

Counselling Psychology and the internet: A review of the quantitative research into online outcomes and alliances within text-based therapy

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Purpose: *This paper examines the empirical research concerning counselling psychologists who utilise the internet in their practice. More specifically, we summarise the quantitative research of online therapeutic outcomes and alliances reported in text-based therapeutic encounters.*

Background: *Online therapy creates much debate within the therapeutic world. Many question the validity of entering into these relatively uncharted waters, while others have begun working productively in this territory. To date, a small pool of research examining the efficacy of such work has emerged and provides the focus for this paper.*

Method: *A review of the literature has been conducted with a two-fold strategy. Initially a review of 16 quantitative outcome studies investigating this area are presented and discussed – these have been selected from Barak, Hen, Boniel-Nissim and Shapira's (2008) comprehensive review of the effectiveness of internet-based psychotherapeutic interventions. Following this, the focus is moved to the concept of the online therapeutic alliance. A systematic review of the existing literature outlines five pertinent quantitative studies and these are discussed in relation to key qualitative work in this area.*

Conclusions: *Conclusions are drawn highlighting that work in this medium shows great promise, with both successful outcomes and strong alliances being reported online. Such findings, although limited due to the dearth of the research available, challenge the views of those sceptical of counselling psychologists entering into virtual arenas.*

Keywords: online therapy, counselling psychology, outcomes, therapeutic alliance.

Technology and Therapy: A brief history

ALTHOUGH online therapy is a relative newcomer to the therapeutic world, using technology is not. Tape-recorded self-help approaches and computer programs which mimic person-centred therapists were experimented with during the 1970s (Lang, Melamed & Hart, 1970; Weizenbaum, 1976). More recently, computerised cognitive behavioural therapy (CCBT) has received considerable attention from researchers (Kaltenthaler, Parry & Beverley, 2004; Marks, Cavanagh & Gega, 2007) and has been included within the National Institute for Clinical Excellence (NICE) guidelines for good practice for both mild to moderate depression and the

treatment of phobias (NICE, 2006). In contrast, less systematic research has focused upon the influence of human-to-human therapeutic interventions mediated through technology. This is the focus of our paper.

Prior to discussing mediated therapy directly, we provide some statistics to contextualise changing health seeking behaviours within industrialised societies such as the UK. First, in 2007, 61 per cent of households within the UK had access to the internet from home (National Statistics, 2007). This is a dramatic increase from previous decades and has an inevitable impact upon online mental health services. Probably the most relevant and striking statistics available are those collected by the Samaritans' e-mail

support service. It received and responded to 36,500 e-mails in the year 2000, this increased to 72,000 during 2002, and more recently in 2006 they received 184,000 (Samaritans, 2004, 2007). This phenomenal increase reflects changing attitudes to the internet as a resource, a concept that is also supported by a recent MORI poll finding (2001) that 60 per cent of internet users would seek help for mental health problems online. However, many individuals still remain wary and appropriately question how prepared the mental health profession is for such developments (e.g. Alleman, 2002).

Counselling Psychology and the internet

Despite concerns regarding the development of online mental health care, therapeutic provision in this medium has become a burgeoning profession. The first recorded individual to pay for online therapy occurred in 1995 (Anthony, 2003). Presently there is no record of the number of online counselling sessions being offered. However, the increase in therapeutic services offered in this medium suggests a public demand for online access to therapists (Grover et al., 2002). This demand is also reflected in the increasing number of text books that include substantial reference to online practices (Fink, 1999; Goss & Anthony, 2003; Riva & Galimberti, 2001; Sanders, 2007; Wootton, Yellowlees & McLaren, 2003) or that have been solely written for counselling practitioners who wish to offer their services over the internet (Bloom & Walz, 2000; Bloom & Walz, 2004; Derrig-Palumbo & Zeine, 2005; Evans, 2009; Hsiung, 2002; Jones & Stokes, 2009; Kraus, Zack & Stricker, 2004).

There are numerous ways of offering online therapy (e.g. e-mail, chat rooms, and videoconferencing) with e-mail the most prevalent (Chester & Glass, 2006; Heinlen, Welfel, Richmond, & Rak, 2003; Stoffle, 2001). Such findings are not surprising given the ease of access and the perceived privacy of online services not typically available face-to-face (e.g. Rochlen, Zack & Speyer, 2004). Provision of online therapeutic services is,

therefore, developing at a reasonable pace and individuals seeking support are not pushing for more sophisticated modes of computer-mediated communication.

Online therapy appears to violate many of the fundamental principles of the therapeutic relationship. In particular, the physical distance between the counsellor and client is a point of great contention. Lago (1996) expresses this contention in the form of the following paradox:

'I have connected deeply with you psychologically and emotionally on my computer, yet still remain isolated from you in every physical sense (no vision, no sound, no touch). It is very personal and not personal at all' (p.288).

Critics challenge online practice because they believe relationships cannot reach sufficient levels of intimacy. For instance, Robson and Robson (1998) state that '[u]sing computer communication runs the risk that the 'space between the two parties' becomes filled with hardware' (p.40) and Pelling and Renard (2000) note that without a high level of skill 'therapeutic interactions may be reduced to mere advice giving when face-to-face interactions are translated to the electronic medium' (p.68). Although these critical voices have subsided slightly in recent years, online therapy is still in its infancy and there has been little systematic focus upon the quality of the online therapeutic alliance.

In applying therapeutic skills online, counsellors need to be mindful of the technical challenges that they can expect to encounter. Briefly summarised from the work of Rochlen, Zack and Speyer (2004) these include the missing non-verbal communication, the increased opportunity for miscommunication, the time delay present when using e-mail, the computer skill deficiency of either the counsellor or client, the inability to intervene when there is a crisis, the cultural clashes that may occur, the question of identity ('Is this really who they say they are?'), and the vulnerability of sending sensitive material over the internet.

A growing literature is emerging that specifically articulates these challenges in online communication. This literature also adds considerable weight to not offering therapy through this medium.

Therapists who work online have attempted to overcome a number of these technical challenges by familiarising themselves with the nuances of computer-mediated communication. A number of book chapters have been devoted to outlining some of the key components of such modes of communication to therapists. Authors explain how counsellors can develop innovative strategies for expressing themselves solely through text despite the absence of face-to-face cues. Written techniques such as emoticons (☺), abbreviations (u=you), acronyms (lol=laughs out loud), and emotional bracketing (see Murphy & Mitchell's [1998] descriptions of therapy-e-mail) are all noted to add depth to the relationships that are created. Stoffle (2002) uses the term 'non-textuals' to describe 'everything other than the words themselves' (p.94) within computer-mediated communication. In such instances, the words and key strokes create a mental representation of the individuals involved and facilitate the creation of relationships of a sufficient depth to produce positive change (e.g. Anthony, 2000a; Suler, 2004). In addition to the development of computer-mediated counselling skills that are utilised within sessions, individuals have also paid attention to the ethical concerns that have been raised (e.g. Anthony & Jamieson, 2005; Bloom, 1998; Childress, 2000; Goss & Anthony, 2004; King & Poulos, 1999; Kraus, 2004; Robson & Robson, 2000; Stoffle, 1997). These works attempt to highlight the numerous pitfalls of working in virtual environments such as producing appropriate counselling contracts, being mindful of the limits of confidentiality, and protecting any electronic files that are stored.

The online environment can provide a number of distinct opportunities that may be used to compensate for the lack of physical

presence. Rochlen, Zack and Speyer (2004) note that it is convenient and increases access for clients, the client may feel safer and thus disinhibited by the online environment, e-mail provides a meditative 'zone of reflection', writing is therapeutic, individuals report feeling close to others they meet online (this has been described by Lombard & Ditton [1997] as 'Telepresence'), and it provides immediate access to internet-based resources. Thus, the theoretical retort to critics of e-therapy has developed substantially in recent years. It has shifted from examining how the nuances of face-to-face therapy can be mimicked solely using text, to considering how technology can actually complement and improve service provision.

Rationale for the review

As outlined above, online therapy is a growing field in which interested professionals have attempted to tackle the challenges posed by the online environment. However, there are still numerous questions of efficacy regarding counselling psychologists entering into virtual environments. Consequently, this work aims to investigate two key facets of such practice. First, 'What evidence suggests that text-based online therapy produces positive outcomes for clients?' Second, 'What evidence suggests that therapeutic alliances of a sufficient quality to create positive change can be created online using text-based media?'

Review strategy

This paper reviews the literature related to the work of counselling psychologists who utilise e-mail or online chat to mediate their practice. It specifically examines the quantitative research that has been conducted exploring therapeutic outcomes and the therapeutic alliance using online text-based modes of communication. The review strategy is a two-stage process:

Stage 1: Initially this paper reflects upon Barak et al.'s (2008) comprehensive review of internet based psychotherapeutic interventions. This review provides a systematic

overview up until March, 2006, of outcome studies related to various online interventions. For the purposes of this paper, only human-to-human computer-mediated contact studies are extracted from the review and discussed. The effect size of the intervention calculated for each mode of communication is reported and Cohen's (1969) rule of thumb is used to interpret the data: 0.2 is a small effect, 0.5 a medium effect ('visible to the naked eye' [p.23]), and 0.8 a large effect size ('grossly perceptible' [p.23]).

Stage 2: The second stage of the review involves reporting on part of an ongoing systematic review examining online therapeutic alliance (Reynolds & Hanley, in preparation). The analysis of the literature cited within several major electronic databases (PsycINFO, Medline, Scopus, and Google.Scholar) up until March, 2008, has been conducted. Although the work reported focuses solely on text-based communication, interested readers can also investigate the videoconference therapeutic work (e.g. Wade et al., 2005), the impact of using online technologies as an adjunct to face-to-face work (e.g. Murdoch & Connor-Greene, 2000), and as an adjunct to self-help materials (Klein, Richards & Austin, 2006). The major quantitative studies presented reflecting work conducted primarily with an adult population and reported in the English language. For work with younger populations, see Hanley (in press) and King et al. (2006).

Findings

Examining outcomes

The Barak et al. (2008) study evaluates the effectiveness of internet-based psychotherapeutic interventions and provides a comprehensive summary of 92 studies involving 9764 clients. The review generally concludes that online work is moderately effective, with an overall mean weighted effect size of 0.53. Barak and his colleagues remind the reader that this effect size is 'quite similar to the average effect size of traditional, face-to-face therapy' (p.109). This finding is compelling evidence for those interested in the efficacy of online practice as it reflects a growing body of evidence indicating that online therapy can be of use to some clients.

When limiting the work examined to only the effectiveness of one-on-one therapy, only 27 of the studies in question represent work conducted synchronously or asynchronously with a therapist. See Table 1 for a breakdown of the modalities utilised and the respective effect sizes.

Upon further reflection, it is also evident that some of the interventions that reflect more sensory rich environments (notably audio and webcam) and those interventions through forums do not reflect one-to-one therapy. Excluding these findings leaves a total of 16 relevant studies for this review and cumulatively involve 614 clients. More specifically, they reflect effect sizes for text-based interventions using e-mail (Effect size=0.51) and chat (Effect size=0.53). According to

Table 1: Effect size of online counselling by communication modality (27 studies).

Communication Modality	Effect Size	Number of studies	Number of clients involved
Audio	0.91	1	54
Chat	0.53	9	231
Webcam	0.31	2	208
E-mail	0.51	7	383
Forum	0.34	8	523

(Summary from Barak et al., 2008)

Cohen (1969), such findings are indicative of moderate effect sizes.

A further consideration with Barak et al.'s (2008) meta-analysis is that it reflects more technical approaches to therapy (e.g. cognitive behavioural therapy), rather than those that place more emphasis upon the curative nature of the relationship (e.g. person-centred therapy). The whole study categorises the work that has been collated into three main psychotherapeutic approaches: cognitive behavioural therapy, psycho-educational interventions, and behavioural interventions. Only two studies within the analysis reflected different approaches to therapy. They both reflect therapy conducted through chat and used an unspecified therapeutic approach (Cohen & Kerr, 1998; Effect size=0.86) and a client-centred form of motivational interviewing (Woodruff, Edwards, Conway, & Elliott, 2001; Effect Size=0.56). In summary, this highlights the bias within the present research towards more technical approaches to therapy as opposed to those that are more relational in nature.

Examining the alliance

Similar to online outcomes, the online therapeutic alliance has received limited attention to date. From the on-going review of alliance, five studies have been selected from the electronic database searches. Table 2 outlines the participants involved in the studies (both those receiving online therapy and those in comparison groups), the type of text-based intervention employed, alliance measure used, and a brief summary of the main conclusions.

The five studies had a total of 161 clients who took part in online therapy treatment conditions. Of the five studies all but one compared their data to face-to-face comparison groups (Prado & Meyer, 2006, compared findings to those of individuals who dropped out of therapy at earlier stages). In addition, three studies only utilised asynchronous communication and two utilised a combination of asynchronous and synchronous communication.

Each of the studies outlined in Table 2 supports the notion that good therapeutic alliances can be developed online. Scores within the studies generally indicated that clients perceived the alliance between them and the counsellor to be moderate or strong in nature. It is also noteworthy that within three out of the four studies that made comparisons to face-to-face equivalents, the online alliance proved higher than the comparison group. Such findings provide persuasive evidence supporting online therapy and challenge theoretical assumptions that relationships of sufficient quality to create therapeutic change cannot be developed online.

Discussion

Previously, two questions were raised: 'What evidence suggests that text-based online therapy produces positive outcomes for clients?' and 'What evidence suggests that therapeutic alliances of a sufficient quality to create positive change can be created online using text-based media?' This section will discuss these questions in relation to the findings presented above. It will then move on to briefly consider the limitations of this work and future directions for research in this area.

Within industrialised cultures, the internet is increasingly being used to seek out health care information and services. Broadly speaking, the findings from this review of the quantitative literature support the notion that individuals who seek out online mental health services can receive effective support. Specifically, 16 studies have reported positive outcomes from such encounters. These studies noted effect sizes for e-mail therapy to be 0.51 and therapy mediated through chat rooms to be 0.53. These findings are comparable to face-to-face outcomes studies (e.g. Lambert & Ogles, 2004), however, the limited number of studies in question limit the comparability. Although there is growing evidence that online therapy proves effective for some individuals, there is still much evaluative work to be undertaken.

Table 2: Table outlining the studies which examine the therapeutic alliance in text-based therapy.

Authors (date)	N= Online group	N= Comparison group	Asynchronous/ Synchronous	Alliance measure	Conclusion
Cook & Doyle (2002)	N=15	f2f archive N=25	Asynchronous & Synchronous	Working Alliance Inventory (WAI)	- Moderate TA scores - higher than f2f
Knaevelsrud & Maercker (2006)	N=48	Previous f2f study with similar client group N=270	Asynchronous	Working Alliance Inventory - short form (WAI-S)	- High TA scores - higher than f2f - no distinction of scores for those with different severity of need
Leiber, Archer, Munson & York (2006)	N=52	f2f archive N=46	Asynchronous & Synchronous	WAI-S	- Moderate TA scores - weaker than f2f
Prado & Meyer (2006)	N=29	Drop out N=19	Asynchronous	WAI	- Moderate to Strong TA scores - Drop out TA scores significantly lower than completion
Reynolds, Stiles & Grohol (2006)	N=17	3 Previous f2f studies using the same measure	Asynchronous	Agnew Relationship Measure - short form (ARM-S)	- Similar TA ratings as f2f

Key: f2f = face-to-face; TA = therapeutic alliance.

The five studies that investigated the online therapeutic alliance in adult therapy add to our understanding of this phenomenon. They offer clear and compelling insight into the quality of online therapeutic relationships. In particular, each study reported alliance scores to be of moderate to high strength. Thus, it could be suggested that a high percentage of the 161 total participants felt the quality of the relationship to be of a sufficient quality to create therapeutic change. Similar to the positive outcomes reported by those who have accessed online therapy, this finding challenges those who question the efficacy of this way of working. More specifically, it calls into

question the view that good quality relationships cannot be fostered in text based relationships (e.g. Pelling & Reynard, 2000). Further, it argues against the notion that mental health professionals are unprepared for technological advances (Alleman, 2002).

The qualitative literature on the online therapeutic alliance supports the possibility of creating good quality relationships online. For instance, two UK-based studies have consulted small numbers of counsellors about the quality of the relationships that they develop with clients in their online practice (Anthony; 2000a; Hanley, 2004b; see also Anthony, 2000b). These studies suggest participants' believe that good

quality relationships can be developed online. There are fewer studies which reflect the views of clients, although these are not completely absent. In most of these reports, the focus is on practical concerns such as utilising the medium for therapy rather than the nature of the relationship itself (e.g. Haberstroh et al., 2007; Young, 2005). More sustained reports are emerging including researchers consulting with adolescents' about their views of forming relationships with therapists online (Hanley, in press) and, on rare occasions, client reports of their experiences (e.g. Ainsworth, 2002). When reflecting upon the experience of receiving her first e-mail response from a therapist, Ainsworth captures the potential of online therapeutic relationships:

'It was a *connection*. Physically, we were separated by five states; but psychologically we were more connected than if we had been in the same room' (Ainsworth, 2002, p.198).

Finally, we return to the view that mental health professionals are not prepared for working in such environments (Alleman, 2002). As is evident above, the studies presented here suggest that the therapists in question are adequately prepared for such work. One possible explanation for therapists' preparation is the growth of the online therapy literature. Theoretical developments have evolved at a similar pace to the practice of online therapy. As noted earlier, numerous text books have been written and specific bodies of literature have emerged supporting practitioners in developing their skills base. Therefore, it may be this heightened interest in the nuances of computer-mediated communication that has led to appropriately skilled therapists working in these studies.

Limitations and future directions

A major limitation to this review is the dearth of studies which it brings together. The study of outcomes and alliances within online therapy is an area still very much in its infancy and one that will undoubtedly be

strengthened as time goes on. It is tempting to contrast this body of work to the large meta analyses of face-to-face equivalents (e.g. Lambert & Ogles, 2004, when contemplating outcome studies, and Horvath & Bedi, 2002, when contemplating alliance studies). Within these bodies of work there is a richness that is impossible to duplicate from the limited work examined here. For instance, it is not yet possible to examine specific nuances such as the use of different measures, variety of people completing the questionnaires, and variable times of questionnaire implementation. Such a problem goes to the core of this paper. Although trends that can be generalised from one group to another may not be identifiable, it is possible to say for certain that some individuals have benefited from online therapeutic support. Thus, the cumulative body of work strengthens the arguments in favour of online therapy. It does not claim to offer a cheap alternative for those who want face-to-face therapy, but it does suggest that online work can play an important part in supporting the psychological well-being of those seeking out such support.

There is much need for continued research into the exploration of online therapeutic outcomes and alliances. For example, an important issue is the influence of online as opposed to face-to-face data collection of online therapy data (e.g. Reynolds & Stiles, 2007). The research that is presented here just scratches the surface but acts as a useful starting point for those entering into this area. As is mentioned above, studies which help to add to the richness of our understanding of online therapeutic work will provide more fodder for quantitative analysis. In addition, explanatory qualitative studies and theoretical developments have played an important part in the evolution of this work. With this in mind, it is difficult to identify specific research priorities. However, the continuation of such work feels essential for this growing area of the counselling psychology profession.

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