rates of flame-wars (arguments) and love affairs that happen on the Net. There is as yet no empirical evidence supporting the observation that flame-wars and love affairs occur in open, interactive virtual communities at a rate higher than what one would find in f2f groups, but there is a growing body of anecdotal reports of this and a widespread awareness of a high frequency of these extreme interpersonal Internet exchanges.

Most people are very familiar with communication protocols in the use of the telephone or a written letter. Not all, however, are adept at writing with the intent of disclosing intimacies previously unexpressed. Text that is conversational in nature, as it exists on the Internet today, is a new phenomenon. These communications can appear colder and much more impersonal than the author intended. People develop the impression, over a lifetime exposure to books and print media, that written text represents the well-thought-out and carefully edited views of the writer. Internet communications are most often the product of someone typing off the top of his or her head. The reader may in turn interpret these messages as being far more representative of the writer's firmly held thoughts and feelings than is warranted.

THE VALUE OF ON-LINE GROUP PARTICIPATION

The social aspect of computer-assisted communication, the interpersonal exchange with others, is so stimulating, rewarding, and reinforcing that some people are finding it hard to know when to stop (see Suler, 1996; Young & Rogers, 1998) (see also http://netaddiction.com). Internet communications offer people an opportunity to experience a form of social contact, with no real social presence. The significant difference between Internet relationships and ones maintained by other existing technologies (telephones, mail, faxes) is the new culture values of Internet virtual communities. They have social norms that allow for, and even encourage, contact with relative strangers:

As Rheingold (1993) notes, one might think the Net a cold place, and yet it need not be. In the impersonal isolation of our large cities, where people often live separated from kin, or lonely amid the multitudes, the Net can become a surrogate social life—a vital source of interpersonal contact despite its non-physical nature. (North, 1996).

The level of concern for fellow participants in Internet forums is remarkable. These on line groups are distinct from f2f meetings in their ability to engender a sense of community among people who hardly know each other or are in fact total strangers (Wellman & Gulia, 1995). There is a higher degree of feeling connected than would be expected from interpersonal relating devoid of body language and other non-verbal clues (Nickerson, 1994).

An on-line community is one of the easiest ways to meet new people. Certainly it is very low-risk. I think this is mainly due to the essential informality of on-line conversation. Rather than being required to sustain a single conversation with one or more people, relationships usually form out of numerous, often short exchanges. But, over time, many people form enduring relationships this way. In the on-line environment, just like any other social situation, the basic currency is human attention. In the public forums, you communicate with groups that may have as many as several hundred people involved—even if they don't all make comments. (Coate, 1992)

There is a voyeuristic potential in Internet groups. People can "lurk," the term for just reading the notes that others post, and never reveal their presence. In fact, most e-mail groups are composed of a majority of lurkers (Smith, 1993). Very little research exists to explain why so many people participate in what are often intimate social exchanges vicariously. Public typing, like public speaking, carries a risk of exposure. For many, the benefits of involvement and the excitement of participation does not depend on sharing their personal opinions or ideas, and they feel that the benefit may be lessened by exposure. This aspect of Internet communities is not well understood at this point.

The Internet is a social technology. People connect to each other from vast distances, read notes posted by invisible others while remaining invisible themselves, all with very little logistic and social cost (Sproull & Faraj, 1995). Internet communities are fulfilling people's need for affiliation, providing information and support, and allowing diverse groups a greater political voice. There are downsides to this Internet interconectivity, but little research exists about the detrimental effects experienced by some. Addiction to the Internet, and addiction to the pornography available on-line (qualitatively different from porn legally available in U.S. adult book stores), are two areas that demand further study. (See Chapters 1 and 7 by Noonan, and Chapter 8 by Morahan-Martin, this volume).

Several diverse fields of study are converging on the overall topic of on-line interpersonal relationships. Sociologists are studying the community building and political empowering aspects of Internet forums. Linguists are analyzing posted notes to see how they reflect underlying communication protocols. Educators at all levels of academia are studying the personal dynamics of text-only relationships to better utilize the growing field of distant education. Courses are currently being developed that will instruct psychologists on how to incorporate advanced communication technology into clinical practice. There is currently a resurgence in the use of naturalistic observation and participant observation research methodologies. Social scientists of all persuasions are finding a wealth of data in the publicly available, archived records of Internet communities. There is often an acknowledgment of the need to protect what King (1996a) describes as the Perceived Privacy factor—the extent that members feel that their notes are going to be read only by other members with a personal interest in that topic, regardless of the true public nature of their notes.

SELF-HELP ON-LINE

Before discussing the advantages and disadvantages of on-line self-help groups, we must first review what is known about traditional self-help organizations. Alcoholics Anonymous is the oldest, largest, and most widely understood self-help group in existence. As such it has been a model for the development of a tremendously wide range of other self-help groups that are devoted to everything from physical disabilities to mental illness. It has, at its core, the principle of members sharing experiences, strengths, and hopes in order that members may solve their common problem. It is this self-referenced, rather than authoritarian, instruction and guidance that has been exported in the development of a huge variety of self-help groups. These groups offer both an alternative and adjunct to the traditional psychotherapy arena. With the development and expansion of self-help groups throughout the world, the psychological community of mental health professionals has developed various opinions about the therapeutic values of self-help groups.

The term self-help is misleading. It implies that people are involved in an effort to help only themselves, where in fact a defining feature of self-help groups is that people help one another. Mutual aid groups is the term preferred by researchers. It better represents the process of people helping one another. The term mutual aid captures another important element of these groups, helper therapy. Helper therapy is the term for that part of the therapeutic value of these groups that is available because each person can be both a helper and a helpee. Humphries and Rappaport (1994) have suggested that the terms self-help and mutual aid groups be used interchangeably in the professional research literature. They do note that self-help is the preferred term among self-help members. The recommended term for groups that are led by professional mental health workers is support groups. Professionally led and professionally organized support groups will be discussed later and should not be confused with self-organized self-help groups.

The last few decades have seen an enormous growth in the self-help movement. Dissatisfaction with traditional medical models for solving emotional disorders, and the general destigmatization of seeking peer support has fueled this growth. Between 8 and 10 million Americans now participate in f2f self-help of some form (Kessler, Mickelson, & Zhao, 1997; Wuthnow, 1994). By far the largest segment of these groups deal with substance abuse problems. All mutual aid groups function as normative communities, allowing members to understand and feel that their experiences with their problem are not abnormal:

At a time when membership in mainline religions is declining, some Americans seem to be finding spiritual renewal in small groups. Even mutual aid self-help groups that do not address spirituality as directly as do 12-step groups may benefit member's spiritual lives. The experience (distinct from the intellectual realization) of learning that we need not suffer life's burdens alone, that we have a place in the human community, and that we have something both to offer and to receive from other beings is too profound to be

captured by such terms as "improved mental health" or "better coping." (Humphreys, 1997, p. 15).

All self-help and mutual aid organizations have in common the fact that members participate with the expectation of receiving emotional support, sharing personal experiences, and finding new ways to help themselves cope with their shared problems. An important aspect of mutual aid groups is that they are grassroots organizations that are controlled by the members themselves. "One of the empowering features of self-help groups is that members experience autonomy, control of the group, and a sense that they are experts on their problem" (Humphries & Rappaport, 1994, p. 219).

A summary of what on-line self-help groups offer members is provided by Madara (in press). Madara explains that social support, practical information, shared experiences, positive role models, helper therapy, empowerment, professional support, and advocacy efforts are all factors that operate on-line, just as they do in f2f groups. The asynchronous nature of e-mail on-line support groups provides the additional advantages of "24-hour availability, selective participation in entering and responding to messages, anonymity and privacy, immediate and/or delayed responding, and recording of transmissions." (Sparks, 1992, p. 62). Members can save notes for later study, decide which subtopics to engage in, and know that other group members are not judging them based on physical appearance.

It is crucial for the therapist who is considering referring a patient to on-line mutual aid that they first understand the nature of the differences between f2f and on-line self-help groups. Additionally, the newness of this arena, and the lack of research data about the value of on-line groups, suggests that a therapist who is supplementing a client's treatment with on-line modalities be personally experienced with the nuances of text-based interpersonal relationships.

REVIEW OF THE RESEARCH ON ON-LINE SELF-HELP

For people who live in rural settings, people that have disabilities that inhibit their movement, and for others who are emotionally unable to seek f2f peer support, the recent advent and explosion of on-line self-help forums represent a rare opportunity. People confined to hospital beds, people with rare disorders, and people without transportation can now connect to the world and find others like themselves (Madera & White, 1997). Some on-line self-help groups have no f2f counterpart. Madera mentions a group devoted to survivors of traumatic car accidents, and one for victims of stalkers.

The results of a recent (Dubin, Simon, & Orem, 1997) survey (N=52) of people that use on-line self-help groups seems to support the hypothesis that people are using these groups as an adjunct to their efforts in recovery from various disorders. Almost half of the respondents reported that at the time they participated

in the survey, they were currently in individual psychotherapy. Furthermore, nearly 60% of the total respondents reported that they were attending traditional group therapy at the same time. Results from a question that addressed the therapeutic value of these groups, on a Likert scale with 1 being the lowest and 5 the highest, yielded an average score of 4.3. There were two primary reasons given by respondents as to why they were receiving a unique form of value from having participated in these groups. One reason was indicated by a 63% response from those who appreciated the "opportunity to share experiences with others." Approximately half found these groups to be unique because of "the convenience of the service." The greatest benefit reported was "the convenience of being in your own home" (73% of the sample). Nearly half the sample cited "the variety of the participants" as being one of the most beneficial values gained from being involved the group (Dubin, Simon, & Orem, 1997).

Some people have their first contact with self-help organizations by their online presence. There are documented cases of drug addicts who became willing to give up a destructive habit for the first time after witnessing the conversations between members of a recovery on-line self-help group (King, 1994). The frequency of this type of initial exposure to treatment for disorders is as yet unknown. Grief Net, a self-described "virtual social service," operates a website that connects people who are dealing with a death to both f2f and Internet resources. Their site gets 3,700 hits per week. Their web page states that their service is needed due to "the disappearance of the extended family and wide geographic dispersion of family members, individuals no longer have as ready access to traditional sources of help among family, communities and religious groups when facing death dying and major loss."

People who are responsible for the care for an elderly person are often relatively homebound. Long before the advent of the Net, a study was organized to see if caregivers for people with Alzheimer's disease could benefit from being linked to a source of information and to each other for support (Brennan, Moore, & Smyth, 1991). Topics discussed showed that the link (between 22 caregivers) was being used for emotional support, advice, information, and sharing of resources. The connection to the message areas to read notes and type to other caregivers was used far more than the access to the databases. This is an indication that it is the interpersonal interactivity that is most salient and important to people in need of affiliation.

One early study looked at addicts helping each other on-line to say clean (King, 1994). There was a statistically significant positive correlation found between the number of hours per week a respondent reported that they used the on-line group and the amount they reported that on-line participation improved their program of recovery. Fifty-eight percent of survey respondents reported they had made contact with others they met on on-line by phone, postal service mail, or in person. This contact variable showed a positive correlation with the length of time a

⁴Scc http://griefnet.org/.

respondent reported being in recovery and the number of months of on-line group use. Improvement in recovery program was also positively correlated with total months of on-line self-help use and with the reported frequency that respondents used the on-line groups to seek advice. It appears that the regular, frequent contact with members from widely separated backgrounds and experiences available on in these on-line groups can improve one's ability to remain drug free. It must be noted that almost all respondents to the survey reported that they used on-line group participation to supplement regular attendance at Alcoholics Anonymous or Narcotics Anonymous.

One study downloaded and analyzed notes from Internet forums devoted to survivors of sexual abuse. Finn and Lavitt (1994) found that there were distinct advantages for this population in being able to use the anonymity provided on-line to decrease the level of anxiety members felt about sharing shameful experiences. Finn questions several aspects of the therapeutic value observed in the notes. Specifically, there was some indication that people were posting short notes that did not contain full stories, and that women felt the openness of these public forums to be problematic. There were no assurances that perpetrators would not be lurking in the survivors group. Separate groups were available for perpetrators in recovery. The advantages noted included the portability of the community. Members involved in on-line groups do not have to worry about members moving away—anywhere that telephones go the group can go.

Covert access by researchers to public Internet forums where highly personal notes are posted is a growing concern. Ethical treatment of human subjects in Internet naturalistic observations requires the researcher to be keenly attuned to the nuances of such public/private spaces. The Information Society: An International Journal, covered this topic in a special issue (Kling, 1996). Researchers from different fields of the social sciences were recruited to write responses to the seed article, which set forth specific ethical guidelines for the treatment of human subjects in cyberspace (King, 1996a). Debate centered around the free access to public forms by researchers, as opposed to the perception of Internet users that these forums were for interested parties only. People do not post notes to Internet forums thinking that researchers may be lurking, and that they may use their notes in the published results of their studies. This is especially true in the self-help groups, where very personal information is posted to what is a public space.

Studies have investigated several on-line self-help forums. Dunham (1997) set up a study of young single mothers, donating computers to them so they could connect from home to provide each other with emotional support and advice on coping strategies. Results showed a high level of use of this resource and an overall decrease in the level of stress reported by the moms. Over half the notes exchanged were supportive in nature.⁵

⁵See http://www.apa.org/monitor/nov96/novnews2.html.

Another study of a group dealing with a very sensitive topic was recently published. Moursund (1997) performed participant observations in a MUD (multi user domain) called Sanctuary. A MUD is a form of Internet chat, a real-time synchronous connection to a text-based virtual reality where rooms and objects in the rooms are created by members and described automatically when someone logs on to that space. Sanctuary is devoted to adult survivors of sexual abuse. Members also had access to an e-mail forum, and could communicate asynchronous as well as in real time. Moursund analyzed notes posted for content, taking great care in the published report to respect the members' confidentiality, and to conform to the extra layers of protection afforded by the protocols defined in the Sanctuary environment. These guidelines proscribed researchers from recording the messages posted in real time to the different "rooms" of the MUD. The results indicated that most of the messages were of a self-disclosure type, the sharing of experience and hope. Second most frequent were messages that conveyed information about what members had learned from other sources, coping strategies, and answers to previously posted questions. Moursund concludes that virtual spaces like Sanctuary are an important and valuable resource for victims of trauma.

Obsessive-compulsive disorder (OCD) can be debilitating and shameful. F2f self-help groups do exist for OCD, but they are not widespread and often meet only once a month. A recent survey of an Internet forum for people with OCD (Stein, 1997) concluded that "a useful component of the management of OCD may include joining OCD-L or a similar Internet support group, as benefits seem to outweigh possible problems," (p. 95). Of 42 respondents to the survey, 80% were currently in treatment by a mental health professional, all responded that the list was either helpful or very helpful in learning about the symptoms of OCD, and "subscribers did not report that the list had mislead them in a significant way, and subscribing to the list triggered symptoms in only a minority of respondents" (p. 98).

A study of notes posted to an eating disorder on-line self-help group (Winzelberg, 1997) found that the most frequent category of postings were of a personal disclosure type. The level of detail that members shared was notable. "Support was provided across traditional boundaries of age, status and education." The few members who glamorized their disordered behavior were corrected by others with more solid recovery. Incidents of flame-wars were few, and there were a lot of referrals to f2f psychotherapy for members that revealed they were trying to recover on their own.

An extensive analysis of 2 weeks worth of notes to an Internet self-help forum for depression found 1,863 notes posted by 533 members (Salem, Bogar, & Reid, 1997). Notes were coded as to which of several categories they represented. "Comments intended to convey support, acceptance, and positive feelings (i.e., emotional support, agreement, and humor) were observed over seven times more

⁶See http://www.ex.ac.uk/cimh/stein.htm.

frequently than comments that conveyed negative sentiments (i.e., disagreement/negative)" (p. 198). About half the notes contained a message intended to help another member. Comparison to studies of similar f2f groups showed that the on-line group had a much higher rate of self-disclosure, but a less formal structure and group process. There was a surprising lack of gender difference in the amount of and type of notes posted. Men participated and self-disclosed a nearly the same rate as women. The authors speculate that this due to the on-line predominance of males in general. In the 2 weeks this group was studied, some members felt it had grown too big and started their own, more private group. The ease with which e-mail Internet groups can be formed makes this kind of splinter-group formation much more likely, and less disruptive, on-line than f2f. As with other studies that employed naturalistic observation, the researchers noted the need to take extra precautions in the manner with which they reported the contents of the notes, so as not to offend members that post very personal information in a public space.

Distribution lists (listserves) are venues where messages are distributed directly to each member's e-mail box by the software used to run the list. The UseNet, accessible through the Internet, manages messages in "newsgroups" stored on-line for a period of time and accessible for others to read and respond to. By far the most extensive and complete analysis of on-line self-help groups is "Attraction to Computer Mediated Social Support" by Joseph Walther and Shawn Boyd (1997). Walther and Boyd gathered data from 340 subjects who responded to a survey of UseNet support groups. The results of this study were revealing not only for the value that participants found on-line but also for what participants felt may be the disadvantages in f2f groups. "The first factor, which accounted for the greatest variance, combined items related to stigma management and objectivity. Items pertained to the potential for embarrassment if off-line acquaintances were to know of the user's concerns, and lesser degree of negative judgment offered by CMC partners than friends or family might make in relationship to the topic discussed on-line" (Walther, 1997, p. 16). This suggests that on-line self-help groups have as a primary benefit the advantage that members can be less concerned about the potential for embarrassment when they self-disclose on-line. It is also apparent from this finding that users of on-line self-help groups tend to be less concerned about being judged negatively by fellow members of their virtual on-line group, than they would be when discussing these matters off-line with friends and family. In fact, these venues are so comfortable for self-disclosure and intimacy, there is a potential for participants to become actively engaged in their on-line relationships to the exclusion of all others (King, 1996b).

Self-help, self-organized groups are appealing to people that want to learn from, and share with, others who suffer as they do. This is true of the on-line groups as well. The survey data, combined with observations and case reports, indicated that members of on-line self-help groups receive benefits that go beyond what f2f groups can offer. For members that participate actively, and don't just lurk, the data

show an overall increase in self-disclosure. This is consistent with the finding that virtual communities engender a disinhibiting effect. Text-based social relationships are real to the people involved, and often result in an effort to meet f2f. The disadvantages (increased misunderstandings, projection, and lack of boundaries) most likely cause members that are negatively effected to drop out, leaving the very satisfied and very involved members to answer the researcher's questions. This self-selection process occurs in f2f groups as well, but it is not known what percent of people try on-line self-help and do not stick with it. An important and consistent finding is that members use self-help on-line to supplement their f2f efforts at recovery from, or coping with, a mental health disorder.

SUPPORT GROUPS ON-LINE

Support groups are distinct from self-help mutual aid groups in that they are organized and led by a trained mental health professional. Such facilitated group therapy on-line is very rare at this time; however, it is potentially one of the most important aspects of on-line therapy, in terms of the therapeutic value to clients. In small, closed on-line support groups, the advantages of text-based relationships clearly start to outweigh the known disadvantages. On-line support groups, of the type proposed here, do not yet exist. Before discussing the few trial efforts that have been made with similar formats, a hypothetical case study is provided in order to clarify exactly how these groups can operate, and to define their potential value.

Traditional f2f group therapy is the model for on-line support groups. The example here will use a group that is focused on recovery from shyness. Any pathology that is not extreme or involving a thought disorder could be addressed in this manner. There is as yet no empirical data that demonstrates the efficacy of an online support group, but research in this area is progressing. There are no claims made that on-line treatment of this kind is a suitable substitute for f2f group therapy. As an adjunct to traditional therapy, or as a method of last resort for someone who is unable to present for f2f treatment, these groups could ethically be organized and run by a licensed professional.

HYPOTHETICAL MODEL

Dr. Lincon has been a practicing, licensed psychologist for years. His specialty is shyness, in all forms, everything from Generalized Social Phobia and Avoidant Personality Disorder to mild social inhibitions. He has been accessing on-line self-help groups for these conditions for some time. He has participated in professional cyberspace forums and knows firsthand how easily flame-wars start. He decides to recruit subjects for an on-line support group. Dr. Lineon posts a message to

alt.support.shyness and several open e-mail lists that are self-help groups for shy people. His messages state that he is forming an on-line support group, and interested parties can access his website for screening. On his website, he has a list of questions for potential clients, as well as a full disclaimer about this form of therapy. The questions ask the potential clients about their current involvements in f2f therapy, the severity of their disorder, and if they have ever thought of harming themselves. A disclaimer informs the potential clients about the limits of confidentiality in this medium and the lack of empirical data that this form of treatment is beneficial. Information about the logistics of the proposed group are provided, so clients will know the required time commitment if they are included in the group.

The first six clients who meet the inclusion criteria are sent e-mail confirming their participation. They are asked to print out, sign, and return a treatment consent form by regular mail to Dr. Lineon. This form asks for the client's real name, address, and phone number as well as the name and number of the client's primary care physician and an emergency contact number.

The group runs for 12 weeks. Once a week the group meets in real time on a secure chat room forum in a MUD. All clients are subscribed to a closed e-mail list moderated by Dr. Lineon. At the commencement of the group, initial messages are solicited that introduce group members to each other, and deal with finding a common time to meet in real time in a text-based virtual reality. As members come to know details of each other, a variety of very personal self-disclosing notes appear on the group list. Feedback is given by group members as well as by Dr. Lineon. The weekly 2-hour real-time meetings in the chat room provide an opportunity to socialize and increase the feeling of being connected.

Dr. Lineon refers members to websites that provided psychoeducational material that addresses recovery from shyness. He also monitors member's postings very closely to see if any misunderstandings arise. When needed, Dr. Lineon sends private e-mail to individual members to help them avoid such misunderstandings. Members share with each other the addresses of websites and other resources they find useful. Toward the end of the 12-week period, closure for group members is effected along similar lines as f2f treatment. Members are asked to summarize the gains they feel they have made and to comment on the insights they see others have achieved.

DISCUSSION OF HYPOTHETICAL CASE

One of the known advantages of text-based relationships is the ease and convenience of access. By providing therapy on an e-mail discussion list, clients have the ability to schedule their participation at their optimal time. One factor that limits interpersonal closeness on the large, open self-help on-line groups is the lack of boundaries. Such open forms are loosely organized and members come and go

without notice to others involved. This case example of an on-line support group shows how this disadvantage is overcome. The boundaries are set, in terms of the number of members, and the time commitment to participate. The moderation of the group prevents the kind of argumentative flame-wars that can disrupt open on-line self-help groups. Dr. Lineon uses the ability to approve of every message posted to the group, and asks potential argumentative members to reconsider before posting to the list. This is an ability that is not possible in f2f groups. There is no preventing group members from sending each other private e-mail. Members must be encouraged to bring such "backchannel" relationships to the group process. There is no equivalent to this capacity in f2f groups. It would be similar to two group members whispering to each other, which could only occur if they were sitting near each other. In the on-line group, any member can send a private message to any other member, with content that relates to the group process. A example of this would be a private e-mail exchange that said something like, "I think Joe was holding back in his last note. What do you think?"

It is also possible for the facilitator to have private conversations with individual members. This is not done in traditional f2f therapy, and the advantages of this are unknown at this time. This ability is defined in a public posting from a researcher (Childress, 1998) who is currently implementing on-line therapeutic interventions.

As a replacement for the loss of nonverbal cues, a procedure may be implemented of providing a private email back channel between group members and the group facilitator. Private email communications between the facilitator and the individual group members would allow group members to privately express personal concerns to the facilitator. The facilitator could then help the member raise and resolve these concerns within the group setting. Such a private, email backchannel may actually be superior to the reliance on reading nonverbal cues in f2f groups and may be an advantage of cyberspace groups over f2f groups. (Childress, 1998).

Some of the known ethical, legal, and moral obligations the therapist has to his clients in this hypothetical case study are accommodated by the extensive screening done and the fully informed consent solicited prior to treatment starting. Other ethical, legal, and moral imperatives remain undefined. It is not clear at this time just how a licensed mental health worker can provide on-line services to people from other states and other countries, when their license to practice is often restricted to one state or country. The fact that this is occurring, and has advantages to some, is spurring regulatory bodies to accommodate new communication technology.

SUPPORT FOR THIS MODEL

Herman, a psychologist working at the University of Southern Mississippi, developed and tested a protocol very similar to the above-described group therapy.

His HOPES (High-tech Online PsychoEducation and Support) model included on-line recruitment, a professionally led closed discussion group, and web-based educational material. He ran a group for people having trouble making career decisions for 4 weeks.

The data suggest that the presence of an active group moderator can improve outcomes on certain variables and lead to greater satisfaction with treatment. This study has demonstrated the feasibility of conducting an entire psychoeducational intervention, and an evaluation of that intervention, on the World Wide Web. (Herman, 1997, p. 20)

A group on-line intervention similar to the HOPES model was done with a population that included people with AIDS/HIV and women with breast cancer. The Comprehensive Health Enhancement Support Program (CHESS) connected clients by closed e-mail discussion groups and provided access to on-line psychoeducational material. Participants were able to send e-mail questions to doctors and other expert professional authorities on their condition. Outcome data suggest that using CHESS helped to improve quality of life and decreased usage of health-care resources among participants (Gustafson et al., 1994).

Colón is a social worker with experience leading on-line support group therapy efforts. In an article describing her impressions of this work she states

Geographical constraints can be overcome without compromising group interactions and processes. Online groups may make supportive therapy more attractive to clients who would not otherwise pursue therapy; online groups also offer privacy, informality, and equality for some clients. The group may also serve to diminish social isolation, anxiety and depression. As a result of these achievements, closely held assumptions about the way psychotherapy can be done are being altered. (Colón, 1996)

In 1997, Dr. Bob Zenhausern and Michael Benjamin organized and ran an on-line support group pilot study that matches the model given above. They recruited clients from an e-mail list called SimGroup (simulated group therapy on-line). The therapist, Michael Benjamin, lives in Israel. Six members communicated daily on the closed e-mail list, and met once a week in real time in a text-based virtual reality chat room environment. Reports from the group participants showed they had a high level of concern for each other and an experience of a transformative relationship with the group.⁷ An explanation of how this group was structured, and a description of some of the logistic problems that were encountered, is provided her by one of the participants:

The group consisted of three men and three women in addition to the therapist. The first week was taken up with logistics—what times people were available, what programs people were using or might need (telnet, etc.)—as well as short introductions. During this time we also discussed issues of confidentiality and the protocol for the group. It was decided that each week one person would present an issue to the other group members. Each member would provide two separate responses to each issue: one would be about

⁷See http://rdz.stjohns.edu/~Group/.

their own personal feelings and experiences related to the presenting material and the other would be feedback to the presenter. Then the person who presented the issue would write about his/her reaction to what had been sent by the group members. After that, the group therapist would write an overview of what he thought or would ask questions of various individuals to expand upon or clarify what they had expressed. Each segment was done by e-mail to the whole group and took one week. Issues arose about whether e-mail communications which were spontaneous and related to personal situations would be permitted or whether that would result in chaos. The group decided (democratically) that, although staying with the protocol provided a necessary structure that prevented multiple crazy-quilt conversations all going on simultaneously, it was just as important not to stifle the on-going concerns of group members that might not fit neatly into our planned format. (Personal communication from Lea Hooker lhooker@sirius.com, 20 Feb. 1998)

Group therapy is a valid method of treatment for many psychopathologies. The development and research of on-line support groups will add another modality to this form of intervention. Training courses are being developed that will assist professionals in gaining the knowledge needed to effectively lead on-line support groups. Video connections may allow future therapists to work with video mail and video conferences as a means of implementing support groups for geographically remote members.

THERAPY ON-LINE

The use of the Internet to provide mental health services is controversial. Even the name of what to title this new field is a matter of opinion. On-line therapy, cybertherapy, and e-mail therapy have all appeared in the popular press. Behavioral Telehealth is the term preferred by members of one professional organization that is currently considering the ethics of on-line therapy. For our purposes here the term *online therapy* will be used to discuss all forms of synchronous and asynchronous Internet mental health efforts, where the stated goal is the establishing of some form of therapeutic contact. There are many websites that offer one-time e-mail responses to questions, for a fee. These types of services are more like a psychology talk radio program and will not be covered here. A compilation and description of currently available web sites that offer online therapy services is maintained at http://www.metanoia.org/imhs/ by Martha Ainsworth (1996). This site is a "comprehensive, independent consumer guide to the psychotherapists and counselors who provide services over the Internet."

Future trends in interactive therapeutic contact will most certainly utilize real-time video connections. Currently, e-mail exchanges offer an alternative that can be used to establish a transformative relationship between a client and a therapist. People who cannot or will not present for f2f treatment are availing themselves of on-line interactive services. The manner in which these relationships can be ethically implemented is not clear (King, 1997b). Once a professional relationship has