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## Online Therapy: Review of Relevant Definitions, Debates, and Current Empirical Support



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The current article reviews the most recent literature addressing the definitions, ethical considerations, and potential strengths and limitations of online therapy. In addition, a framework is provided for how to conceptualize and categorize different aspects of online therapy for research purposes. Relevant studies of both online and face-to-face therapy as well as suggestions for future research are outlined. © 2004 Wiley Periodicals, Inc. *J Clin Psychol* 60: 269–283, 2004.

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The integration of technology with the practice of psychotherapy has arguably been one of the most vigorously debated topics among mental health professionals within the last 15 years. Some of the more frequently noted aspects of this debate include precise definitions, ethical considerations, regulation and training, and the benefits and potential challenges associated with the practice. While these discussions and debates continue in

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the academic and popular literature, one point of agreement is that online mental health service delivery is under way and is likely to expand in the future (Norcross, Hedges, & Prochaska, 2002). In the current article, we will review the most critical aspects of online therapy and overview the current state of relevant research.

### Defining Internet Therapy

We define online therapy as *any type of professional therapeutic interaction that makes use of the Internet to connect qualified mental health professionals and their clients*. We use the term "therapy" as the public defines it, in a broad, generic sense. For the purposes of this article, an online therapist is defined as any qualified mental health professional who is using the Internet as a medium for practice. The exact definitions of "online therapy" or "online therapist" are still in flux and are a source of debate. As we use them, the terms are not specific to a particular theoretical or technical approach nor are they limited to practitioners with a particular level of training or licensure.

Importantly, our review of the literature and research will not be exhaustive of all Internet-facilitated mental health services. For one, we will not be discussing the topic of "telehealth" or "telepsychiatry," which typically includes therapeutic interactions conducted via closed-circuit television or satellite (e.g., Glueckauf et al., 2002). These methods are generally only available to those in medical or research institutions whereas "online therapy" is available to any client with a computer and Internet connection. In addition, we will not be discussing the literature pertaining to the use of Internet-facilitated support groups and discussion forums. Although the evidence for the use of these outlets has been positive (Houston, Cooper, & Ford, 2002; Huws, Jones, & Ingledew, 2001; Page et al., 2000), we have decided to focus our review on the literature and research specifically targeting the practice of online therapy as conducted on an individual basis with a mental health professional.

### The Practice of Online Therapy

Online therapy is a relatively recent development when contrasted with the long history of therapists delivering treatment via letters and telephone (e.g., Haas, Benedict, & Kobos, 1996; Padach, 1984; Wiederhold, Wiederhold, Jang, & Kim, 2000). Today, the majority of online therapy takes place via e-mail (Stofle, 2001). E-mail is "asynchronous," meaning that communication does not take place in "real time," but rather whenever the participants have a chance to respond to one another. Some therapists use full-service Web sites that provide secure message and credit card processing options. Other therapists simply exchange standard e-mail messages with clients. Online psychotherapists have developed a variety of pricing arrangements including flat fees for standard message lengths, by-the-minute charges for time spent replying, or package deals for a set number of e-mail. Less common is the practice of synchronous online therapy that takes place in real time, often using free, chat-based interfaces (e.g., AOL Instant Messenger, ICQ, etc.). As high-speed Internet connections become more prevalent, an increasing number of therapists are offering videoconference sessions using a broad range of available software and programs.

Online therapy occurs in a variety of formats. It is provided as stand-alone service, but also is used as an adjunct to traditional face-to-face clinical work (Yager, 2001). Mental health professionals are finding many interesting ways of integrating online services into their work. Finally, it should be noted that mental health professionals have turned to the Internet to provide a variety of services, including online testing (Barak &

English, 2002), career counseling (Boer, 2001), and information-resource Web sites for consumers (Grohol, 1999). Although these are undoubtedly used in conjunction with online therapy, a discussion of these uses is beyond the scope of this article.

### The Debate

In reviewing the literature, it is clear that there are some authors and organizations who strongly favor or oppose the practice of online therapy. Other authors take a more objective perspective in reviewing the possible advantages and challenges as well as the circumstances and types of clients that seem to be a good match for online therapy (e.g., Alleman, 2002; Barak, 1999; Maheu & Gordon, 2000; Stofle, 2001). It is important to reexamine why therapists and clients choose to engage in online counseling, and why skeptics rally against the practice. Therefore, we will overview the more commonly cited benefits and challenges associated with the practice (see also Childress, 1998).

### Benefits

#### *Convenience and Increased Access*

One of the most frequently cited benefits of online therapy is convenience and increased access for both clients and therapists. Online therapy also has the potential to serve people with limited mobility, time restrictions, and limited access to mental health services. Besides people living in remote locations or areas that lack access to an appropriate therapist, there are people working, traveling, and relocating in countries where they would not consult a mental health professional due to language barriers. People who are physically disabled, or their caretakers, represent another group with significant barriers to visiting a psychotherapist. In addition, potential consumers who feel stigmatized by the counseling process may be more likely to seek help online if they feel the initial shame is diminished when they are not in the therapist's physical presence (Mitchell & Murphy, 1998).

#### *Disinhibition and Internalization*

The disinhibiting effect of online communication has been discussed extensively by observers of Internet behavior (Joinson, 1998). In the context of online therapy, disinhibition can encourage therapeutic expression and self-reflection (Suler, 2002b). Since the process circumvents a client's overt persona, there are few, if any, social masks to remove, and clients tend to "cut to the chase" of core issues. Some online therapists report anecdotally that relating through text-based self-disclosure can have the effect of inducing a high degree of intimacy and honesty from the first exchange of e-mail. At the same time, the power differential can be diminished, as both parties become co-authors of client insights. To this end, the presenting problem can be externalized while the helper is being internalized. Both these time-honored therapeutic values are naturally enhanced by the medium and the closeness/distance of those engaged in it. The client can always (even years hence) re-read, rehearse, and reinforce the solutions and resolutions contained in the correspondence.

#### *The Zone of Reflection*

Online therapy communications may have the potential advantage of enhanced self-reflection and ownership of the therapeutic process gained through the act of writing.

Once ongoing contact between client and therapist has been established, there is an opportunity for both parties to enter what Suler (2002b) called the "zone of reflection." For example, in an asynchronous e-mail exchange, the normal process of therapy is mediated by the text, allowing both writers to pay close attention to their own process while still engaged in a dialogue. There also may be an enhanced sense of emotional containment, as the client is able to set the pace, tone, volume, and parameters of self-disclosure (Suler, 2000).

### *Writing is Therapeutic*

The contemplative process of writing about one's problems or conflicts may in and of itself be therapeutic for some clients (Murphy & Mitchell, 1998). In fact, Pennebaker (1997) provided empirical evidence that writing about emotional experiences is generally helpful. This research can logically be extended to a possible advantage of online therapy practice. As one online practitioner observed, "In an in-person session, you may talk for an hour and not get to the heart of the matter. In contrast, an online therapy client may sit in silence for an hour and then say more in one typed line than she has ever revealed to anyone."

### *Telepresence and Transference*

When conditions on both sides of the dialogue enhance the advantages described earlier, then the text-based bond may allow the client and therapist to experience "telepresence." This is the feeling (or illusion) of being in someone's presence without sharing any immediate physical space (Fink, 1999). Some online therapy supporters claim that text-only talk carries clients past the distracting, superficial aspects of a person's existence and connects the person more directly to the other's psyche (Suler, 2002a).

### *Hypertextuality and Multimedia*

Another advantage of online therapy is the ability to use the power of the Internet to feed relevant supplementary material to clients quickly and easily. Links to informational Web sites, video clips, documents, and assessment tools are readily supplied via all online therapy modalities. Whereas traditional therapy takes place in the therapist's office, limiting the therapist to whatever resources he or she has on the bookshelf, online therapy always takes place in a context with limitless resources (Grohol, 2000).

## Challenges

### *Missing Nonverbals*

One frequently noted challenge to the process of online therapy is the lack of visual cues. There is no access to the nonverbal behaviors (besides reported ones) that are undeniably important ingredients in the counseling process. This limitation may rule out highly experiential therapeutic approaches that necessitate in-person presence (Alleman, 2002).

### *Misreading*

In addition, online therapy creates a potential for misunderstanding in the absence of spontaneous clarification. Clients with poor ego strength or paranoid tendencies may

suffer from the loss of reassuring visual and auditory cues. For therapists lacking appropriate training in text-based communication, important information about the client may remain “between the lines,” with the real issues evading assessment. The increased room for error in online assessment makes traditional diagnosis virtually impossible and limits the clinician to making provisional hypotheses (Childress, 1998).

### *Time Delay*

Another technical challenge is that online therapy conducted by e-mail, for instance, is asynchronous and has a built-in time delay altering the nature of the counseling process. Clients may wonder about the meaning of unexplained delays in a therapist’s response. Ultimately, although time delay can be good (time to think about and digest responses), it also can increase anxiety, leading to what Suler (2002a) called the “black hole phenomenon.”

### *Skill Deficiency*

Both therapist and client must be reasonably good writers and typists, and need to be computer literate to manage the medium (Stofle, 2001; Zack, 2002). The effectiveness of online therapy could be lost on those not comfortable expressing themselves in writing. The medium appears best suited to those who value written self-expression and have the creative independence it takes to hold up their end of the written dialogue (Mitchell & Murphy, 1998).

### *Crisis Intervention*

Another debatable concern noted about online therapy relates to how therapists deal with crisis. Some authors have suggested there are significant problems that can surface when a client becomes suicidal/homicidal or the therapist is otherwise concerned about the client’s safety (Mitchell & Murphy, 1998). These authors note that there can be no certainty of an immediate e-mail response from the therapist, so the ability to reliably deal with crisis is challenging, if not impossible. In contrast, Fenichel et al. (2002) concluded that there is no evidence suggesting online therapy cannot be done with clients in crisis nor is it more difficult in locating a client in online therapy compared to telephone hotline clinical work.

### *Cultural Clashes*

Technology could lead some therapists to adopt a “carte blanche” approach to the indiscriminate crossing of cultures, time zones, and social systems. If it appears a therapeutic relationship is prone to conflict of interest, misunderstanding, or compromises the client’s needs, then ease of access may prove to be a secondary consideration.

### *Identity*

Verifying clients’ identities can be a challenge for online therapy. This is another reason why professional online therapy often makes identifying and emergency contact information a prerequisite for intake. Most Web sites require a password before the client can access the Web-site’s interactive communication system (Childress, 1998).

### *Security*

Another common concern is the confidentiality of communications and client records. Without special precautions, there are a number of key security issues in the process of online counseling (Zack, 2004). Technology has the potential to keep client records more secure than conventional systems, but without awareness of Internet protocols and utilization of encryption solutions, online therapists may inadvertently increase the risk of divulging sensitive information (Grohol, 1999).

### Legal and Ethical Issues

The challenges of online therapy lead many critics to argue about legal and ethical concerns associated with the delivery of mental health services via the Internet. Opponents worry about licensure issues related to doing therapy across jurisdictional boundaries, legal responsibility in the event of a crisis, and the appropriateness of client anonymity, among other concerns. Although an extensive discussion of these issues is beyond the scope of this article, we would stress that online therapy is being conducted throughout the world, and many of these issues (especially pertaining to licensing) are culture- or nation-specific. For more on the legal and ethical issues associated with Internet therapy, readers are referred to other sources (e.g., Bloom, 1998; Heinlen, Welfel, Richmond, & Rak, 2003; Koocher & Morray, 2000).

### Who Is Appropriate for Online Therapy?

One way to mitigate the challenges of online therapy is to carefully screen clients and to work only with those who will be able to benefit from the service (Suler et al., 2001). The expanded base of potential clients for online therapy brings up the clinical limitations of who can and cannot be effectively treated. Stofle (2001) suggested that online therapy is ideal for clients in outpatient settings, and possibly even intensive outpatient settings. However, it is not appropriate for patients who are hospitalized or who have severe psychiatric disorders. Issues and problems potentially best suited for online therapy include personal growth and fulfillment; adult children of alcoholics; anxiety disorders, including agoraphobia and social phobias; and body image and shame/guilt issues. Clients *not* appropriate for online therapy include those who have suicidal ideation, thought disorders, borderline personality disorder, or unmonitored medical issues (Stofle, 2001).

Just as not every client is appropriate for online therapy, it also is important to consider which therapists should be providing online services. At the very least, online therapists should be comfortable with computers and communicating via text. Although the personality attributes of successful online counselors have not been studied, we expect that the best online therapists are strong visualizers with an ability to be flexible, patient, and creative. Of course, the most important factor is that ethical online therapists acquire additional specialized training in the practice of online therapy, either through self-study or formal workshops and seminars (Anthony & Goss, 2003; Hsiung, 2003). They also may be likely to participate in professional organizations devoted to the practice of online mental health and telemedicine.

### Research Overview

Ultimately, whether the benefits of online therapy can overcome the challenges is an empirical question. However, to date, few empirical studies have directly investigated

these benefits and challenges or the appeal, process, and outcomes of online therapy. Perhaps the most obvious explanation for this shortage of research is due to the newness of the practice, particularly when contrasted with face-to-face psychotherapy. In addition, as alluded to earlier, the application of therapy provided via the Internet is still a process being debated (Alleman, 2002; Fink, 1999). Hence, the process of operationalizing the variables of investigation for research purposes can be particularly difficult. Finally, another challenge associated with this research involves finding clients and therapists to participate in research. The majority of process and outcome studies in the broader psychotherapy research area have used clients and therapists at counseling centers, community mental health centers, and hospitals. These outlets allow for more controlled settings where procedures can be standardized. Currently, few of these centers are conducting online therapy services, making it difficult for therapists and clients to be recruited for research purposes.

Fortunately, some research has been conducted, and more is in progress. This specialty area has attracted the interest of researchers from a range of disciplines including psychology, computer science, and communications. Ultimately, this multidisciplinary focus will help to address such questions as: Does online therapy work? Exactly how does online therapy differ from more conventional face-to-face therapy? Is online therapy effective or appealing to populations that could potentially benefit from the convenience of the services? What factors (therapist, client, or process variables) contribute to either successful or unsuccessful outcomes in online therapy?

Before establishing a framework for addressing online therapy research, it seems useful to differentiate between the various components of online therapy. Hill and Williams (2000) provided a helpful classification for individual, face-to-face, and personal social therapy by distinguishing among input variables, process, and outcome. "Input variables" reflect traits of the clients, therapists (e.g., attitudes, demographics, expectations, etc.), and setting (physical arrangement of the space in which therapy is being provided). "Process" pertains to overt/covert feelings as well as thoughts and behaviors that both clients and therapists report as present during therapy sessions. Finally, "outcome" refers to changes that occur directly or indirectly as a result of participation in therapy.

### Input Variables

Due to the debate regarding perceptions of online counseling (Barak, 1999; King & Moreggi, 1998; Murphy & Mitchell, 1998; Tait, 1999), it is important for researchers to initiate empirically based assessment measures of the general attitudes and perceptions related to online therapy. Studies addressing attitudes toward online therapy can provide pertinent and pivotal information regarding the population traits of those utilizing this particular help service. Rochlen, Beretvas, and Zack (in press) conducted a thorough instrument-development project that addressed preliminary validation of measured attitudes toward online and face-to-face counseling services. Factor analyses of the Online Counseling Attitude Scale (OCAS) and the corresponding Face-to-Face Counseling Attitude Scale (FCAS) yielded similar two-factor structures, which assess perceived levels of value and discomfort with the two respective counseling modalities. Overall, respondents expressed more favorable evaluations of face-to-face than online counseling (although none of the clients had ever engaged in online counseling). Interestingly, these authors did not find any significant gender differences between attitudes toward online counseling services. This was contrasted with the finding that women expressed more favorable

attitudes toward face-to-face counseling services than men, a point consistent with other studies addressing attitudinal gender differences (Fischer & Farina, 1995).

Chang, Chang, and Kim (2002) examined online mental health information-seeking behaviors and attitudes in a large sample of college students. Their findings suggest that individuals used the Internet to seek information about mental health significantly more often than they sought help for a personal problem. The college students were neutral about using the Internet to gather mental health information and had somewhat negative attitudes toward seeking help from online groups, e-mail counseling, and online psychological help.

An additional study conducted by Chang and Chang (2003) investigated online help-seeking attitudes of Asian American and Asian international college students. Similar to results obtained by Rochlen et al. (in press), Asian American and Asian international college students had less favorable attitudes toward seeking online professional psychological help than they did toward seeking face-to-face professional psychological help.

In all three of these studies, authors provided similar explanations for what might underlie less positive attitudes toward online therapy services as contrasted with face-to-face therapy. Most notably, the authors pointed to the fact that participants might be more familiar with face-to-face therapy services than their online counterparts. In addition, the authors suggested that frequently cited ethical and logistical concerns might be contributing to negative attitudes (Barak, 1999; King & Moreggi, 1998; Murphy & Mitchell, 1998). Although it was emphasized in both studies that online counseling attitudes were indeed less favorable than those expressed toward face-to-face counseling, they were not necessarily negative attitudes.

In our review of the literature, we found no studies that attempted to explain the sources accounting for the differential attitudes. In addition, with the exception of the Chang et al. (2002) study, no research has been initiated concerning how different populations perceive the value of online therapy services. This line of research seems especially important to conduct with populations that could benefit from the convenience of the service. For example, it would be interesting to examine the attitudes toward online counseling within samples from disabled populations, rural populations (with little or no access to face-to-face services), or people who stigmatize traditional counseling services.

Another critical area of research relevant to input variables involves client expectations. Studies of face-to-face therapy have provided useful information describing the relationship between expectations of therapy, attitudes toward counseling, willingness to utilize help services, and preferences for counseling styles (Constantine & Arorash, 2001; Leong, Wagner, & Kim, 1995; Lyddon & Adamson, 1992).

Studies addressing similar areas of research in online therapy seem especially important. Expectations of both online and face-to-face therapy (accurate and otherwise) will naturally fluctuate. Yet, the lack of familiarity and relative novelty of online therapy might lead to particularly inaccurate expectations of the process. Hence, there is a need for studies measuring the accuracy of client expectations toward online counseling as well as how accurate expectations are shaped by information about the services. Studies in the broader psychotherapy literature have shown the efficacy of psychoeducational interventions on help-seeking attitudes and the shaping of realistic expectations about the process (Gonzalez, Tinsley, & Kreuder, 2002; Murstein, & Fontaine, 1993).

Another area of research relevant to input variables of online therapy that has not yet been initiated involves preferences for various online therapy styles. This area of research, in the larger psychotherapy literature, has yielded a wealth of information in terms of how different types of clients (most frequently distinguished by race, gender, ethnicity, etc.) express preferences toward different types of counseling styles and theoretical orientations



(Hanson, Claiborn, & Kerr, 1997; Heaven & Furnham, 1994; Wanigaratne & Barker, 1995; Wisch, Mahalik, Hayes, & Nutt, 1995).

Preference studies for online therapy may want to examine how different personality traits (e.g., extroversion, introversion) and attitudes toward the service correlate to preferences for different styles of online therapy. For example, people who feel highly stigmatized by therapy or who struggle with intimacy may express preferences toward online therapy where no direct visual cues (i.e., synchronous e-mail chat where the therapist is not visible) are involved.

A final research area relevant to input variables involves training considerations. In the larger psychotherapy literature, the impact of pre-therapy training has yielded positive results. Research has shown that participants who received pre-therapy training report more realistic expectations of therapy, better attendance, and an overall better understanding of the therapeutic process than those who do not receive training (Coleman & Kaplan, 1990; Deane, Spicer, & Leathem, 1992; Weinstein, 1988). In extending this research into the area of online therapy, it may be important for training efforts to carefully explain the various modalities of online therapy. This would include an explanation of how each type of therapy is conducted and the advantages and disadvantages of different methods. Moreover, studies may want to provide opportunities for clients to practice using different technology and to learn how certain characters or “emoticons” (faces, symbols, etc.) are used to express emotions (Wolf, 2000).

### Outcome Studies

Regarding outcome studies, a range of different methodologies have been employed, all with the intention of evaluating the efficacy of online therapy. Most common have been studies aimed at evaluating whether online therapy interventions lead to clinical improvements overall and as compared to wait-list control groups. In general, the results of these studies have yielded relatively consistent and encouraging findings in support of online therapy. More specifically, significant improvements in symptom relief after participating in different online therapy interventions have been reported by participants experiencing a range of clinical concerns including panic disorders (Klein & Richards, 2001), eating disorders (Robinson & Serfaty, 2001), and posttraumatic stress and grief (Lange et al., 2000; Lange, van de Ven, Schrieken, & Emmelkamp, 2001).

Studies using a qualitative design also appear to be a promising methodology in assessing the potential benefits of online therapy. Jedlicka and Jennings (2001) analyzed the outcomes of 11 couples who participated in solution-focused marital therapy as conducted via the Internet. Couples recruited from a university electronic mailing list completed an e-mail-based therapy with a trained therapist for a duration between 1 and 14 weeks. The authors concluded that the online-only therapy was effective in a similar manner to that which has been described for face-to-face therapy couples. The encouraging findings were particularly evident for couples who seemed actively engaged in the problem-solving, cognitive focus of the therapy.

Finally, a few studies have directly incorporated into the methodology direct comparisons between online therapy interventions with face-to-face therapeutic approaches. These projects are especially important in furthering the online therapy outcome literature as they address not only the question of whether online therapy works but how this help-seeking option contrasts with therapy as practiced in a face-to-face context. In a preliminary study, Cohen and Kerr (1998) assigned 24 clients to one session of either face-to-face or computer-mediated counseling. Counselors in both conditions followed a similar format that included identifying, exploring, and working through the client's

presenting concern. Upon finishing the session, clients completed measures evaluating the counselor, the session, and their anxiety level. Clients in both conditions showed equivalent decreases in expressed anxiety and similar ratings regarding the session and the counselor's expertise, attractiveness, and trustworthiness.

Day and Schneider (2002) conducted a similar study with a larger sample and greater external validity. Eight community clients were recruited and assigned to one of three conditions representing three different modes of psychotherapy: face-to-face, real-time videoconference, and two-way audio (similar to telephone communication). Participants completed five sessions of therapy and completed measures of the working alliance, session outcome, and general satisfaction with the sessions. In general, the conclusions supported the use of online therapy. The only significant difference between the groups on any of the process or outcome variables seemed in favor of the non-face-to-face conditions. Clients who were not in the face-to-face condition reported higher scores on an index of client participation that involved clients' activity level, initiative, trust, spontaneity, and disinhibition. The results of the outcome analyses determined no significant differences and generally positive findings among all three treatment groups.

Collectively, these preliminary studies have yielded encouraging data regarding the efficacy of online counseling. Yet, given the small samples sizes of the reviewed studies (Six of the seven studies had 25 or fewer participants.), considerably more research is needed. As has been stressed in the face-to-face counseling literature (Wampold, 2000), future outcome studies should consider using a range of outcome measures aimed at assessing different aspects of a therapeutic outcome. For example, researchers should consider using measures evaluating such factors as client-rated satisfaction, insight, and depth of session in addition to more commonly used measures of symptom relief. Moreover, carefully designed outcome studies are needed using populations that have been outlined in the literature as potentially being well-suited for online therapy (e.g., clients in rural populations, participants who stigmatize therapy, etc.).

### Process Studies

To date, few studies have focused on investigating the process of online therapy. One notable example is a study by Mallen and Vogel (2002) that employed a creative methodology whereby counselors were informed they would be meeting with a client in a synchronous chat environment for one session. In reality, clients were confederates informed to communicate a fairly standardized presenting concern for a college-aged student. The results of this project demonstrated that counselors were able to accurately assess the clients' presenting problems and felt generally satisfied with the process of treatment. The authors also noted that the overall levels of experience and familiarity with the use of technology was particularly low.

Mallen and Vogel (2002) also analyzed the scripts of the transcripts for the sessions and compared them to similar single-session data (Day & Schneider, 2002). Client and therapist comments were coded using Hill and O'Brien's (1999) coding system. Counselors in the face-to-face condition offered more approval, reassurance, and interpretations, challenged the client more often, asked more questions, and focused more on immediacy issues than counselors in the online condition. In addition, there was a significant difference in the amount of words used in each condition, with more words being used in the face-to-face condition than the online condition.

An additional study addressing an important area within the process of online therapy was recently published by Cook and Doyle (2002). These authors evaluated differences in the client ratings of the working alliance ratings between a small sample ( $n = 15$ )

of online therapy clients with normative data from a comparable face-to-face counseling sample. All participants completed a minimum of three sessions of online counseling as conducted via e-mail or chat with therapists trained in online therapy. As predicted, the authors found comparable (and relatively high) evaluations of the working alliance for the online sample using the frequently applied Working Alliance Inventory (Horvath & Greenberg, 1989). More specifically, significantly higher scores were observed for the online sample for the overall composite index and the goal setting subscale. Equivalent scores were observed on the client's ratings of the therapeutic bond and tasks involved in therapy between the online therapy and face-to-face normative data.

Expanding upon these promising preliminary studies, several additional areas of process research can be outlined. First, further research efforts should be initiated to address how online therapy is evaluated when conducted by therapists with different training levels and theoretical orientations. For example, it may be that therapists who adhere to more structured theoretical orientations (e.g., solution-focused therapy, Rational Emotive Behavioral Therapy [REBT], etc.) have greater ease in conducting therapy online. This may be contrasted with therapists who adhere to models placing a greater emphasis on the interpersonal dynamics of the face-to-face interaction (e.g., psychoanalytic approaches).

Second, there is a considerable need to investigate several critical phases, interventions, or processes of therapy. Some examples that might be particularly relevant for online therapy include therapist interpretation (Hoglund, 1996; Piper, Joyce, McCallum, & Azim, 1993), self-disclosure (Edwards & Murdock, 1994; Knox, Hess, Petersen, & Hill, 1997), confrontation (Miller, Benefield, & Tonigan, 1993; Olson & Claiborn, 1990), compliance with homework assignments (Conoley, Padula, Payton, & Daniels, 1994; Mahrer, Gagnon, Fairweather, Boulet, & Herring, 1994), and countertransference and transference responses (Gelso, Hill, Mohr, Rochlen, & Zack, 1999).

In addition, researchers need to continue to investigate how the text-based bond formed in online therapy compares and contrasts with the in-person therapeutic alliance. This variable has consistently been demonstrated to be important in predicting therapy outcome (see Horvath & Symonds, 1991, for meta-analysis).

### Limitations and Conclusion

Clearly, research in this area remains in its beginning stages and is hampered by several significant limitations. First, in addition to the general challenges of conducting process–outcome research (Hill & Williams, 2000; Wampold, 2000), the ambiguity, lack of control, and debate over precise definitions of online therapy make this research specialization particularly difficult. Second, few researchers to date have considered cross-cultural issues and differences that surface in online therapy. Relevant cross-cultural factors need to be considered both in regard to differences between clients and therapists and in terms of rules, regulations, guidelines, and accessibility to technology that exist among users (or potential users) of online therapy in different countries. Third, caution must be exercised in generalizing the results of the research that has been conducted due to limitations including the use of small homogenous samples, lack of control and wait-list conditions, and the use of mostly inexperienced therapists.

Finally, it is important to note that while there have been frequent discussions of the benefits and the challenges of online therapy, few research projects have directly tested whether these benefits and challenges are perceived as such by practitioner and end users of online therapy (i.e., therapists and clients). Hence, the benefits and challenges noted

earlier and in other articles (e.g., Alleman, 2002; Barak & English, 2002) remain largely based on anecdotal evidence with limited empirical data supporting their validity.

In lieu of these limitations, a few tentative conclusions can be generated as a useful guide to prompt future studies. It seems that the general public continues to express significant reservations about their willingness to utilize online counseling services, above and beyond attitudes expressed toward psychotherapy in general. However, studies addressing the process and outcome of online therapy when contrasted with face-to-face therapy have yielded more positive findings, suggesting few differences in the process and outcome of these different avenues for help. Considering the possible benefits of online therapy, particularly in reaching populations that might not otherwise seek help, more research in all areas of this practice is strongly recommended.

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