the impact of training, a Spearman's rho correlation, ANOVA, and independent-samples t-test were conducted. The mean score on the MAPS for those reporting many sessions (3.94) was significantly higher than those with less than many sessions (3.74) through testing with an independent-samples t-test and the difference between the means scores was significant at the $p<.05$ level (note: $p=.024$, for a two-tailed test). The final worker related variable demonstrating significance was the level

of the group leader's facilitation activity. The mean score on MAPS was 3.5 (SD=.61) for the less than high levels group and the mean score on MAPS was 4.1 (SD=.68) for the high level group. As demonstrated by an independent-samples t-test the mean scores differed significantly at the p<.05 level (note: p=.000, for a two-tailed test).

Of the group related variables, setting, purpose, length, frequency, and size significantly impacted the MAPS score. Of the membership related variables only mandated-voluntary status of members impacted the MAPS score significantly. In order to study the impact of the setting of a group a one-way ANOVA was conducted. The setting associated with the highest mean score on the MAPS was short-stay rehab (4.21). This finding was significant with p=.010 at the p<.05 level. In order to determine the impact of group purpose on the MAPS score a one way ANOVA was performed. The purpose associated with the highest mean score on the MAPS was "other" which was described as a combination of all possible options (4.2). Based on the results of an ANOVA test this finding was significant with p=.019 at the p<.05 level. In order to determine the impact of the session length a one way ANOVA and an independent-samples t-test were performed. The mean scores on the MAPS differed significantly on the ANOVA with "more than two hours" yielding the highest score (4.14) with p=.001. This was further evaluated with a t-test wherein the mean of more than 2 hours (4.14) was compared with all other options less than "more than 2 hours" (3.87). The mean scores differed significantly at the p<.05 level (note: p=.003, for a two-tailed test).

In order to determine the impact of the frequency of group sessions on the MAPS score, a one way ANOVA was conducted. The frequency that yielded the highest MAPS score was 3x per week (3.99). This finding was significant at the $p<.05$ level with $p=.017$. In order to determine the impact of group size on the MAPS score, a one way ANOVA was conducted. The size that yielded the highest score on the MAPS was "13 or more members" (4.09) and was significant at the $p<.05$ level with $p=.001$. The final variable with a significant impact on the MAPS score was the mandated status of group members. In order to determine the impact that mandated status has on the MAPS score a one way ANOVA was conducted. The option that yielded the highest score on the MAPS was an equal mix of mandated and voluntary members (4.00). This finding was significant at the $p<.05$ level with $p=.002$.

Of note, the following variables did not significantly impact the score on MAPS for this sample: years in the field providing group treatment; professional discipline; highest earned degree; group practice model studied gender of practitioner; group approach utilized; group duration; whether the group was open or closed; gender mix of members; and length of abstinence of members.

Stepwise multiple regression analyses were conducted on four models examining the impact of predictor variables on the MAPS score. Eight of the nine variables demonstrating significance through bivariate testing were dummy-coded for regression analysis. The first model tested three predictor variables related to worker characteristics; the second model tested variables related to group characteristics; the

third model tested the impact of the mandated status of group members; and the fourth model tested the impact of each model's most impactful variable.

The first model demonstrated that high levels of group facilitation and number of semesters of group specific education explained almost 20% of the variance (adjusted R^2=.19), with high levels of facilitation accounting for 17% of the variance on MAPS scores. The second model demonstrated that meeting more than one time per week in sessions greater than 2 hours explained almost 4.4% of the variance (adjusted R^2=.038), with 3% of the variance explained by meeting more than one time per week. The third model indicated that groups comprising mostly voluntary members or an equal mix of mandated and voluntary members explained almost 3.5% of the variance (adjusted R^2=.032). The fourth model examined the combined impact of a high level of facilitation, in groups that meet more than once per week, with groups comprising mostly voluntary members or of an equal mix of voluntary and mandated members. Overall these three variables combined explained 23% of the variance (adjusted R^2= .218) on the MAPS score.

This concludes the report of the findings. In the next chapter the key findings will be further discussed, as will study limitations, implications for the social work field, and recommendations for future research.

Chapter Five: Discussion

Introduction

This study was conducted in order to generate new information about the presence of mutual aid processes in treatment groups for people with SUDs in the field. Due to scant empirical evidence about mutual aid in treatment groups for people with SUDs, argued to be of clinical salience for this population, further evidence was warranted (Freeman, 2001; NIDA, 2003; Weiss et al, 2004). Furthermore, experts in substance abuse treatment have asserted that practitioners in the field engage in individual work in a group setting, failing to make optimal use of the multiplicity of helping relationships potentially available in group treatment, in large part due to the treatment providers' lack of education about group practice models (Flores, 1997; King & Lorenson, 1989). Paraprofessional counselors supposedly reliant only on their own 12-Step participation have been accused of engaging in individual work in the group setting as well, acting more like sponsors than group leaders (Flores, 1997). Additionally, information is needed about the effect that group work education has on the amount of mutual aid in SUD treatment groups for practitioners of various educational backgrounds (Flores, 1997) and for social workers in particular (King & Lorenson, 1989; Steinberg, 1992). Consequently, this exploratory study was conducted to further examine the presence of mutual aid processes in abstinence-based SUD treatment groups in the field and the effect of various variables on the amount of mutual aid.

This quantitative study explored both the amount of specific mutual aid processes in treatment groups for people with substance use disorders (SUDs) as well as the effect of key predictor variables on the amount of mutual aid as measured in the Mutual Aid Processes Scale (MAPS) by surveying members of NAADAC with email addresses (n=484). Based on a review of the substance abuse group treatment literature, the social work group treatment literature and the general group treatment literature, the overarching question that informed this study was "to what extent do specific mutual aid processes occur in treatment groups for people with Substance Use Disorders". The effects of worker, group, and membership related variables on the MAPS were examined through bivariate tests of significance and stepwise multiple regression analyses.

The variables examined will be identified once more. Worker variables included professional discipline, highest earned degree, worker role, gender, credential, 12-Step participation, number of semesters of group practice model education, amount of group practice model training, model studied, and years in the field. Group related variables included treatment setting, group purpose, group approach, session length, frequency of meetings, whether the group was open or closed, duration of the group, and the size. Membership related variables included gender mix, predominant length of sobriety, and mandated status of group members.

Three hypotheses were examined and are presented below.

- Respondents who are social workers that possess an MSW with at least one semester of group work specific education will yield higher total scores on the Mutual Aid Processes Scale (MAPS) as compared to those with other professional degrees and at least one semester of group work specific education.
- Respondents who are social workers that possess an MSW with three or more semesters of group work specific education will yield a higher total score on the MAPS as compared to MSW social workers with 2 or fewer semesters.
- There will be no statistically significant difference on the mean total score of the MAPS between respondents who report that they participated in a 12 Step program versus respondents reporting no participation in a 12 Step program.

This chapter will present a discussion of key findings. Findings that will be highlighted include those relating to the sample, the most frequently occurring mutual aid processes, hypotheses testing, and the effect of key variables on the amount of mutual aid processes. Additionally, since an author-created scale was utilized the associated findings will be discussed. This discussion of the findings will be followed by a review of study limitations, implications for the fields of social work and substance use disorder treatment, and recommendations for future research.

The Sample

This sample comprised members of NAADAC, the Association for Addiction Professionals, with email addresses who responded to the survey (n=484). The study highlighted the findings related to those respondents who had facilitated a treatment group in an abstinence-based setting within the past two years. Approximately 76% of the sample indicated that they had facilitated a treatment group in an abstinence-based setting within the past two years (n=369). While the discussion will highlight the findings related to this sub-sample, some aspects of the whole sample are worth underscoring. For the most part, this was a well educated sample with 66% reporting the possession of a Master's degree or higher and an additional 23% reporting the possession of a bachelor's degree. These findings resonate with NAADAC's membership survey research indicating that 60% of those surveyed possessed at minimum a Master's degree (NAADAC, 2003). The findings from both studies echo other recent studies that suggest the substance abuse treatment workforce is becoming increasingly professionalized by including more providers with graduate education (Southern Addiction Technology Transfer Center and Florida Certification Board, 2005). Of note, the distinction between alcohol and other drug use counselors with either 12 Step experience or professional education is increasingly a specious one. In this study slightly more than 60% of the 288 respondents who attended a 12-Step Fellowship reported the

possession of at least a bachelor's degree and more than 41% indicated they had a master's degree or higher.

This study presented new information with regard to the amount of group specific education received by respondents. A robust percentage, 80%, of the whole sample reported at least one semester of group specific education. For the study's main sample comprised of group leaders this percentage was only slightly smaller at 78.2% with slightly more than 30% reporting they had had four semesters of group work education.

While it may be that this was a highly educated sample with regard to group work, the findings with regard to amount of group work education as measured by number of semesters do not readily resonate with the available literature (Birnbaum & Auerbach, 1994; Flores, 1997; Steinberg, 1992). The substance abuse treatment literature has suggested that despite the increase in professionalization, group leaders lacked group specific education (Flores, 1997).

With regard to the graduate level education of social workers the steady erosion of group work education has been documented (Birnbaum & Auerbach, 1994; Birnbaum & Wayne, 2000). Birnbaum and Auerbach (1994) had indicated that only 19% of MSW programs in 1991 required at least one group work course. Given the context provided by the extant empirical evidence it is unlikely that many educational institutions provide four semesters of group work education. One possibility is that these findings reflect

social desirability bias with respondents reporting a higher amount of group work education than received (Rubin & Babbie, 2005). Another possibility that exists is that respondents with substantial interest, expertise, and education regarding group work were more likely to participate in this study due to the area of inquiry. In sum, though, the charge that group leaders lack education about group practice models does not seem to hold true for this sample.

The remaining discussion will focus attention on the salient findings related to the main study sample comprised of group leaders. To further examine the group specific education reported by this sample, respondents were asked to identify the primary model studied. Overwhelmingly, the most commonly identified model reportedly studied was cognitive-behavioral (58.6%), followed by interactive group psychotherapy (14.6%) and mutual aid model/social group work (8.7%).

The findings for the MSW level social workers in this sample as regarding group practice model studied parallel the main study sample, with almost 48% reporting cognitive-behavioral, followed by interactive group psychotherapy (21.7%) and then mutual aid model/social group work (15.2%). These findings do not resonate with a study conducted of the syllabi used by group work instructors in MSW programs who were members of the Association for the Advancement of Social Work with Groups (AASWG) (n=51) (Strozier, 1997). Strozier (1997) found that while Yalom's 1995 text on interactive group psychotherapy was the most commonly used (n=13), the cognitive-behavioral model presented in a text authored by Rose (1990) was among the least used

(n=2), with several mutual aid oriented texts by different authors also reflected in the findings (n=15). Strozier (1997) made the point to identify that a limit of the study was that it was comprised of members of the AASWG. Arguably, instructors who were not members of AASWG were more likely to utilize cognitive-behavioral models. At the same time, an alternate possibility exists in that the respondents with MSWs in this sample may have sought out coursework about cognitive-behavioral group practice models due to their interest in substance abuse treatment.

In addition to the models reportedly studied, respondents were asked to identify the approach utilized in work with SUD treatment groups. Paralleling the report of the models studied, respondents identified cognitive-behavioral (31.2%) followed by interactive group psychotherapy (26.3%) and eclectic (19.5%) as the primary approaches utilized. Interestingly, despite the report of different models, respondents reported use of various group interventions including teaching, offering information, stimulating insight, facilitating group interaction, confrontation, and providing individual work in a group setting.

While there are discrepant perspectives expressed about these activities in the group treatment literature for people with SUDs, in general, these activities reflect contemporary clinical recommendations. For example, psychoeducation, as reflected by the use of teaching and providing information, is regarded as an important intervention in early SUD treatment. An important study sponsored by NIDA reported the use of psychoeducational groups within the first three months of SUD treatment (Crits-

Christoph et al, 1999). Of note, while the protocol utilized a psychoeducation group, this was not at the expense of cultivating mutual aid (Daley et al, 1999). In fact, the use of this element of group process may support learning. With regard to the psychoeducation group model used in this study Daley et al (1999) have noted the role of the mutual aid process, sharing data: "often the most effective teaching is done in an interactive format because clients learn most from what they think about and contribute in the group" (retrieved at www.nida.nih.gov/TXManuals/DCCA/DCCA3.html on October 7, 2007).

The high ranking of the group leader activity associated with stimulating insight was somewhat surprising in light of research that suggests this activity may account for group member relapse (Getter et al, 1992). At the same time, at least one study has suggested that stimulating insight was found to be helpful for group members in an SUD treatment group (Lovett & Lovett, 1991). An important area of inquiry not undertaken in this current study would examine group leader's definition of insight, beliefs about its importance in SUD recovery in light of etiology and treatment tasks, and the range of activities utilized to stimulate this cognitive process. Clearly there are discrepant perspectives about this in the field.

The least frequently reported processes were associated with individual work in the group setting and included confrontation and individual work. Dependent on one's perspective, individual work may be appropriate based on the stage of group development and/or apparent clinical needs of group members, even within the context

of a mutual aid based approach to group work (Shulman, 2006). That the use of group facilitation was higher than the activities relating to individual work in the group setting indicates that practitioners in this sample valued the benefit of cultivating a multiplicity of helping relationships.

Clearly most practitioners in this sample highly recognized the importance of mutual aid processes for this population. When asked to rate the level of frequency for the group leader activity, "helping the group members talk directly to each other so that they can work on their problems, concerns or issues together", almost 60% of respondents indicated this process occurred with a high level of frequency. The capacity for group members to work together in order to solve common problems and to cope with feelings is an important recovery skill for people with SUDs (Flores, 1997; Freeman, 2001; SAMHSA, 2005). To be able to experience helpful peer relationships in the treatment group setting affirms the benefits of a sober network for people in early recovery (Cicchetti, in press).

The priority placed on facilitation resonates with the argument proposed by Schwartz (1961), the originator of the mutual aid model of social group work, who suggested that the cultivation of mutual aid did not stand in contrast to other worker tasks but was rather a task in addition to those related to achieving the goals for which the group was formed. This study asserts the belief that opportunities for mutual aid exist within both structured groups, such as cognitive-behavioral, skill-building and psychoeducation (Daley et al, 1999; Crits-Christoph et al, 1999; Rose, 1990, 2004;

Sandahl & Ronnberg, 1990; SAMHSA, 2005) as well as in interactive groups (Crits-Christoph et al, 1999; Daley et al, 1999; Gitterman, 2006; Matano & Yalom, 1991; Schwartz, 1961; Shulman, 2006; Steinberg, 2004). These findings also resonate with the suggestion made by SAMHSA (2005) that opportunities for mutual help be integrated with all group approaches utilized in substance abuse treatment. The mutual aid processes reported to occur with high frequency will be discussed in the next section.

Frequently Occurring Mutual Aid Processes

Respondents were asked to rate the frequency with which 30 mutual aid processes occurred in the treatment group about which they were reporting. As this study utilized survey instruments, the responses reflect the respondents' perceptions of the frequency of these processes. The options ranged from between 0 and 6, with zero equaling "never" and six equaling "always". The option "frequently" equaled 4. Twelve of the items ranked yielded a mean score of 4 or more; an additional seven items yielded a mean score of 3.9 or more.

In the review of the practice literature the most frequently identified mutual aid processes included mutual support, peer challenge and the all-in-the-same boat phenomenon. In work with members in early recovery the instillation of hope was identified as a crucial element (Rugel, 1991; SAMHSA, 2005). Arguably, the supportive, empathic milieu of group treatment softens defenses and erodes denial (Golden, Khantzian, & McAuliffe, 1994).

The top three ranked mutual aid processes suggest the groups about which were reported were supportive in nature and stimulated the processes thought to be crucial in group work with people in early recovery from SUDs. The top ranked processes and their mean scores included "listening attentively when a member shares feelings, problems or concerns" (4.55); "assuring each other that their experiences …are not unique" (4.51); and "share their personal successes in overcoming problems (4.42). These processes reflect elements of mutual support, the all-in-the-same-boat phenomenon and the instillation of hope.

Additional processes relating to mutual support were found among the top nineteen processes and included: "validate and affirm each other" (4.28); "provide empathic responses to each other that indicated understanding or care" (4.18); and "reveal personal, intimate experiences, thoughts and/or feelings" (4.15). The difference in the mean score for empathic listening (4.55) as compared to that for self-disclosure (4.15) suggests that group members are more likely to listen than reveal, a phenomenon not uncommon in beginning groups, as were many of the groups reported on by this sample (Gitterman, 2006).

Several of the processes reported to occur frequently related to problem-solving and sharing data. Items related to both sharing data and individual problem-solving were reported to occur frequently. Sharing data was reflected in the following items: "provide ideas to each other about how to handle a situation" (4.37); and "request ideas from each other about how to handle a situation" (4.05); and "provide information to

one another about topics relevant to the group" (3.93). Requesting ideas scored slightly lower than providing ideas. For many people asking for help evokes a sense of vulnerability and may interact with ones perceived sense of safety and trust (Khantzian et al, 1999).

While "sharing data" related items ranked slightly higher, individual problem-solving processes occurred frequently according to respondents. The problem-solving processes ranked highly included: "help a member identify a solution by identifying one that worked for them when faced with a similar situation"(4.32); "ask clarifying questions of a member so as to better understand their concern or problem" (3.94); and "help anticipate obstacles to resolving a problem"(3.90). The item, "asking for help", was the lowest ranked process of these nineteen (3.90). Again this suggests that asking for help may be challenging for members of SUD treatment groups. Also, while related to the instillation of hope, the process "providing realistic reassurance that their problems will be resolved positively" (3.96) was reported to have occurred frequently.

Dialectic processes, associated with motivation enhancement, also ranked among the most frequently occurring mutual aid processes (Miller & Rollnick, 1991). Miller and Rollnick (1991) in discussing motivation enhancement have suggested that discussing discrepant perspectives about behavior change without judgment from the practitioner stimulates motivation for change. The dialectic processes, "discuss the pros and cons of a topic or issue" yielded a mean score of 4.29 and "discuss or debate differing perspectives about a topic or concern" yielded a mean score of 4.10.

In substance abuse treatment, opportunities to practice new behavior are important for people in recovery. In theory the group becomes a safe forum to practice new ways of behaving through both formal and informal means. Two processes associated with this element of mutual aid occurred frequently: "provide constructive feedback about a member's new behavior" (3.96) and "practice new behavior in group" (3.95).

Surprisingly, only one process related to mutual demand or challenge occurred among the top rated process, "encourage each other to behave in ways that are socially desirable and/or promote personal growth" (4.25). As intended, this type of challenge was not suggestive of a confrontational stance. The item that was worded to suggest a confrontational stance was "challenge or confront each other's problematic behavior or attitude" which ranked number 21 of the 30 mutual aid processes and yielded a mean score of 3.70. This may resonate with the relatively low level of confrontation employed by group leaders, underscoring the point made by Lieberman (1983) that the group leader's ideology has bearing on the processes that occur within the treatment group. The lower rate of confrontation may be attributable to more recent perspectives about the role of motivation in behavior change (DiClemente, 1993; Miller & Rollnick, 1991). Alternately, the lower level of confrontation and the expression of candid feelings, for that matter, may relate to the stage of group development and/or the group member's level of perceived safety and trust, which were not directly measured in this study. As both group work and substance abuse experts have noted, confrontation may be more

effective when it occurs within the context of a supportive milieu and a therapeutic alliance has formed (Fisher, 2004; Shulman, 2006).

Overall, these findings suggest that the climate of the treatment groups about which were reported were supportive, empathic, and inspirational for members. Group leaders prioritized providing information but not at the expense of cultivating a multiplicity of helping relationships. The evidence suggests that at least 19 of 30 possible mutual aid processes occurred frequently. Of these processes, the most frequently occurring processes related to mutual support, the all-in-the-same-boat phenomenon and the instillation of hope, all of which are deemed essential in SUD treatment groups (Flores, 1997; Freeman, 2001; Matano & Yalom, 1991; Rugel, 1991; SAMHSA, 2005). Confrontational processes occurred less frequently than supportive, problem-solving, dialectic, informational, and other processes. This seems to reflect the lower level of confrontation utilized by group leaders and may reflect shifting clinical perspectives regarding behavior change.

These 30 processes were computed as a new variable, the Mutual Aid Processes Scale. These items demonstrated face, content, construct and factorial validity. Construct validity is enhanced when tests relate to one another as theoretically predicted (Rubin & Babbie, 2005). This is evidenced by the findings regarding level of facilitation and the score on the MAPS with multivariate regression analysis indicating that high levels of facilitation explained 17% of the variance on the means of the MAPS, suggesting that high levels of facilitation relate to higher amounts of mutual aid.

Factorial validity with varimax rotation strongly suggested that these 30 items related to one another as a unitary construct. Additionally, reliability testing yielded a very high Chronbach's alpha of .96. It would seem that this scale reflects an effective means of measuring the types and amount of mutual aid processes. Hypotheses testing and other bivariate tests of significance were conducted utilizing the score on the MAPS.

Factors Associated with Higher Amounts of Mutual Aid

This discussion will turn attention to the hypotheses examined in this study and the finding of other bivariate tests of significance and the findings of stepwise multiple regression analyses. Three hypotheses were examined. The first hypothesis posited that respondents who are social workers that possessed an MSW with at least one semester of group work specific education would yield a higher score on the MAPS as compared to respondents with other degrees and at least one semester of group work specific education. This hypothesis was formulated based on the perspective that mutual aid should be an important concept in group work education for social workers (Birnbaum & Wayne, 2000) and the longstanding primacy afforded mutual aid among social group work experts (AASWG, 2006; Gitterman, 2006; Middleman & Wood, 1990; Schwartz, 1961; Shulman, 2006; Steinberg, 2004). Some have even argued that mutual aid was exclusive to social group work (Kurland & Salmon, 1992). As indicated this hypothesis was not supported by these findings.

There are three dimensions to the explanation for this finding. The first aspect of the explanation lies within the examination of the models studied by social workers,

which essentially ranked in the same manner as that for non-social workers. The models studied in ranked order included cognitive-behavioral, interactive group psychotherapy, and mutual aid model/social group work. Arguably the nature of group work education for social workers has evolved in such a way that it is indistinguishable from the group work education received by other professionals. Further evidence of this perspective is offered by the study of syllabi conducted by Strozier (1997) which suggests that the text written by Yalom (1995), a psychiatrist, was the most commonly used text among group work instructors in graduate schools of social work. Among the texts were also those authored by psychologists, Corey and Corey.

Another aspect still is the erroneous belief that mutual aid is exclusive to social group work. In fact, one significant finding of this study was not the result of a statistically significant finding, but the lack of significance. Essentially, the mean scores on the MAPS did not differ significantly with regard to professional discipline, group model studied, or group approach utilized. This suggests that opportunities for mutual aid are sought within the framework of various practice models. If the findings of previous studies offer any guidance, mutual aid may be a universal element in all group practice models (Crits-Christoph et al, 1999; Holmes & Kivlighan, 2000; Sandahl & Ronnberg, 1990).

A third element of this explanation is the possibility that the effective group leader applies group practice models in such a way as to consider the clinical needs of the population with which they are working. As indicated in the literature review,

several authors writing about group treatment of people with SUDs suggest that opportunities for mutual aid be integrated regardless of group type (Freeman, 2001; Matano & Yalom, 1991; Rugel, 1991; SAMHSA, 2005). In sum, the group leaders in this sample reported robust demonstrations of mutual aid processes in general, and the types of processes thought to be essential to people in SUD treatment, in particular.

The second hypothesis proposed that respondents who were social workers with an MSW would yield a higher score on the MAPS if they possessed 3 or 4 semesters of education about a group practice model when compared to social workers with an MSW who had 2 or fewer semesters of group work education. This hypothesis was largely informed by the findings of a qualitative comparison study of social workers with 3 or more semesters of group work education versus those with 2 or fewer semesters, including those whose sole academic instruction occurred in foundations course work (Steinberg, 1992). That study suggested that social workers with at least three semesters of group work education placed greater primacy on stimulating mutual aid as compared to their counterparts with less than 3 semesters. This hypothesis was not supported by the findings. At the same time, the mean score on the MAPS, while not statistically significant, was slightly higher for the cohort with 3 semesters (4.00), as compared to that with less than 3 semesters (3.77). In hindsight, this comparison may be more salient in examining the difference among recent graduates. In this sample there are confounding variables such as amount of training and years in the field.

The third hypothesis predicted that there would not be a statistically significant difference between respondents with reported 12-Step Fellowship participation (not necessarily for SUD recovery) versus those without. This hypothesis was supported by the findings. However, the findings grazed the level of statistical significance at the $p<.05$ level; note: $p=.053$, for a two-tailed test). Arguably, the lived experience of participating in a mutual aid system offered group leaders a felt-sense of the therapeutic benefits of mutual aid. Members of self-help groups have reported feeling helped by receiving support as well as by providing help to others (Roberts et al, 1999). With almost 83% of 12-Step Fellowship participants reporting at least one semester of education about a group practice model, it stands to reason that an understanding of group leadership skills when combined with a felt-sense of the importance of mutual aid contributes to a higher level of mutual aid in treatment groups for people with SUDs led by these leaders. However, a closer scrutiny of the current findings does not readily illuminate the processes that account for an increase in the reported amount of mutual aid. Once more, an observational study and/or a qualitative study could shed light on this finding.

In the following discussion, the worker variables, group related variables, and membership variables that yielded significant findings will be discussed. Additionally, the significant findings were informed models studied in step-wise multiple regression analyses. The findings of both bivariate and multivariate analyses will be drawn upon to discuss the significant findings.

Worker variables demonstrating significance included amount of education about a group practice model as measured by number of semesters; amount of training; and level of facilitation. An independent-samples t test revealed that the difference between those with 4 semesters of group work education (4.11) was significantly higher than those with less than 4 semesters (3.77). While it would seem that the days of finding four semesters of group work education in a school of social work are long gone (Birnbaum & Auerbach, 1991), it is worth recognizing that among all disciplines reflected in this survey, those with four semesters of education about a group practice model yielded higher scores on MAPS.

Respondents who reported "many" training sessions about a group practice model yielded a statistically significant higher mean score on MAPS (3.94) than those who indicated they had none, one or few training sessions (3.74). While agencies have little control of the amount of education received by a group leader, they can provide training or access to training regarding group practice models. Clearly the amount of training has a positive influence on the amount of mutual aid.

The final worker related variable demonstrating significance was the group leader's reported level of facilitation, which was operationally defined with the statement, *I help the group members talk directly to each other so they can work on their problems, concerns or issues together*. The mean score on MAPS for those indicating a high level of facilitation was 4.1 and was significantly higher than that for those reporting less than high levels of facilitation (note: p=.000, for a two-tailed test).

This association between high levels of facilitation and high levels of mutual aid hang together theoretically. As has been argued, group facilitation skills are required to facilitate mutual aid (Middleman & Wood, 1990). It stands to reason that the greater primacy placed on stimulating mutual aid would positively impact the score on MAPS.

These variables were used to create a model for a stepwise multiple regression analysis. This model demonstrated that the high level of facilitation and number of semesters of education about a group practice model explained almost 20% of the variance (adjusted R^2=.19), with high levels of facilitation accounting for 17% of the variance on MAPS. Clearly, if one wishes to stimulate mutual aid the leader should frequently utilize group facilitation skills.

The group related variables demonstrating significance included setting, purpose, length, frequency and size. The findings related to setting, length, and frequency will be discussed further. The setting that yielded the highest score on the MAPS was short-stay rehab (4.21). In trying to understand why the short-stay rehab setting sub-sample yielded a higher score on the MAPS, further exploration was conducted. Of note, 80% of the groups of the short-stay rehab sub-sample met more than one time per week. As we will see in the discussion of frequency, more frequent meetings typically yielded a higher score on the MAPS than once per week meetings. It may be that this variable demonstrated significance, not so much because of the setting per se, but the frequency with which meetings occur within this setting.

As indicated the length and frequency of meetings also positively impacted the score on MAPS, as indicated through both bivariate and multivariate analyses. Time clearly has an impact on the amount of mutual aid. Quite possibly the group members become primed for mutual aid as trust and perceived safety increase, both within a single session and over time. When a group meets with greater frequency during the course of the week safety, trust and group engagement may be accelerated.

The findings related to both group purpose and size warrant further exploration. The group purpose that yielded the highest score was that identified as "other" which was essentially a combination of the specified purposes. Future inquiry should explore the interaction of group composition, purpose, and mutual aid processes in SUD treatment groups. Similarly, the impact of group size warrants further exploration. The group size that yielded the highest score on MAPS was "more than 13" (4.09). However, some have indicated that 8 is an optimum group size (Yalom, 1995) and that larger groups are associated with higher rates of member dissatisfaction (Hare, 1953). Consequently, this finding suggests the need for further inquiry.

The most impactful member related variable was that related to the predominant mandated status of group members. The findings of stepwise multiple regression analysis indicated that groups composed on mostly voluntary members or an equal mix of both mandated and voluntary members explained a higher amount of the variance on the MAPS score than groups composed of mandated members, as groups comprised of mostly mandated members yielded a lower score on the MAPS. This

finding resonated with bivariate testing. As the literature has indicated, group work with mandated members is challenging due to resistance to treatment quite possibly evoked by the experience of being mandated (Milgram& Rubin, 1992; Rooney & Chovanec, 2004). Perhaps observing the process and progress of voluntary members softens these defenses and accelerates the acceptance of being in treatment. The impact of mandated status on group process is an under-explored topic empirically and warrants further attention. Interestingly, the heterogeneous group with regard to mandated status yielded the highest score on the MAPS of the three options (4.00).

In sum of this discussion, the findings are quite promising and provide directions for the substance abuse treatment field. Through regression analysis the group leader's participation in "many" trainings, the more than once per week meeting of treatment groups, and the non-exclusively mandated group mix all were associated with higher rates on the MAPS score and together accounted for almost 23% of the variance between the mean scores on the MAPS in this study. These findings are promising in that they are all within the control of agencies and treatment providers and should inform decisions about agency training, treatment group planning, and group composition. The following sections include a discussion about the limitations of this study; a further discussion of the implications for social work and substance abuse treatment; and recommendations for future inquiry.

Limitations

In this section the limitations of the study design, sampling choices, and methodology will be reviewed. This section will be followed by that addressing the implications of these findings and the recommendations for future inquiry.

Design Limitations

This exploratory study utilized an anonymous, quantitative, self-administered survey developed through the website, Survey Monkey. This survey was delivered by email to the approximate 6, 000 members of NAADAC with email addresses.

An advantage of self-administered surveys is they make administration to very large samples feasible (Rubin & Babbie, 2005). Survey research also typically allows for the relationship between several variables to be analyzed simultaneously (Rubin & Babbie, 2005). Such was the case with this study.

While useful information is provided through survey research, there are limitations associated with this approach to research. One limitation is that the use of standardized items truncates the ability, barring additional research, of identifying salient contextual factors (Rubin & Babbie, 2005). In this inquiry, for example, the item relating to dialectic process was understood as a productive element of group process. One study respondent wrote this researcher an email indicating that she reported high levels of this process, but experienced the debate in the group she led as a misuse of time and counterproductive to achieving group purpose.

Related to the above observation, surveys cannot measure social action directly, in the way that observational studies allow (Rubin & Babbie, 2005). At best, surveys measure respondents' perceptions and recollections of past social actions. With the above observation the respondent that emailed this researcher is still only reporting a perception of social action. The perception that this process was not productive may be related to a discomfort with expressions of difference or insufficient skill in being able to work with this particular process effectively. Whether or not the debate in the group being reported on was functional could be understood more fully through additional inquiry, in this case, perhaps through direct observation or inquiry involving group members. In sum, these limits relate to the insufficient capacity to understand contextual factors.

That survey research captures respondent's perceptions is problematic in two ways. The first is that perceptions may vary among respondents. For example, with regard to the report of level of group leader facilitation, the descriptors used to measure the level, such as, "rarely" and "frequently", are likely to have been understood in different manners by respondents. There is the additional limit with regard to social desirability bias (Rubin & Babbie, 2005). Respondents may be drawn to answer in such as way that reflects not what they have perceived to have actually occurred but what they think ought to have occurred. In this study, for example, respondents may have potentially inflated the amount of group work education they have received. An observational study would reduce the impact of social desirability bias.

Finally, because this study was primarily correlational in nature and not experimental, the causality of findings cannot be determined. This study is only able to identify the factors associated with the amount of mutual aid, not those that cause that amount. Also, this study is unable to offer a causal statement about the effect of mutual aid on group treatment outcome measures, such as abstinence of group members.

Sampling Limitations

Resonant with the exploratory nature of this study, data was collected from a sample derived purposively. The members of NAADAC that possessed an email address were selected as the sampling frame as they comprise the largest association of addiction professionals in the United States and are heterogeneous with regard to demographic and educational variables.

A limit of this method of sampling is that the findings cannot be generalized to the larger population of United States-based counselors in the substance use disorder field. The respondents in this sample, for example, were very likely to have had academic coursework about a group practice model. These findings cannot be interpreted in such a way as to make a generalizable comment about the amount of group work education received by counselors in the field, nor other members of NAADAC.

An additional limit in this study relates to the response rate. In this inquiry, there were 484 respondents equaling an 8% response rate. This low response rate precludes generalizing the findings to the larger NAADAC membership. Additionally, the

response rate of social workers with an MSW was only 12% in this study, whereas this population accounts for 22% of the NAADAC membership (NAADAC, 2003). In the group leader sample only 46 respondents identified as having an MSW, limiting the strength of the associated findings.

Finally, the respondents of this study seemed to have had high amounts of group specific education and training. While this may be explained in part by social desirability bias, an alternate explanation is that respondents with high amounts of group work education were more likely than those with less education to participate in this study. This factor, along with the low response rate, limits the ability to generalize the findings beyond this sample.

Methodology Related Limitations

This study utilized quantitative methods to gather and analyze data. This study utilized an author-created scale to measure the amount of mutual aid. The scale, the Mutual Aid Processes Scale, yielded very high measures of reliability, a Chronbach's alpha of .96 and a Guttman split-half correlation of .92. However, these findings were based on data gathered in this one survey. The determination of the overall reliability of this scale will be strengthened with future inquiry where this instrument can be used with the same population as well as different populations.

In sum, this section addressed limitations related to the use of a self-administered survey, sampling and response rate, and instrumentation and data analysis. The following section will identify the implications of the findings.

Implications of the Findings

There are four major implications of these findings which relate to the importance of mutual aid in treatment groups for people with SUDs; group treatment of people with substance use disorders; social work education; and group treatment research.

This study clearly demonstrates that mutual aid is an important element of group treatment for people with substance use disorders. The significance of this finding is heightened by the fact that the types of mutual aid processes reported to occur resonated with clinical recommendations offered by experts in the field. Even if we were to consider the possibility that social desirability bias resulted in an inflated reported amount, then this could be interpreted as further validation that practitioners in the field value the role of mutual aid in group treatment with this population. Additionally, these findings underscore the point that opportunities for mutual aid can be integrated within any group type, whether it is cognitive-behavioral, interactive group therapy, psychoeducation, or supportive.

These findings also provide support for the use of the Mutual Aid Model of social group work with this population. The findings suggest the processes that a group leader using this model may want to purposefully stimulate. Additionally, the findings suggest the need to find ways to incorporate opportunities for psychoeducation with those for mutual aid. Future inquiry could include examining expert practitioners who utilize this model for work with this population.

With regard to group treatment in the SUD field, the findings have implications for both the preparation of group treatment providers and the planning of treatment groups. As this study demonstrates, higher amounts of mutual aid are associated with "many" group work trainings. While agencies may have little control over whether or not they are able to hire group leaders with group work specific education from an academic institution, agencies are able to ensure that counselors have received training about group work. While future inquiry can determine the necessary amount of training, the evidence strongly suggests that higher amounts of group work training are associated with higher amounts of mutual aid. An unexamined element in this inquiry was the nature of the training received. Future inquiry could examine the content of the group work training programs for counselors in the SUD field.

With regard to treatment group planning, the findings suggest that there may be benefit in considering the use of multiple meetings. While the single most frequently reported group meeting time was one time per week, the groups that met more than once per week were associated with higher rates of mutual aid. Additionally, the group length associated with the highest rate of mutual aid was more than two hours. This finding along with that suggesting an association that groups that last more than two hours are associated with higher rates of mutual aid. Additionally, the evidence suggests that with regard to mandated status and group composition, the use of heterogeneous groups may be preferable as the amount of mutual aid in groups of mostly mandated members were likely to have lower amounts of mutual aid as compared to mostly

voluntary groups and mixed groups. In sum, with regard to group planning, agencies may want to consider the use of a group design that includes multiple meetings in sessions that last longer than two hours with heterogeneity regarding mandated status of members as these factors are associated with higher rates of mutual aid.

While the significance of the findings with regard to social work education are limited in large part due to the small number of participants with an MSW, the overall findings of this study have implications for group work in social work education. This study affirms the importance of mutual aid, at least with regard to the groups about which were reported on in this study. Consequently, group work courses should attend to the skills related to the stimulation of mutual aid. These findings offer support of the key argument regarding mutual aid and social work education offered by Birnbaum and Wayne (2000): mutual aid should be a major concept addressed in group education for social workers.

This study also supports the general belief that education is associated with the amount of mutual aid that occurs within groups, at least to the extent that that was the case in this study. While those with no group specific courses in an academic institution yielded a surprisingly high amount of mutual aid on the MAPS (3.79); those with four semesters yielded a higher score on the MAPS (4.11). Clearly, the element of social desirability bias needs to be considered in understanding the implications of these findings. However, the general trend of amount of education was that this variable was

associated with higher scores on the MAPS as compared to the overall mean score of 3.89.

Finally, this study both demonstrates the importance of mutual aid in group work with this population and perhaps offers a suitable measurement instrument. An ongoing lament about the state of group treatment research, both with the SUD field and with other populations, has been the neglect of aspects of group process. This study underscores the importance of at least one element of group process, mutual aid. This study may highlight the importance of ensuring that group process elements, including mutual aid, are identified. As this study indicated, simply identifying the approach utilized is insufficient in understanding what actually took place within the group. Furthermore, it would seem that while different approaches abound, in the group work about which was reported within this study, group leaders may utilize a variety of activities within the group. This point, too, underscores the importance of knowing what processes occur within a group treatment model so as to understand what elements of group work contribute to successful outcomes.

Recommendations for Future Inquiry

The role that mutual aid processes play in treatment groups for people with SUDs warrants further inquiry. Three types of future inquiry are recommended. The first type of study would allow for direct observation of treatment groups in the field. This type of study would verify the presence of mutual aid processes in these treatment groups. This type of study could also include the examination through direct

observation of the mutual aid processes that occur within different group models, such as cognitive-behavioral, interactive group psychotherapy and the Mutual Aid Model of social group work. The Mutual Aid Processes Scale could be used by multiple observers, further demonstrating the reliability of the instrument, as well. A related inquiry would utilize qualitative measures to explore the factors that account for both high levels of mutual aid processes and low levels of mutual aid processes. This type of inquiry would further illuminate the contextual factors that contribute to the amount of mutual aid in SUD treatment groups. Finally, a survey of both practitioners and group members about the importance ascribed to these mutual aid processes would further illuminate their role in SUD group treatment.

Future SUD group treatment would benefit by observing the amount of mutual aid processes in addition to other aspects of group process. Attention to process will further identify the essential ingredients of effective group treatment of this population. These studies could begin examining the association between processes and outcomes.

Finally, further inquiry regarding the amount of group work training on the impact of mutual aid, among other elements of group leadership, is warranted as this will aid the SUD treatment field in providing effective group treatment.

Conclusion

To conclude, this study, in response to gaps in the literature and calls for further inquiry, examined the amount of mutual aid in SUD treatment groups in the field. This

study indicated that there was a robust display of mutual aid within the treatment groups about which were reported, according to respondents self-report of their perceptions. Further analysis indicated that key factors were associated with higher than average levels of mutual aid, as measured on an author-created measurement scale, the Mutual Aid Processes Scale (MAPS). These factors included group leader education, amount of training, level of facilitation, length and frequency of group meetings, and heterogeneity of group composition with regard to mandated status. The study report concluded with a review of these findings, the study limitations, implications for the social work and substance abuse treatment field and recommendations for future inquiry.

Appendices

Appendix A: Study Questionnaire

Mutual Aid Processes in Treatment Groups For
People with Substance Use Disorders

Informed Consent

Andrew Cicchetti is a doctoral candidate at the Graduate Center/CUNY. He is conducting a study about the presence of mutual aid processes in treatment groups for people with substance use disorders. Mutual aid processes are identified as the ways in which group members help and are helped by one another in service of achieving individual and group goals. You are being asked to participate in a study that will examine your perception of these processes and the impact of several factors such as group leadership, group structure and membership characteristics. You have been identified as a potential participant because you are a member of NAADAC and are over the age of 18. All 11,000 NAADAC members are invited to participate in this study. Participation in this study is voluntary and refusal to participate will involve no penalty or loss of benefits.

You are invited to participate in an on-line survey by completing the first 12 questions which should take less than 2 minutes. Your answers to these questions will provide educational and demographic information.

Additional information is sought from NAADAC members who have facilitated a group in an abstinence-based treatment setting that has met for at least 3 sessions that either concluded in the past 2 years or is currently meeting. If you meet that criteria you are invited to complete the survey which should take not longer than 14 minutes.

The anticipated risks of your participation are expected to be minimal meaning no more than that encountered in every day life. In the unlikely event that you experience discomfort as a result of participating in this survey you may discontinue your participation at any time. You may choose to skip any question.

There are no direct benefits. However, participating in this study may enhance your knowledge about mutual aid processes.

This is an anonymous survey, meaning your personal identifying information is not requested nor recorded. This on-line survey is hosted at Survey Monkey, a well known company that collects data for on-line research. This researcher has purchased an encrypted version which reduces the risk that your responses can be viewed by an unauthorized person. Survey Monkey will not record your IP address, further protecting your privacy. A limit to complete anonymity is that there exists a remote possibility that your data could be viewed by an unauthorized third party, such as a computer hacker. To prevent this from happening Survey Monkey uses a program called "Hacker Safe" which prevents over 99% of hacker crime. The data will be collected and stored on-line at Survey Monkey. Data will be reviewed by the researcher, Andrew Cicchetti and his Faculty Advisor, Dr. Michael Smith. Only aggregate data will be reported in reports or publications derived from this research.

If you have questions about this study you can contact the researcher at atcicchetti@att.net or his Faculty Advisor, Dr. Michael Smith, at ProfMSmith@aol.com. In the unlikely event that you experience distress as a result of participation in this study you may wish to call 1-800-Lifenet to locate a counselor in your vicinity, including free and low-cost services. If you have questions as a subject or in the unlikely event that you feel as though you have been harmed as a result of participating in this study please contact the Hunter College IRB office at (212) 650-3053. To get information about the findings once the study is completed please go to www.AndrewCicchetti.blogspot.com.

This study protocol has been approved by the Hunter College of CUNY Committee for the Protection of Human Subjects from March 31, 2008 to March 30, 2009, protocol number HC-020810867.

If you have read and understand the above statements, please click on the "Next" button below to indicate your consent to participate in this study. Completion of the on-line survey implies your consent to participate in this study.

To Be Completed By All

This section is to be completed by all respondents. This section should take no longer than 2 minutes to complete.

Please select the single best answer that identifies your professional discipline.

- ◯ Alcohol and Other Drug Counselor
- ◯ Social Worker
- ◯ Psychologist
- ◯ Psychiatrist
- ◯ Nurse/Nurse Practitioner
- ◯ Clergy
- ◯ Other (please specify)

Please select the single best item that identifies your highest earned degree.

- ◯ High School Diploma/GED
- ◯ AA/AS
- ◯ BA/BS
- ◯ BSW
- ◯ MSW/MSSW
- ◯ MA/MPH
- ◯ DSW
- ◯ Ph.D.
- ◯ Ed.D.
- ◯ MD
- ◯ Other (please specify)

Please indicate the year in which your highest degree was awarded.

Please select the single best item that describes how you spend more than 50% of your time at work.

- ◯ Direct Service Provider/Clinician
- ◯ Supervisor/Administrator
- ◯ Other (please specify)

Please select the item that best identifies your gender.

- ◯ Male
- ◯ Female
- ◯ Trangender Male
- ◯ Transgender Female
- ◯ Genderqueer

Do you have a state or national credential designating you as an alcohol and other drug counselor.

- ◯ No
- ◯ Yes

Do you or have you ever participated in a 12-Step Fellowship?

- ◯ Yes
- ◯ No

Please select the single item that best describes the highest amount of group work/therapy education at an academic institution.

- ◯ One semester of a group work/therapy specific course.
- ◯ Two semesters of a group work/therapy specific course.
- ◯ Three semesters of a group work/therapy specific course.
- ◯ Four semesters of a group work/therapy specific course.
- ◯ No more than a few class sessions in a course not specific to group work/therapy.
- ◯ I have not received any group work/therapy coursework in an academic institution.
- ◯ Not Applicable: I did not attend an academic institution.
- ◯ Other (please specify)

Please select the one item that best identifies the highest amount of training sessions or workshops regarding group work/therapy you have completed.

- ◯ None
- ◯ One session of a workshop or training
- ◯ A few sessions of a workshop or training
- ◯ Many sessions of a workshop or training

If you have received group work/therapy education or training, please select the item that best reflects the primary model studied.

- ◯ Mutual Aid Based Group Work/Social Group Work
- ◯ Cognitive-behavioral Group Work
- ◯ Interactive Group Psychotherapy
- ◯ Cognitive-Behavioral Group Therapy
- ◯ Group Psychoanalysis
- ◯ Psychodynamic Group Psychotherapy
- ◯ Not Applicable.
- ◯ Other (please specify)

Please enter the approximate number of years you have provided group services to people with substance use disorders.

Have you facilitated a group in an abstinence-based treatment setting that has met for at least three (3) sessions and either concluded within the past two years or is currently meeting?

- ◯ No
- ◯ Yes

Information About the Group

You may have or are facilitating several groups. For the purpose of this study select only one of those groups with which you have worked and answer the following questions as they relate to this one group.

Please select the response that best indicates the treatment setting of the group about which you are reporting.

- ◯ Outpatient Program
- ◯ Residential Therapeutic Community
- ◯ Short-Stay Residential Program
- ◯ Hospital In-patient
- ◯ Prison
- ◯ Private Practice
- ◯ Other (please specify)

Please select one item that best describes the primary purpose of the group about which you are reporting.

- ◯ Enhance treatment readiness/motivation for treatment
- ◯ Work on early recovery tasks related to achieving abstinence
- ◯ Work on relapse prevention and maintaining abstinence
- ◯ Work on non-recovery specific life issues
- ◯ Other (please specify)

Please select one item that best describes the approach to the group about which you are reporting.

- ◯ Support
- ◯ Interactive Group Therapy
- ◯ Skills Development
- ◯ Cognitive-Behavioral Therapy
- ◯ Psychoeducational
- ◯ Eclectic
- ◯ Other (please specify)

Please select the answer that best reflects the length of a typical group session for the group about which you are reporting.

- ◯ Less than one hour
- ◯ One Hour
- ◯ 90 Minutes
- ◯ Two Hours
- ◯ More than two hours
- ◯ Other (please specify)

Please select the answer that best describes the frequency of group meetings for the group about which you are reporting.

- ◯ 1x per week
- ◯ 2x per week
- ◯ 3x per week
- ◯ 4x per weel
- ◯ 5x per week
- ◯ Other (please specify)

Please indicate if the group about which you are reporting is/was closed with a fixed membership or open with members joining and leaving as time goes bye.

- ◯ Closed Group With fixed membership
- ◯ Open Group with changing membership

Please select the item that best describes the duration of the group, or the length of time the group about which you are reporting has been meeting.

- ◯ Less than one month
- ◯ 1-3 months
- ◯ 4-6 months
- ◯ 7-12 months
- ◯ More than 12 months

Please select the item that best describes the typical number of members in the group about which you are reporting.

- ◯ 4 Members or less
- ◯ 5-7 Members
- ◯ 8-12 Members
- ◯ 13 or More Members

Information About Group Composition

Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. The following items relate to characteristics of the members of the group about which you are reporting.

Please select the item that best describes the gender mix of the group about which you are reporting.

- ◯ All female (including transgender identifying as female)
- ◯ All male (including transgender identifying as male)
- ◯ Mostly female (including transgender identifying as female)
- ◯ Mostly male (including transgender identifyng as male)
- ◯ Equally or almost equally mixed with regard to gender (including transgender people)

Please select the response that indicates the length of abstinence of most group members from alcohol and illicit drug use in the last group session held, to the best of your knowledge.

- ◯ Most group members are abstinent less than one month
- ◯ Most group members are abstinent 1-3 months
- ◯ Most group members are abstinent 4-6 months
- ◯ Most group members are abstinent 7-12 months
- ◯ Most group members are abstinent more than 12 months
- ◯ Most group members are not abstinence
- ◯ Group members' length of abstinence varies widely
- ◯ Other (please specify)

Please select the response that best describes the mandated status of the members of the group about which you are reporting, to the best of your knowledge.

- ◯ Most members are court mandated
- ◯ Most members are voluntary
- ◯ Equal or almost equally mixed with regard to mandated status

Group Leader Activity

Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. The following section identifies some of the ways in which group leaders can be of help to group members of substance use disorder treatment groups. Please answer the following questions as they relate to your work with the one group about which you are reporting.

The following statements reflect ways in which you may be or have been of help to the group about which you are reporting. For each statement select the item that best describes the frequency with which these activities occur.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
I offer the group practical information about addiction, recovery, and relapse prevention.	○	○	○	○	○	○	○
I help each group member, one at a time, work on their problems, concerns or issues.	○	○	○	○	○	○	○
I help the group members talk directly to each other so they can work on their problems, concerns or issues together.	○	○	○	○	○	○	○
I confront or challenge group members.	○	○	○	○	○	○	○
I help the group members understand themselves more fully by helping them develop insight.	○	○	○	○	○	○	○
I teach the group members specific coping or recovery skills.	○	○	○	○	○	○	○

Mutual Aid Processes

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members provide each other with physical gestures of care, like hugging.	○	○	○	○	○	○	○
Group members provide realistic reassurance to each other that their problems will be resolved positively.	○	○	○	○	○	○	○
Group members ask other members for help with a problem or concern.	○	○	○	○	○	○	○
Group members encourage each other to behave in ways, both inside and outside the group, that promote personal growth and/or are socially desirable.	○	○	○	○	○	○	○
Group members express candid feelings about the group leader directly.	○	○	○	○	○	○	○

Mutual Aid Processes (continued)

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members discuss the pros and cons of an issue or topic.	○	○	○	○	○	○	○
Group members request ideas from each other about how to handle a situation.	○	○	○	○	○	○	○
Group members validate and affirm each other.	○	○	○	○	○	○	○
Group members provide ideas to each other about how to handle a situation.	○	○	○	○	○	○	○
Group members reveal personal, intimate experiences, thoughts and/or feelings.	○	○	○	○	○	○	○
Group members discuss topics one might regard as taboo or are uncomfortable to discuss for some reason.	○	○	○	○	○	○	○

Mutual Aid Processes (continued)

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members evaluate the performance of the group.	○	○	○	○	○	○	○
Group members ask clarifying questions of a member so as to better understand their concern or problem.	○	○	○	○	○	○	○
Group members practice new behavior in the group.	○	○	○	○	○	○	○
Group members listen attentively when a member shares feelings, problems or concerns.	○	○	○	○	○	○	○
Group members assure each other that their experiences, thoughts and/or feelings are not unique.	○	○	○	○	○	○	○

Mutual Aid Processes (continued)

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members challenge or confront each other's problematic behavior or attitude.	○	○	○	○	○	○	○
Group members request information from each other about topics relevant to the group.	○	○	○	○	○	○	○
Group members help a member anticipate obstacles to resolving a problem once potential solutions have been identified.	○	○	○	○	○	○	○
Group members take action as a group on behalf of shared interests or concerns.	○	○	○	○	○	○	○
Group members provide constructive feedback about a member's new behavior.	○	○	○	○	○	○	○

Mutual Aid Processes (continued)

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members role play situations in order to practice new behaviors to handle a challenging situation.	○	○	○	○	○	○	○
Group members challenge each other to respect the group ground rules.	○	○	○	○	○	○	○
Group members provide information to one another about topics relevant to the group.	○	○	○	○	○	○	○
Group members express candid feelings about each other directly.	○	○	○	○	○	○	○
Group members share their personal successes in working through or overcoming problems.	○	○	○	○	○	○	○

Mutual Aid Processes (continued)

There are a variety of ways in which group members can be of help to one another in a group setting. These processes are often referred to as mutual aid processes. Once again, while you may be or have facilitated several groups, for the purpose of this study you are asked to reflect on only one of those groups. Please identify the frequency with which the following mutual aid processes occur in the one group about which you are reporting.

Please select the item that best describes the frequency with which each of the following activities occur in the group about which you are reporting.

	Never	Very Rarely	Rarely	Sometimes	Frequently	Almost Always	Always
Group members provide empathic responses to each other indicating understanding and/or care.	○	○	○	○	○	○	○
Group members help a member identify potential solutions to their problem by identifying a solution that worked for them when faced with a similar problem.	○	○	○	○	○	○	○
Group members discuss or debate differing perspectives about a topic of concern.	○	○	○	○	○	○	○
Group members take action as a group to help a member accomplish an individual task that may be difficult for that person to do alone.	○	○	○	○	○	○	○

Thank You Page!

Thank you for your time and participation in this study. For more information about the findings from this study once it is completed please go to www.AndrewCicchetti.blogspot.com. Please note that that website will not track or record your visit thus continuing to protect your privacy.

Appendix B: Approval Letter

From NAADAC, the Association for Addiction Professionals

NATIONAL
Certification Commission

1001 N. Fairfax Street, Suite 201
Alexandria, VA 22314
703/741-7686 • 800/548-0497
FAX: 703/741-7698 • 800/377-1136
World Wide Web: www.naadac.org

February 18, 2008

Andrew Cicchetti, MSW
439 78th Street, Apt. 4
Brooklyn, NY 11209

To Whom It May Concern:

I am aware that Andrew Cicchetti, MSW is conducting a research study in partial completion of his Ph.D. in Social Welfare at the Graduate Center/CUNY. He is not affiliated with NAADAC, except in that he is a current member. The study he plans to conduct will examine NAADAC members' perceptions of mutual aid processes that occur in the treatment groups with which they work. Andrew Cicchetti has shared with me the details of his project.

NAADAC gives him permission to conduct his study and will distribute the link to his on-line survey to our 11, 000 membership base.

We understand this survey will be anonymous and no identifying information of its membership will be requested or recorded, except for the limits related to the potential for hacking crime.

Sincerely,

Shirley Beckett-Mikell
Director of Certification and Education
NAADAC, The Association for Addiction Professionals
1001 N. Fairfax Street, Suite 201
Alexandria, VA 22314

(800) 548-0497 ext. 107
(800) 377-1136 (fax)

Appendix C: IRB Approval

From Hunter College/CUNY

Committee for the Protection of Human Subjects from Research Risks

HUNTER COLLEGE

INSTITUTIONAL REVIEW BOARD
695 PARK AVENUE, ROOM E1426
NEW YORK, NY 10021
PHONE (212) 650-3053 ◆ FAX (212) 650-3055
http://www.hunter.cuny.edu/irb

To: Andrew Cicchetti
Michael Smith
Social Work

From: Sherryl Browne Graves, Chair SBG
Harriet Goodman, Chair HG
Roseanne Flores, Chair RF

Date: 3/31/2008

Re: Human Subjects Review

Protocol # HC-020810867

Type of Review: Full Review

Project: "Mutual Aid Processes in Substance Use Disorder Treatment Groups in the Field: Impact of the Treatment Professional Education, Components of Group Structure and Membership Characteristics"

The Hunter College Committee for the Protection of Human Subjects has approved your project with the following provisions:

a. This approval is for the period **3/31/2008** through **3/30/2009**. You will receive a renewal notice approximately eight weeks before the expiration of this project's approval. This notice will be sent to the faculty advisor for student projects. However, it is your responsibility to ensure that your have an approved protocol at all times during your research.

b. Approved and stamped consent form(s) must be used by all participants. You are responsible for maintaining signed consent form(s) for a period of at least three years.
☑ Consent form(s) attached. ☐ Consent form(s) not attached. ☐ Flyer Attached

c. All modifications and/or changes to the approved protocol must be reviewed and approved by the IRB prior to implementation.

d. All adverse events or unanticipated problems as a result of this research, must be reported to the IRB within 10 business days. Please refer to website for the Adverse Event and Unatnticpated Problem Form that should be used when reporting.

e. All key personnel must have CITI training certificates on file at the IRB Office. It is your responsibility to submit an updated Key Personnel form should there be a change in the key personnel on this project.

Good luck with your work!

By signing below, I acknowledge that I have received this letter and am aware of and agree to abide by all of its stipulations in order to maintain active approval status, including prompt reporting of adverse events/serious problems and annual continuing review. I am aware that it is my responsibility to be knowledgeable of all federal and state regulations including CUNY's Federalwide Assurance (FWA) with the U.S. Department of Health and Human Services (HHS) Office for Human Research Protections (OHRP)

Signed: A Cicchetti
Andrew Cicchetti
Michael Smith
Social Work

PLEASE SIGN AND RETURN ONE COPY OF THIS MEMO TO CAROLYNN JULIEN
INSTITUTIONAL REVIEW BOARD, 695 PARK AVENUE, NEW YORK, NY 10021.

YOUR PROJECT WILL NOT BE APPROVED UNTIL WE RECEIVE THE SIGNED COPY.

Appendix D: Email Alert

Alert e-mail

Dear NAADAC Member,

Andrew Cicchetti is a doctoral candidate at the Graduate Center/City University of New York. He is conducting a study as part of his degree requirements about the presence of mutual aid processes in treatment groups for people with Substance Use Disorders. In brief, mutual aid processes are those processes in groups in which members help and are helped by each other. Scant empirical information exists about the extent to which mutual aid processes occur in substance use disorder treatment groups.

You are receiving this email as you are a member of NAADAC, the Association of Addiction Professionals and are over the age of 18. All members of NAADAC are invited to participate in the survey by completing the first 11 questions which should take you no more than 2 minutes to complete. Additional information is sought from NAADAC members who have facilitated a group in an abstinence-based treatment setting that has met for at least 3 sessions that either concluded in the past 2 years or is currently meeting. If you meet this criterion you are invited to complete the survey which should take not longer than 14 minutes.

This study is designed to be anonymous, meaning that no identifying information is requested or recorded. The survey is hosted and maintained at Survey Monkey.com. A limit to complete anonymity is the remote possibility for an unauthorized third-party to view your information. To prevent this from occurring Survey Monkey uses a program called Hacker Safe which prevents over 99% of hacker crime. Additionally, IP addresses will not be recorded further protecting your privacy if you decide to participate.

An email with a link to the on-line survey will be sent to all NAADAC members shortly. As no IP addresses will be collected it will be impossible to know who has and has not completed the survey. In order to maximize the likelihood that all who wish to participate are able to do so, this email will be sent up to 3 times over the course of the next 6 weeks. Unfortunately you may receive this email despite your having completed the survey or choosing not to participate. Please do not misconstrue the repeat emails as an invitation to participate more than once or as pressure to participate.

Your participation is voluntary. There are no penalties for not participating in this survey and your benefits as a NAADAC member will not be affected in any way.

Should you require more information please contact Andrew Cicchetti at atcicchetti@att.net.

Thank you,

Andrew Cicchetti, MSW
Doctoral Candidate,
The Graduate Center/CUNY

Appendix E: Email with Link to the Survey

E-mail with Survey Link

Dear NAADAC Member,

This email is a follow-up to a previous email alerting you to an on-line study being conducted by Andrew Cicchetti. Mr. Cicchetti is a doctoral candidate at the Graduate Center/City University of New York. He is conducting a study as part of his degree requirements about the presence of mutual aid processes in treatment groups for people with Substance Use Disorders. In brief, mutual aid processes are those processes in groups in which members help and are helped by each other. Scant empirical information exists about the extent to which mutual aid processes occur in substance use disorder treatment groups.

You are receiving this email as you are a member of NAADAC, the Association of Addiction Professionals and are over the age of 18. All members of NAADAC are invited to participate in the survey by completing the first 11 questions which should take you no more than 2 minutes to complete. Additional information is sought from NAADAC members who have facilitated a group in an abstinence-based treatment setting that has met for at least 3 sessions that either concluded in the past 2 years or is currently meeting. If you meet this criterion you are invited to complete the survey which should take not longer than 14 minutes.

This study is designed to be anonymous, meaning that no identifying information is requested or recorded. The survey is hosted and maintained at Survey Monkey.com. A limit to complete anonymity is the remote possibility for an unauthorized third-party to view your information. To prevent this from occurring Survey Monkey uses a program called Hacker Safe which prevents over 99% of hacker crime. Additionally, IP addresses will not be recorded further protecting your privacy if you decide to participate.

No IP addresses will be collected therefore, it will be impossible to know who has and has not completed the survey. In order to maximize the likelihood that all who wish to participate are able to do so, this email will be sent up to 3 times over the course of the next 6 weeks. Unfortunately you may receive this email despite your having completed the survey or choosing not to participate. Please do not misconstrue the repeat emails as an invitation to participate more than once or as pressure to participate.

Your participation is voluntary. There are no penalties for not participating in this survey and your benefits as a NAADAC member will not be affected in any way.

Should you require more information please contact Andrew Cicchetti at atcicchetti@att.net.

Finally, here is the link to the survey
http://www.surveymonkey.com/s.aspx?sm=2YkqPGGzd4BiqO5r9UjecQ_3d_3d.

Thank you,

Andrew Cicchetti, MSW
Doctoral Candidate,
The Graduate Center/CUNY

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