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# Psychology at a Distance: Examining the Efficacy of Online Therapy

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Psychology at a Distance: Examining the Efficacy of Online Therapy

by

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An undergraduate honors thesis submitted in partial fulfillment of the

requirements for the degree of

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in

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and

Psychology

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**Abstract**

Online therapy presents both potential benefits, and possible hazards, when compared with traditional face-to-face (FTF) therapy. Questions of clinical efficacy are of primary interest to mental health workers and researchers. In this literature review, I break the concept of efficacy into a tripartite investigation of outcome, process, and self-report evidence. The outcome evidence indicates that teletherapy patients experience similar results compared with control groups. The process studies indicated that working alliance was unaffected by the medium of communication. Finally, the survey studies reported that clients were predominantly satisfied with online therapy. Therapists, however, had misgivings about the online therapy environment. These findings appear to suggest that online therapy is clinically efficacious and is roughly equivalent to traditional therapy.

## Table of Contents

Abstract.....	2
Introduction.....	4
Analysis of the Scholarly Community.....	6
Methodology.....	7
How Efficacy Relates to Online Therapy Research.....	9
Efficacy and Outcome Studies (Efficacy and Effectiveness).....	9
Efficacy and Process Studies.....	10
Efficacy and Subjective Appraisals.....	10
APA Best Practices.....	12
Outcome-based Studies.....	15
Process Studies.....	19
Self-Report Studies.....	23
Discussion.....	27

## Psychology at a Distance: Examining the Efficacy of Online Therapy

### **Introduction**

When carefully evaluated as an emerging practice in clinical settings, Telepsychology presents both potential benefits and possible hazards. Previous literature reviews on the topic have often focused upon issues ancillary to the fundamental question of therapeutic value (e.g. legal questions, ethical quandaries, and adoption rates). The purpose of this literature review is to evaluate the efficacy of online therapy in comparison to face-to-face psychotherapy. I have focused on this route of inquiry because it is a pertinent question often asked by practitioners, and clinical psychology researchers consider the question crucial because it relates directly to clinical outcome (Hertlein, Blumer, & Mihaloliakos, 2015).

Research into online therapeutic practice is extremely important given the relative newness of the technique, the possibilities inherent in the medium of therapy, and the degree of skepticism present in the clinical community. The expenditure on healthcare, including psychotherapy, continues to rise, and online therapy cuts costs by allowing sessions to be conducted over the internet. This is particularly crucial for follow-up care; an e-mail based therapeutic dialogue could help clients maintain mental health, and ward off future difficulties, without the expense of additional in-person therapeutic sessions (Perle, Langsam, & Nierenberg, 2011). For patients living in remote areas, without readily accessible therapists, the internet is a powerful medium of communication allowing access to mental health workers living in adjacent counties, or even neighboring states. Finally, underserved populations, such as individuals with agoraphobia or other conditions restricting access, could “see” therapists without being

physically present in a clinic (Bouchard, Payeur, Rivard, Allard, Paquin, Renaud, & Goyer, 2000).

While telepsychology has the potential to reduce costs, allow access to underserved populations, and lower client inhibitions, it might also introduce counter-productive elements into a therapy session—such as a lack of non-verbal cues or reduced empathy. Consequently, telepsychotherapy research attempts to gauge the similarities and differences between it and traditional therapy. The effect of a relatively small difference, observed in a study, could be magnified if online therapy were conducted on a wide scale (Cook & Doyle, 2002). Scientific researchers have a duty to investigate new forms of therapy to certify their efficacy and safety. Online therapy is posed to become a larger part of psychology in the coming years, and research is vital in detecting potential ill-effects and finding scientifically sound solutions (Perle, Langsam, & Nierenberg, 2011).

The first research into alternative or distance therapy dates back many decades. Therapists have used mail correspondence and the telephone to maintain contact with distant clients since the beginning of the 20th century, and this practice was the subject of sporadic, but limited, research interest (Perle et al., 2011). Today, the topic sees renewed involvement, spurred by the massive growth of the internet from the mid-1990's to the present day. Compared to telephone-based therapy, computing technologies are far more flexible and present some distinct advantages—like being able to see the therapist's face in videoconferencing. The internet also impacts other facets of the mental health system. Clients can schedule appointments by e-mail, use internet search engines to look up pertinent medical information, and join online support groups (Mallen, Vogel, Rochlen, & Day, 2005). Practitioners can, as well, utilize internet journal

databases to keep up-to-date on the latest developments in psychology, communicate with colleagues via email, and collaborate over vast distances electronically. Therefore, conducting therapy over the internet is only one small part of a rapidly changing discipline.

### **Analysis of the Scholarly Community**

Therapy delivered electronically is known by many different names and has, in the past, suffered from a lack of consistent terminology. In the American Psychological Association (2001) Thesaurus of Psychological Index Terms, the subject is listed under the label of “online therapy” (p. 190). Elsewhere, it is referred to as teletherapy, a term derived from the broader label of telemedicine. E-mental health, internet therapy, e-therapy, online counseling, and cyber counseling have variously been used either as generic labels, or as category descriptions for practices under the umbrella of online therapy (Barak, Klein, & Proudfoot, 2009). Hence, there is some overlap and ambiguity present in the terminology. I will use these names interchangeably when referring to the practice of delivering therapy over the internet. The lack of consistent definitions reflects the unsettled nature of the debate surrounding the ethical, legal, and methodological questions posed by the presence of technology in modern clinical practice.

Digital communication is integrated into day-to-day life on a previously unimaginable scale. The technology is inexpensive to implement, and presents a tantalizing range of possible uses. At the same time, however, the emergence of online therapy has generated some controversy. Perle et al. (2011) noted that many researchers and therapists have voiced objections to the practice, fearing the possible negative consequences arising from a “dehumanized” therapeutic environment. Despite the controversy over the potential long-term effects of widespread adoption, the use of online therapy is expected to increase in the future.

The goal of the existing research has, therefore, been to examine the legal, ethical, and clinical questions in detail; these studies directly serve the interests of clinical practitioners. The legal questions have been examined in depth, particularly around the issue of multi-state licensure when telecommunicating with a client residing in different state, but they cannot be resolved by the psychological community. It has largely fallen on state legislatures and legal scholars to develop laws and guidelines relevant to the practice of telepsychology. Consequently, most of the discourse community has focused both on issues of ethics and issues of clinical efficacy. I will refrain from covering the legal issues in too much depth, as it veers from the scope of my research and resides in an ever-shifting domain of confusing, and sometimes contradictory, regulations.

Among the telepsychological scholarly community, however, one line of questioning reigns supreme: is online therapy as “good” as conventional therapy, i.e., does teletherapy manifest any of the ill effects predicted by skeptics in the scientific community? These questions lie at the heart of this literature review and correspond with the interests of current researchers.

### **Methodology**

The purpose of my study is to survey the literature and look for a tentative consensus regarding the efficacy of online therapy. This thesis will concentrate on studies lying within the purview of clinical psychology and will avoid delving into the broader field of telemedicine. Research in online therapy only spans a limited time period (from approximately 1995 to 2016), and this review will primarily include studies conducted over the past fifteen years in an attempt to include only the most up-to-date information.



The majority of the studies will invariably be non-experimental, owing to the difficulty of conducting controlled experiments when client-therapist confidentiality must be maintained. It appears that convenience samples, selected from patient groups, are predominant, as are self-report surveys. The quantitative information will come from these surveys, while the qualitative information will come from both surveys and interview studies.

### **How Efficacy Relates to Online Therapy Research**

Before delving into the substance of my literature review, I will define my use of the term “efficacy” in regards to my central thesis. The term has multiple meanings dependent upon the academic and/or technical context it is used. I will commit to an overview of the concept and how other academics have encapsulated it. Furthermore, I will outline the three categories of studies that contribute to understanding a particular treatment modality. These three categories of articles make up the bulk of this literature review and support my suggestion of online therapy's efficacy. Therefore, I use the term “efficacy” in a broad sense, referring to outcome studies, process studies, and subjective appraisal studies. This three category model is similar to the perspective employed by Mallen et al. (2005) when they examined the literature on online counseling, although the focus of my thesis will be considerably narrower in scope.

#### **Efficacy and Outcome Studies (Efficacy and Effectiveness)**

The American Heritage Dictionary of the English Language (2006) defines efficacy as the “power or capacity to produce a desired effect,” although this is a fairly vague explanation and is unsuitable for a treatise in teletherapeutic methodology. In the context of medicine and pharmacology, efficacy is the capacity of a given treatment to produce a beneficial effect. This desirable or beneficial change is referred to as “therapeutic effect.” Thus, an efficacious new therapy technique is one that produces positive outcomes, in a controlled clinical setting, that compare favorably with previous lines of treatment.

In psychology, “efficacy” and “effectiveness” are used to describe two different types of research studies (Hunsley and Lee, 2007). Whereas effectiveness studies seek to maximize external validity, such as measuring outcomes in real-world clinical settings, efficacy studies

seek to maximize internal validity via the utilization of a carefully controlled setting and randomized treatment and control groups. Both of these paradigms play an important role in determining the overall picture of a new—and occasionally untested—treatment method.

When the outcomes of the two types of studies (grouped together under the label “outcome studies”) are in concordance with one another, it can be assumed that the new treatment is valid from a clinical perspective (CPA, 2013).

### **Efficacy and Process Studies**

Process studies examine the “process” of therapy, the formation of a person to person bond between a therapist and their client, and the overall rapport with a therapist during a session. Process studies are crucial in evaluating the formation of “alliance,” the healing and supportive relationship that a client forms with a counselor. This is typically measured using surveys such as the Working Alliance Inventory (WAI) (Barak et al., 2009). According to previous scholarly investigations into the relationship between process variables and outcomes, increased alliance is strongly correlated with improved satisfaction (both by client and therapist) and an increased rate of favorable outcomes arising from a course of therapy (Cook & Doyle, 2002). These studies are particularly important in evaluating teletherapy, as a decline in alliance in comparison to traditional therapy could be indicative of a dehumanizing effect arising from the lack of face to face contact.

### **Efficacy and Subjective Appraisals**

These types of studies concern the perceptions felt by clients and therapists towards different aspects of a therapy session. This can include levels of comfort or discomfort with a therapy, ease of use factors (especially with synchronous or asynchronous online therapy), and

ability to gauge nonverbal cues (in the case of therapists). This information is typically gathered via the use of surveys, either through the internet or through paper-based questionnaire. Both quantitative and qualitative information can be gathered through this approach through the attachment of short-answer or forced choice questions or through the utilization of numerical scores.

### **APA Best Practices**

Over the past twenty years, the mental health community has gradually come to view online therapy as a promising adjunct to traditional therapeutic methods. This change in opinion has coincided with the increased use of computer-mediated communication across the broader healthcare field. Although acceptance of online therapy is not universal, enough practitioners have begun using computer mediated communication to warrant a review of the tools, ethical safeguards, confidentiality protections, and overall practices used in teletherapy.

In 2013, the American Psychological Association announced that it had created a set of finalized recommendations for clinical practitioners using online therapy. The APA Task Force on Telepsychology investigated the issues in a comprehensive manner: first, they identified the existing practices of distance therapy; second, they examined the research produced on the effectiveness, ethical concerns, legal questions, and practical concerns.

Prior to the 2013 guidelines, the APA had issued no formal recommendations for inter-jurisdictional practice. This has resulted in a distinct lack of clear guidelines for online therapists communicating with clients across state or country boundaries (Perle et al., 2011). In fact, Perle et al. notes that the lack of established precedent (for cross-jurisdictional therapy) has created a legal grey area. In Maheu and Gordon's (2000) survey of licensed counselors, the respondents often held erroneous or false ideas about their relevant state regulations. Many counselors were unaware that their state or country had laws governing teletherapy. There appears to be some confusion among many counselors as to the legal particulars of practicing over the internet. Clinical psychologists are required to hold a license from the state they practice in. What is unclear is whether psychologists are required to hold licenses in the states that their clients reside

in (when engaging in distance therapy). In the newly released APA guidelines, psychologists are advised to consult *all* relevant state guidelines before practicing across state lines, because the relevant regulations are a patchwork that varies depending on the state in question. (Barak et al., 2009)

In addition to the legal questions, there are some ethical concerns held by clinical professionals. Confidentiality, an ethical imperative in psychological practice, could be compromised by the digital nature of the communications medium. Most of the research has focused on establishing best practices in regards to data storage, protecting against eavesdropping, and training psychologists to use these techniques. This could include, for example, the use of encryption software to anonymize the messages between therapist and client (Perle et al., 2011). Or it could include the use of secure servers and hardware encryption to protect client information. Again, these issues required additional investigations, and the APA developed a set of guidelines to answer these practical questions.

Part of the challenge arises from the sheer number of options available to the enterprising therapist. Hertlein, Blumer, and Mihaloliakos (2015), in their survey of practicing marriage and family counselors, found that ethical issues and uncertainty surrounding confidentiality ranked as one of the foremost concerns expressed by the therapists. Although only tangentially related to clinical efficacy, the ethical quandaries are important to consider when examining telepsychology. The APA guidelines address these concerns, advising psychologists to inform clients of the possible risk to confidentiality arising from the unique nature of internet-based therapy. This ties into informed consent; the psychologist has a duty to educate clients on the

data recorded during a therapy session, how that data is stored and protected, and whether the client fully understands the use of internet technologies.

### **Outcome-based Studies**

Outcome studies (both of the aforementioned efficacy and effectiveness types) represent an important facet of psychological research methodology, and they are crucial in determining the real-world impacts of online therapy (Hunsley & Lee, 2007). It is not enough, simply, to assess working alliance in a clinical setting, or to utilize survey information from practitioners and clients; a persuasive claim of efficacy requires concrete evidence of favorable results in a clinical setting.

Much of this evidence comes from quantitative outcome studies that, until recently, have been absent from the literature of online therapy (Barak et al., 2009). Case studies and survey studies have been generally more common in the literature due to the ease of arranging interviews or distributing questionnaires. Process-based studies (with qualitative and quantitative data) are also more common, in part due to the relative ease of measuring process variables in a simulated, or some some cases real-world, environment. Therefore, while the literature related to qualitative information is plentiful and consistent across various research interests, there is less certainty in regards to quantitative information. The vital quantitative outcome data (such as decreases in particular symptoms or improvements in emotional coping) can only be gathered from experimental research. This presents methodological problems given the relative newness of telepsychology and the lack of widespread adoption.

There are also barriers for potential participants in teletherapy studies, as noted by Perle et al (2011). Computer technology has the capacity to increase access to therapy among technoliterate groups, but it could also reduce the pool of potential users among those less savvy or capable of access (such as ethnic minorities, the elderly, and low income populations). These



groups are vital for inclusion into quantitative studies to maximize their representativeness.

When compared to the general population, a sample must accurately represent the demographic characteristics being examined. Online therapy studies call for computer literate research subjects. This factor has the potential to exclude demographic groups that either lack access to communications technology (such as low-income individuals) or who are less skilled in the use of computers (often elderly individuals). Thus, the current studies have some self-selection bias present.

Many of the studies examining outcome-based variables also investigate other variables such as working alliance or client satisfaction. Often these data are gathered via interview or survey. Later, this information is tabulated and converted into qualitative and quantitative information. In Cohen and Kerr's (1999) study, for example, researchers gathered data corresponding to patient anxiety (an outcome variable) and patient attitudes toward care (a qualitative self-report variable). By utilizing multiple lines of evidence, the researchers could better gauge the overall picture of teletherapy compared with face-to-face therapy.

Cohen and Kerr's (1999) study is an oft-cited landmark within the online counseling and online therapy discourse community. It was one of the very first research efforts devoted to measuring therapeutic outcome. In this case, Cohen and Kerr looked at the differences between two groups, one assigned to computer mediated counseling (CM) and one assigned to face-to-face counseling (FTF). The outcome related aspect of the study came from the administration of an anxiety inventory at the end of the counseling session. All of the subjects in the trial previously indicated that they suffered from anxious symptoms, and thus the goal of the study was to measure the improvement (if any) in symptoms of anxiety and compare the two groups.

Researchers also collected qualitative information from the participants in the form of a session evaluation questionnaire, and they were asked to provide a rating for the therapist based upon several criteria: “expertness, attractiveness, and trustworthiness” (p. 18). After subjecting the data to statistical analysis, the authors determined that there were no functional differences between between the FTF and CM group; both groups had the same decrease in anxiety symptoms. The authors also noted both groups gave similar session evaluations. These findings present a clear case for viewing online therapy as substantially similar to traditional therapeutic routes.

Murphy et al. (2009) similarly conducted a study examining the interplay between online counseling modalities and client perceptions. Murphy et al. looked at two criteria, Global Assessment of Functioning (GAF) and Client Satisfaction Scale (CSS). The GAF represented the outcome variable, while the self-report data was gathered from the use of the CSS. The study used a convenience sample of 45 individuals for the CSS group. The GAF group used a sample of 26 people for online therapy and 101 people for face-to-face therapy. The authors concluded, after analyzing the data, that there were some differences between face-to-face participants and online participant groups. Interestingly, online therapy participants scored higher than those of face-to-face group members. However, the authors conclude that the ability for either modality to bring about therapeutic change is supported, and both modalities appear equally efficacious. In the criteria of client satisfaction, both modalities were scored quite similarly. The researchers are careful to note that some participants (outliers) seemed to dislike the online experience to a greater extent. These individuals, the authors theorize, could have had problems adjusting to the online experience.

Overall, the outcome literature appears to support the feasibility of online therapy. Teletherapy appears to produce therapeutic changes in a client in a similar manner to traditional therapy. This occurs in spite of the obvious differences in the medium of transmission and communication (i.e. speaking directly to a person in the same room versus digitally facilitated communication over a distance). Obviously, these studies have some limitations given the small sample sizes and the prevalence of convenience sampling. The evidence provided, however, strongly points in the direction of seeing online therapy as roughly equivalent to FTF.

### **Process Studies**

Psychologists have typically approached the problem of researching process variables by utilizing *working alliance*, a relationship construct defined as a collaboration between client and therapist that enhances psychological healing. One of the most popular statistical measures is the Working Alliance Inventory (WAI). The WAI is a 36 item self-report survey designed to measure relationship variables on a set of Likert scales. Higher levels of alliance have been found to strongly correlate with improved therapeutic outcomes (Cook & Doyle, 2002). Among the studies I have reviewed, the majority utilize the WAI when concentrating on differences between traditional and online therapy (Cook & Doyle, 2002; Germain, Marchand, Bouchard, Guay, & Drouin, 2010; Reynolds, Stiles, Bailer, & Hughes, 2013).

Cook and Doyle's (2002) research represents one of the first comprehensive process-based investigations of online therapy. The authors cited the work of Lambert (his paper on common factors among different therapeutic approaches) to support their claim of the primacy of the client-practitioner relationship in determining health outcomes.

Alliance in online therapy was compared to alliance in traditional therapy. 15 participants were selected by contacting their therapists via email. The participants filled out a demographics questionnaire. The Working Alliance Inventory (WAI) was given to participants after the third online therapy session. Single sample t-tests compared the answers of online therapy clients to the results of WAIs given to face-to-face clients. The results of the study clearly showed no significant difference between the scores of the two groups.

The sample used in the study is non-representative, and overwhelmingly female, the authors noting that women tend to be more interested in using the internet for mental health

services. A sample size of only 15 participants also presents a problem for external validity. The WAI is a robust measure, but at smaller samples the results could be skewed. According to the comments received from participants, many of them preferred online therapy due to the “online disinhibition effect;” where the feeling of being anonymous allows people to express their thoughts and feelings in more depth. Although the study predates the emergence of videoconferencing and other more sophisticated techniques in teletherapy, it represents one of the first attempts to assess the effectiveness of distance therapy and has served as a model for many other research projects examining working alliance.

Germain, Marchand, Bouchard, Guay, and Drouin (2000) investigated the potential application of telepsychotherapy in treating post-traumatic stress disorder (PTSD), a condition marked by long term distress. The article's authors examined the emergent opportunities presented by telepsychology in improving access to mental health care along with other logistical and practical benefits. Forty-six participants were selected; 29 were placed in the face-to-face control group, while 17 were placed in the video conferencing group. The 17 participants in the experimental group lived in a rural region 200 miles from Montreal. The study utilized a series of quantitative scales intended to measure the degree of therapeutic alliance between therapist and client.

The statistical data gathered, the researchers felt, represented definitive evidence that the development of therapeutic alliance was not harmed in the transition to electronic communication. There was no evidence in the data that lent credence to the more vocal criticisms of teletherapy. Even so, Germain et al. recommended that teletherapeutic techniques serve as a supplement to traditional therapy and not as a wholesale replacement.

Reynolds, Stiles, Bailer, and Hughes (2013) examined the differences between in-person and face-to-face therapy, centering on whether clients developed the same degree of alliance with therapists and whether participant factors affected the online therapy similarly to traditional therapy. Reynolds et al. noted that online interactions are generally less stressful—in many instances—for clients due to an online calming effect. The impersonal nature of communication might, therefore, lead to a lowering of inhibitions. Additionally, the researchers contended that deviations between traditional and online therapy are less than one would initially expect. Their assertion is supported by a wealth of process-related evidence, where a number of client-therapist relationships in an online context were compared with previous studies using the same metrics. Reynolds et al. use this statistical analysis to demonstrate that subjects in online environments actually rate their session impacts and alliances as strong as—and sometimes stronger—than clients in the previous studies examining patients in a traditional therapeutic environment. The authors also build on previous studies examining the issue of cybertherapy, like Cohen and Kerr's (1998) study on computer mediation. The sample size is, however, somewhat small, indicating that the study offers only provisional evidence in favor of virtual therapy.

Bouchard, Payeur, Rivard, Allard, Paquin, Renaud, and Goyer (2000) explored the treatment of agoraphobia with videoconferencing technology. The researchers were concerned with testing the effectiveness of telepsychotherapy in contrast to traditional therapy. Eight different individuals were chosen for the study: three men and five women. The sample was split between two groups, one residing in a rural area, while the other resided in an urban area. The rural sample was treated with therapy via videoconferencing, while the other sample was treated

via traditional means. The participants each received 12 separate sessions of psychotherapy. Effectiveness was measured with the Working Alliance Inventory, to gauge perceived therapeutic effectiveness, and the measurable symptoms were compared (both before and after treatment). Participants in both groups showed statistically significant improvements in symptoms, such as lessened anxiety and decreased frequency of panic attacks.

The evidence presented by Bouchard et al. demonstrated that CBT delivered via teleconference is as effective as traditional therapy, and possesses certain benefits in comparison. Bouchard et al. note that people diagnosed with agoraphobia often have extreme difficulty in both locating and meeting with a therapist. Agoraphobia, in more serious cases, can lead a person to totally avoid public places out of a fear of panic attacks and can, potentially, make a person avoid leaving their home. Thus, seeing a therapist would be impossible for many individuals with the most severe form of the disorder. Teletherapy could remove the necessity of face-to-face contact, and could be a useful tool when used to gradually ease the strong agoraphobic tendencies of a client. The sample size is extremely small and, although the authors used several statistical methods to better extrapolate the results, too homogenous, being composed entirely of severe agoraphobic individuals. The authors hope to expand the methodology of their study and apply it to a larger sample size at a future date.

### **Self-Report Studies**

Self-report surveys, alongside observational designs, are popular sources of information in clinical psychological research. Due to the ease of use factor, minimal time commitment, and simplicity of analysis, surveys are widely used in examinations of therapeutic practice (Cozby & Bates, 2012). Client and therapist feelings and perceptions are internally held mental states. This complicates the process of designing and conducting an experimental study. Researchers, on occasion, have instead turned to recording and analyzing qualitative and quantitative information from interviews, questionnaires, and email correspondence. Mishna, Bogo, and Sawyer (2015), for example, used a purely qualitative study to examine the experiences of counselors and clients undergoing teletherapy. While not capable of directly answering the question of clinical efficacy, these types of studies are able to discern subtle differences between therapeutic methods. For example, a qualitative study might reveal deviations in personal preference among practitioners and clients. These difficult-to-measure factors could be overlooked in process studies and outcome studies (which often center on directly measurable phenomena).

A recent study by Hertlein, Blumer, and Mihaloliakos (2015) sought to gain insight into the perceptions of technologically facilitated therapy among clinical practitioners and mental health workers. The authors surveyed the mental health community with a series of questions relating to the perceived ethical risks associated with distance therapy (e.g. whether teletherapy created ethical quandaries in maintaining confidentiality, patient-therapist boundary management, and appropriateness of setting). The researchers selected a sample of 226 individuals out of a pool of 2,000. The responses of psychology/counseling students and practitioners were compared via a t-test to determine if there was any statistical difference. The



article is written with a specific audience in mind: clinical practitioners and scholars with an interest in family/marriage counseling (and/or teletherapy) and students of counseling. The methodology of the study is based upon the prior work of Perle et al. (2013), where researchers tried to ascertain whether theoretical orientation or scholarly focus played a role in the decision to use teletherapy.

The researchers found that issues of confidentiality and therapeutic relationship effects cropped up at a significant frequency in the data. Student respondents appeared to rate the ethical risks of informed consent as higher, and were, on average, more interested in becoming cyber-counseling certified in the future (if that option were available). I was surprised by their finding that the majority of respondents were not currently using technology based therapy and were, in large part, ignorant of video conferencing techniques and held somewhat inaccurate ideas about its effectiveness. This poses significant problems in the implementation of new technology. On one hand, a majority of psychologists were interested in receiving training for, or using, technology in the future; on the other, most psychologists were deeply concerned over the impact it would have on the therapeutic environment while being unaware of the research.

Mishna, Bogo, and Sawyer developed a pilot study at the University of Toronto college of social work designed to investigate the perspectives of MSW (Master in Social Work) interns towards cyber counseling (“e-Therapy” is a term they use in conjunction). Twenty-four student interns and 34 undergraduate students were selected to participate. The authors primarily concentrated on gathering information about the perceived benefits, hazards, and therapeutic dynamics in cybertherapy. Cyber counseling was conducted over a secure server. The authors chose to use purely qualitative methods in conducting the study (which is an uncommon

approach) which was justified by the need to record the subjective perceptions of both the MSW interns and the undergraduate clients.

The qualitative nature of the study should not be seen as a limitation, as qualitative evidence is simply a different type of evidence that suits some categories of information more effectively. Corresponding to the authors' research questions, and to the findings of previous studies, clients found the cyber counseling to be more convenient during certain times of the year. Clients also felt less inhibited in disclosing potentially sensitive issues when it occurred during an online session. The most striking finding was that, while clients felt there was an adequate level of emotional connection, MSW interns reported feeling confused and frustrated by the lack of face-to-face contact, feeling there was additional difficulty in trying to gauge a client's emotions. Mishna et al. pull some ideas from the social work discourse community in an effort to explain this puzzling dichotomy, attributing this difference to the “decreased empathy and sensitivity” (p. 175) found in Ang and Goh's 2010 study. Mishna et al. suspect the underlying cause could be related to the relative inexperience of the interns. Better training, they argue, could reduce the uncertainties felt by therapists in cyber counseling, while simultaneously providing many of the benefits such as increased accessibility, patient comfort, and instant access. The merits of the study should, I feel, be tempered by the authors use of an unrepresentative convenience sample composed mostly of female undergraduates.

Maheu and Gordon's (2000) survey assessed the field of online therapy by both determining the types of therapy provided over the internet and examining the professional characteristics of the providers. An online questionnaire was sent out to a mailing list of 2,175 mental health practitioners. Fifty-six individuals were included in the final sample. Among the

respondents, psychologists made up the bulk of those practicing online. Sixty-three percent reported that their behavioral services were limited to “advice,” while 18% reported using the internet for counseling or therapy. Seventy-eight percent reported providing online therapy to clients located in another state. However, 74% of those respondents held erroneous or false ideas about their relevant state regulations. Many counselors were uncertain as to whether their states had any ordinances on telemedicine. These findings appear to indicate that significant percentage of therapists are not keeping abreast of changing regulations, or are simply confused by the myriad array of state laws (or lack thereof) dealing with multi-state practice and online therapy. The newly-released APA guidelines will likely help to alleviate some of this uncertainty.

### Discussion

After examining all three categories of research, online therapy appears to be clinically efficacious. According to the process studies, working alliance appears to be unaffected by the change in setting. Interestingly, the survey research results are split between therapist and client. The client participants gave overwhelmingly positive assessments of online therapy. The therapist respondents, however, were much more mixed in their assessments. Hertlein et al. Noted that therapists, while being enthusiastic about the promise of online therapy, often held inaccurate views about its clinical effectiveness and were concerned about the possible negative effects on the therapeutic environment. A common theme in the survey literature, clinicians were especially unnerved by the possible loss of valuable non-verbal information, like body-language. Additional research should be conducted to determine the extent of these concerns in the clinical community.

Small sample sizes also appear to be widespread in the research archive. This can have the effect of skewing the results of a survey, because of the unrepresentative nature, or limiting the statistical power of a particular finding. Germain et al. (2010) cautioned against interpreting their data as “proof” of the efficacy of online counseling, largely because their sample—which consisted of 46 participants—was neither representative of the general population nor sufficiently broad. To draw stronger conclusions, larger pools of participants, controlled manipulation, or a longterm study would be necessary. Most of the research into online therapy consists of convenience samples, largely unrepresentative of the general population. The promising findings generated by this research should not be ignored, but expectations should be tempered somewhat by the limited sample sizes.

There appears to be a need for future research into several domains of online therapy. One potential avenue would be investigating the influence that disciplinary orientation has on the use—and adoption—of online therapy in clinical settings. I was unable to locate any examples of such a study while conducting my review. Is there, for example, a difference in the way a psychodynamically-oriented therapist would approach teletherapy compared to a cognitive-behavioral therapist? Are there differences in effectiveness for various therapeutic methods when delivered via the internet? As the adoption rate for online therapy increases, questions will continue to be raised about its applicability to different aspects of psychological practice. It will be up to future researchers to further explore the potential benefits and shortfalls posed by online psychology.

## References

- American Psychological Association (2013). *Guidelines for the practice of telepsychology*.
- Barak, A., Klein, B., and Proudfoot, J. G. (2009). Defining internet-supported therapeutic interventions. *Annals of Behavioral Medicine, 38*(1), 4–17.
- Bouchard, S., Payeur, R., Rivard, V., Allard, M., Paquin, B., Renaud, P., and Goyer, L. (2000). Cognitive behavior therapy for panic disorder with agoraphobia in videoconference: Preliminary results. *CyberPsychology & Behavior, 3*(6), 999–1007.
- Cohen, G. E., & Kerr, B. A. (1999). Computer-mediated counseling: An empirical study of a new mental health treatment. *Computers in human services, 15*(4), 13-26.
- Cook, J. E. and Doyle, C. (2002). Working alliance in online therapy as compared to face-to-face therapy: Preliminary results. *CyberPsychology & Behavior, 5*(2), 95–105.
- Cozby, P. C. and Bates, S. C. (2012). *Methods in Behavioral Research*. New York, NY: McGraw-Hill, 11th edition.
- Germain, V., Marchand, A., Bouchard, S., Guay, S., and Drouin, M.-S. (2010). Assessment of the therapeutic alliance in face-to-face or videoconference treatment for post-traumatic stress disorder. *Cyberpsychology, Behavior, and Social Networking, 13*(1), 29–35.
- Hertlein, K. M., Blumer, M. L. C., and Mihaloliakos, J. H. (2015). Marriage and family counselors' perceived ethical issues related to online therapy. *The Family Journal, 23*(1), 5–12.
- Hunsley, J. and Lee, C. M. (2007). Research-informed benchmarks for psychological treatments: Efficacy studies, effectiveness studies, and beyond. *Professional Psychology: Research and Practice, 38*(1), 21.

- King, S. A., Engi, S., and Poulos, S. T. (1998). Using the internet to assist family therapy. *British Journal of Guidance and Counselling*, 26(1), 43–52.
- Lovejoy, T. I., Demireva, P. D., Grayson, J. L., & McNamara, J. R. (2009). Advancing the practice of online psychotherapy: An application of Rogers' diffusion of innovations theory. *Psychotherapy: Theory, Research, Practice, Training*, 46(1), 112.
- Maheu, M. M., & Gordon, B. L. (2000). Counseling and therapy on the Internet. *Professional Psychology: Research and Practice*, 31(5), 484.
- Mallen, M. J., Vogel, D. L., Rochlen, A. B., and Day, S. X. (2005). Online counseling reviewing the literature from a counseling psychology framework. *The Counseling Psychologist*, 33(6), 819– 871.
- Mishna, F., Bogo, M., and Sawyer, J.-L. (2015). Cyber counseling: Illuminating benefits and challenges. *Clinical Social Work Journal*, 43(2):169–178.
- Murphy, L., Parnass, P., Mitchell, D. L., Hallett, R., Cayley, P., & Seagram, S. (2009). Client satisfaction and outcome comparisons of online and face-to-face counselling methods. *British Journal of Social Work*, bcp041.
- Perle, J. G., Langsam, L. C., and Nierenberg, B. (2011). Controversy clarified: An updated review of clinical psychology and tele-health. *Clinical psychology review*, 31(8), 1247–1258.
- Reynolds, d'Arcy J., J., Stiles, W. B., Bailer, A. J., and Hughes, M. R. (2013). Impact of exchanges and client–therapist alliance in online-text psychotherapy. *Cyberpsychology, Behavior, and Social Networking*, 16(5), 370–377.