

**School of Psychology and Speech Pathology
Division of Health Sciences**

**An Evaluation of Therapeutic Alliance and Outcome
in an Internet Chat Therapy Service**

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Doctor of Philosophy
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Thesis Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date:

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Abstract

Although the Internet has increasingly been the focus of research over the past decade, there have been relatively few studies about how the full variety of Internet communication tools can be used for the purpose of delivering psychological services. Much of the recent emphasis has been on web-based self-guided psychological interventions, where interactions with a psychologist are minimal (Amstadter, Broman-Fulks, Zinzow, Ruggiero, & Cercone, 2009; Spek, Cuijpers, Nyklicek, Riper, Keyzer, & Pop, 2007). A limited number of studies have investigated the processes and outcomes of psychological interventions applied over Internet chat communication (Cook & Doyle, 2002; King, Bambling, Reid, & Thomas, 2006a; Mallen, Day, & Green, 2003; Rassau & Arco, 2003); however, there has been a general tendency to avoid comparing these forms of intervention with face-to-face therapy (Anthony, 2000a). This has had the unfortunate consequence of placing the existing research beyond the reach of evidence-based practice, where various forms of intervention are compared and contrasted. The main goal of this research is to make a direct comparison of psychological processes and therapeutic outcomes when the same group of therapists deliver psychological interventions to clients over both Internet chat and face-to-face therapy.

A mixed quantitative and qualitative approach was utilised to integrate findings from outcome measures with the subjective report of clients and therapists who undertook Internet chat therapy. A team of 20 therapists provided psychological services to clients who self-selected either face-to-face or Internet chat therapy. Both therapists and clients completed measures for symptom severity and the therapeutic alliance at the first and third session. Therapeutic alliance was measured using the client, therapist and observer rated versions of

the CALPAS, while symptom severity was measured using the BSI and SCL-90 Analogue. The final sample consisted of 17 matched pairs of Internet and face-to-face therapy cases, with 3 additional cases where the therapist was only able to obtain an Internet case for the data. The hypotheses of this study predicted that symptom severity would decrease and that the therapeutic alliance would increase over 3 sessions in both treatment modalities. It was also hypothesised that face-to-face therapy would outperform Internet chat therapy on each measure.

Results of ANOVA analyses supported all hypotheses related to improvement over the first 3 sessions of treatment, with the exception of therapist-rated symptom severity. There was a strong main effect for client-rated alliance, increasing significantly at the same rate in both treatment groups: $F(1,35) = 23.021, p < .001$, partial $\eta^2 = .397$, *Cohen's d* = 1.15. There was also a strong main effect for client-rated symptom severity across both groups over the first 3 sessions of treatment: $F(1,35) = 15.191, p < .001$, partial $\eta^2 = .303$, *Cohen's d* = .92. Results for ANOVA analyses comparing treatment modalities did not identify statistically significant differences, with the exception of significantly higher alliances rated by clients receiving Internet chat therapy: $F(1,35) = 6.972, p = .012$, partial $\eta^2 = .166$, *Cohen's d* = .76. In addition to statistically significant change, an analysis for clinically significant change was also undertaken (Jacobson & Traux, 1991). Results of this analysis showed that there were only minor differences between groups at both the first and third session. In the Internet chat therapy group 10% of cases were 'improved' and 5% were classed as 'recovered'. In the face-to-face therapy group, 11.8% were categorised as 'improved' and 5.9% classed as being 'recovered. In summary, there were relatively few measurable differences between these modes of service delivery.

Qualitative data generated from interviews at the conclusion of Internet chat therapy showed the importance of therapeutic distance for people who select this form of treatment. Clients described how the distant way of communicating to a psychologist over Internet chat led to a more personal experience for them. Therapists described the challenge of understanding the emotions of their client when relying on the written word alone. Clients and therapists also described the formation of mental images of the other party and the role this had in terms of constructing a sense of interaction with the other person. The formation of mental images had an influence on the quality of the working alliance that developed, with both clients and therapists being generally satisfied with the therapeutic relationship overall.

Despite the widespread public use of Internet chat, this popular form of communication has received very little attention from researchers. The results of this study are promising in that they demonstrate that positive clinical outcomes are associated with client interactions with psychologists offering services over this modality. With meta-analytic reviews showing that larger treatment effects are associated with web-based interventions where there is greater therapist involvement (Barak, Hen, Boniel-Nissim, & Shapira, 2008; Spek et al., 2007), the present study raises questions about whether Internet chat could be utilised more broadly as a mode of service delivery. This study provides a detailed first glimpse at how real-time written communication over the Internet could be used for psychotherapeutic purposes.

Chapter One

Literature Review

Introduction

Over the past few decades an increasing range of psychological interventions have been used by practitioners, heightening existing concerns about the effectiveness of the various forms of psychotherapy. While some researchers have directed interest towards generating a list of empirically supported therapies (Chambless & Ollendick, 2001), others researchers have emphasised the therapeutic factors found in successful psychotherapy relationships occurring across all therapeutic orientations (Norcross, 2002). New technologies have also changed the way some psychologists deliver services to their clients. The popularity of the Internet and the emergence of online counselling has raised questions about whether psychological interventions can be employed effectively over modalities that harness telecommunications and how a therapeutic relationship might be maintained without a physical presence (Hancock & Dunham, 2001; Robson & Robson, 1998). That is, with increased demand for psychological services on-line, the communication medium used to engage with clients is an emerging contextual variable of interest that could potentially alter the way that psychotherapy is delivered. Preliminary research shows some merit to the effectiveness of online counselling; however, it remains unclear how some of the problems inherent to this mode of service delivery can be suitably addressed. At present, our limited knowledge about the distinctive features of working relationships formed online makes it very difficult to know how practitioners should manage therapeutic ruptures or whether traditional practices can be employed effectively. This study is a first step towards clarifying the nature

of the therapeutic alliance on-line and how the emerging therapy relationship corresponds with clinical outcomes.

The present review will begin with an exploration of the evidence-based practice movement in psychology, discussing the place of factors such as the therapeutic alliance and other contextual variables of interest, including the mode of communication where therapeutic processes occur. This review will describe the main Internet-supported psychological approaches used today, providing an overview of the current state of research, and focusing on findings that come to bear on the question of whether ‘Internet chat’ could be a suitable form of communication for therapists to provide psychological services. The review will conclude by identifying the existing gaps in the literature, in order to inform the direction taken in the current research.

Evidence-Based Practice in Psychotherapy

Psychologists have faced many challenges over the past century in providing scientific evidence to support psychological theories. Psychotherapists have arguably faced the most significant of these challenges, with the range of complex and inter-related variables involved in psychotherapy process. The most widely recognised historical example of this challenge was Eysenck’s (1952) conclusion that the success rate for psychotherapy was no higher than the likelihood of spontaneous remission. A number of meta-analytic reviews have provided compelling evidence to counter that claim, in the form of support for the general effectiveness of psychological treatments (Smith & Glass, 1977; Wampold, 2001). More recently however, psychotherapy research has shifted focus to examine specific treatment effects (Wampold, Lichtenberg, & Waehler, 2002). The growing number of technological applications available for psychological intervention has heightened concerns about the conditions under which therapy might be considered efficacious.

As managed health care organisations attempted to curb rising health costs during the 1990s, economic pressure was put on psychologists to provide empirical justification for psychological treatments. This pressure originally arose in the medical field where it was found that different medical procedures were being delivered for the same medical diagnosis (Levant, 2004). Doubts began to emerge about the role of clinical decision making across the health sector. With the aim of minimising variation in treatment, health care planning was introduced with specific rules that standardised treatment. This meant that psychotherapists needed evidence to demonstrate that specific psychotherapy approaches could be used to treat psychological disorders, enabling them to select the most empirically valid therapy of choice for each client according to their psychological diagnosis (Chambless & Hollon, 1998). The primary reason for this change in emphasis has been the pressure put on individual practitioners to demonstrate that their preferred technique works (King & Ollendick, 1998).

Effectiveness, Efficacy and Efficiency

There are three main ways that researchers typically assess psychotherapy (Andrews, 1999). ‘Efficacy’ research refers to the use of highly controlled conditions where control groups and carefully screened client populations are used to test whether a particular type of psychological intervention works. ‘Effectiveness’ research refers to the use of real-world practice settings and naturalistic observation of therapy processes to determine whether a particular type of psychological intervention will actually work in practice, not just in highly controlled conditions. ‘Efficiency’ research refers to the assessment of the economic costs required to arrive at positive health outcomes as a result of psychological interventions used in practice.

In addition to screening client groups, efficacy research has also been characterised by careful selection of therapists, adherence to a treatment manual, and ongoing supervision

throughout the controlled trial. Much emphasis has been placed on eliminating any possible sources of extraneous variability that might influence psychological outcomes, besides the chosen psychological intervention (Westen, Novotny & Thompson-Brenner, 2004). The underlying basis for this decision to attempt to control all other sources of variance is the assumption that each type of psychotherapy approach has specific ingredients that are thought to be responsible for alleviating psychological symptoms (Wampold, 2001). In this sense, controlling every other source of variance besides the psychological intervention is intended to allow researchers to discover which psychotherapy approaches are most effective for the treatment of specific psychological disorders.

Randomised clinical trials have been criticised for controlling variables to the extent that the psychotherapy situation being tested does not reflect the complexity of real world cases that psychologists engage with in practice (Kazdin, 2008). Whilst it is important to demonstrate that a particular technique is efficacious in a controlled setting, it is just as vital to show that psychologists can apply the chosen technique effectively under typical therapy conditions (Fonagy, 2010; Shafran, Clark, Fairburn, Arntz, Barlow, Ehlers, Freeston, Garety, Hollon, Ost, Salkovskis, Williams, & Wilson, 2009). Effectiveness research is aimed at exploring the application of psychological interventions in settings that genuinely reflect the complexity of day-to-day encounters between client and therapist. Understandably, this is a very difficult thing to achieve, given that participants need to be aware of their involvement in research and therefore will self-select for inclusion or exclusion in any given study. In a sense then, the resulting sample used for effectiveness research still remains slightly different from everyday client populations. Broadly speaking however, effectiveness research takes reasonable steps to integrate much more complex everyday situations into consideration. This makes it far easier to generalise that a particular technique works beyond highly controlled research settings.

In a competitive health market, the effectiveness of a psychotherapy technique for alleviating specific types of psychological distress must be balanced with evidence that the technique is a cost-efficient way to manage the issue. The efficiency question in psychotherapy research generally implies a ‘dose-response’ model, linking a fixed-cost quantity of psychotherapy delivered with the amount of improvement in psychological health outcomes. Relatively few studies have assessed the cost-efficiency of psychotherapy approaches due to the necessity to demonstrate initially that psychological interventions work. In addition, in order to assess the true cost-benefit ratio of psychotherapy, one must know all the relevant variables that add value to the intervention. That is, simply measuring how much the psychotherapy costs, does not provide information about the additional savings a client makes through increased vocational efficiency and reduced strain on other health services. For this reason, psychotherapy research that assesses efficiency tends to explore costs and benefits that pertain specifically to the type of disorder being targeted. In the past decade, a growing number of psychotherapy researchers have shifted focus to the efficiency question as a result of wider recognition that psychotherapy works.

Empirical Validation of Psychological Interventions

The different sub-disciplines of psychology have engaged with the issue of evidence-based practice in a manner that reflects the core values of their area of specialisation. This has resulted in distinct strategies emerging from each domain, which has sometimes resulted in heated feuds across the literature about the best way to inform psychological practice with research. The main strategies that have typically been used are briefly discussed below.

Clinical Psychology Perspectives

As managed health care became more prominent during the 1990s, Clinical Psychologists sought to summarise and disseminate information about the most effective psychological interventions to consumers and third party payers (e.g., insurance companies, government bodies, etc). In the United States, a taskforce was formed by the APA Division of Clinical Psychology (Division 12) with the aim of systematically reviewing and publicising psychological interventions that have robust empirical support (Chambless & Ollendick, 2001). The ultimate goal of this process was to inform the wider health care community about those psychological approaches that are known to be efficacious from rigorous scientific research.

Following suit from pharmaceutical research in biological psychiatry, this taskforce used Food and Drug Administration (FDA) guidelines to approve psychotherapies (Wampold et al., 2002). Under these guidelines, approved psychotherapies had to be conducted using a treatment manual for a clearly specified presenting problem and found to be either superior to no treatment (or placebo), or equal to a previously established treatment in at least two randomised control trials (Chambless & Hollon, 1998). The last update to the Division 12 Taskforce on empirically supported treatments (ESTs) listed 16 therapies that met the criteria for being “well established”, and 56 therapies that were deemed to be “probably efficacious”. A recent review using the same criteria has been undertaken, inclusive of a broader range of therapies specific to the treatment of mood disorders (Hollon & Panniah, 2010).

After the first publication of the list of ESTs, concerns arose about creating a list of ‘valid’ psychotherapies. Implicit to the claim that psychological therapies can be matched to disorders is the notion that psychological disorders are akin to diseases (Garfield, 1998) and therein, that psychological therapies are equivalent to biomedical treatments (Charman,

2003). This approach has been challenged for a broad range of reasons discussed below (Andrews, 2000; King, 1998).

The creation of a list of ESTs will presumably provide information highly demanded by third parties such as insurance companies, however, there are a number of problems with matching therapies directly to disorders. First, the common factors of various types of psychotherapy are minimised by discretely differentiating each approach (Hubble, Duncan, & Miller, 1999). The increasing number of therapists employing an eclectic approach and the sheer number of therapies available complicates this problem (Spinelli, 1999). Second, the personal qualities of both client and therapist contributing to positive therapeutic interaction are not typically accounted for by researchers (Garfield, 1998). Several reviews of the literature have highlighted the importance of individual client needs and therapist factors towards successful treatment outcomes (Ackerman & Hilsenroth, 2003; Luborsky & Crits-Christoph, 1998). Third, the quality of the relationship between client and therapist is undermined when one selects a therapeutic intervention purely on the basis of the presenting disorder (Norcross, 2002). Psychotherapy occurs within a context of the relationship between client and therapist (Andrews, 2000; Safran & Muran, 2000). Decades of psychotherapy process research supports the contention that the quality and strength of the client-therapist relationship is the most significant factor contributing to positive therapeutic outcome (Lambert & Barley, 2002).

At the same time, criticism that has been levelled at the evidence-based practice movement in psychology does not hold in all cases. For instance, widely stated claims to the effect that lists of empirically validated therapies are comprised of controlled studies that do not include complex cases, are not borne out by the evidence. Shafran et al. (2009) point out that more recent controlled studies do include complex, severe and co-morbid conditions; and that most of the cases seen in routine clinical settings are actually less complicated than those

in controlled studies. They also raise the problem of access to evidence based approaches, in that consumers of psychological services tend not to receive the recommended treatments. Identifying the evidence-based approaches in psychology helps to address this problem.

Counselling Psychology Perspectives

Scepticism about the limitations of the list of ESTs compiled by APA Division 12, led the Division of Counselling Psychologists (Division 17) to form their own special task group on the matter (Wampold et al., 2002). In particular, Counselling Psychologists were concerned about restriction of client choice and lack of consideration for the importance of clinical judgement. With this in mind, Division 17 established a more contextually specific set of principles that addressed a broader range of factors.

The principles of the task group proposed that much more focus should be placed on meta-analytic reviews to examine the broad trend of research findings. In general terms, the principles reflect the orientation of counselling psychologists to factors beyond clinical diagnosis and express caution that claims made about the specific effects of psychotherapy require compelling evidence. Most of all, the principles emphasise flexible service delivery such that the place of client choice and clinical judgement are considered. The chair of the Clinical Psychology taskforce for five years expressed support for these Counselling Psychology principles (Chambless, 2002), commenting that this added specificity would complement the Clinical list of ESTs.

Empirically Supported Relationship Principles

In contrast to the aforementioned positions, the Division of Psychotherapy in the APA (Division 29) emphasised ‘empirically supported therapy relationships’ (ESTR: Norcross, 2002). Their taskforce focused on the identification of the effective components of relational

processes in psychotherapy. The aim was to develop methods for customising therapy to the specific needs of individuals on the basis of their non-diagnostic characteristics. As in the case of the Division 17 guidelines, the ESTR guidelines provide a broad set of inclusion criteria. For example, in addition to randomised clinical trials, research that was considered for these guidelines included naturalistic, process-outcome, and correlation studies, including consideration for therapist characteristics, client characteristics, and a variety of treatment types and lengths. The outcome of this taskforce was the publication of a book targeting policy makers, journal publications targeting academics and several seminars in the US targeting practitioners (Norcross, 2002).

The major implication of this taskforce was the finding that measures of the client-therapist relationship are more strongly correlated with client outcomes than specific psychotherapy techniques (Lambert & Barley, 2002). The authors of the ESTR guidelines highlight that this takes nothing away from the argument that certain therapy approaches can be considered more appropriate for addressing particular client problems. It is important to note, however, that staunch critics of the evidence-based therapy movement have often drawn on these findings to reinforce their claim that the choice of psychotherapy for a particular disorder is irrelevant.

In 1936, Saul Rosenzweig noted the common ground between different psychotherapy approaches, drawing on a quote from Lewis Carroll's classic children's story 'Alice's Adventures in Wonderland' (1977) – 'At last the dodo bird said, "Everybody has won, and all must have prizes"' (p. 28). In psychotherapy research, the term 'Dodo bird verdict' refers to the claim that in the race to prove which form of psychotherapy is best, all forms of psychotherapy seem relatively equivalent in terms of outcome (Luborsky, Rosenthal, Diguier, Andrusyna, Berman, Levitt, Seligman, & Krause, 2002). Contemporary reviewers of psychotherapy research tend to reinforce this claim, arguing that the common factors of

different psychological approaches provide the best explanation for the finding of equivalent client outcomes (Barlow, 2002). Put simply, 'common factors' refers to the common ground between different therapeutic approaches. Amongst other variables, common factors include such factors as the client-therapist alliance, the therapist's level of skill and their allegiance to the form of therapy being used. Related factors also come in to play here such as the placebo effect and the meanings ascribed to therapeutic events by the client (Wampold, 2001).

Empirical Evidence for the Common Factors

Over the past 60 years, fierce debates have surrounded the issue of how much the common factors contribute to positive therapy outcomes. In an extensive review of outcome studies spanning this period, Lambert and Barley (2002) estimate that 30% of clinical improvements can be attributed to common factors, in comparison to only 15% being attributed to specific techniques. Claims about the importance of the common factors have their strongest empirical basis in meta-analytic studies.

The earliest and most notable example of this is the meta-analysis by Smith and Glass (1977), which found that the average treated person is better off than 80% of those who are not treated. Since then, many meta-analytic reviews have taken place, examining both general and targeted treatment effects (Lambert & Ogles, 2004). In an effort to assess these meta-analytic reviews, Lipsey and Wilson (1993) conducted a meta-analysis of 302 meta-analytic reviews of psychological, educational and behavioural interventions. Their initial meta-analysis with broad inclusion criteria was so overwhelmingly positive that Lipsey and Wilson doubted the validity of their findings. A second meta-analysis with more stringent inclusion criteria was undertaken, resulting in a moderate treatment effect size of .47, indicating broad positive results for psychological, educational and behavioural interventions.

Wampold (2001), one of the major contemporary researchers of the common factors, has challenged the claim that different psychological interventions have treatment specific effects with his proposed model about how psychotherapy works. He contends that the popular view of each psychological approach having specific ingredients that target problem areas is founded on the medical model and is inappropriate for psychology. Instead, Wampold argues for a contextual model, where psychologists consider the therapeutic relationship, the client's treatment preferences, and the preferred style of the therapist, as being active ingredients in the process of change. These conclusions were drawn from a number of studies where different components of change were considered beyond the type of treatment provided (Messer & Wampold, 2002).

Sexton and Whiston (1994) made a similar argument in their review of empirical studies about the client-therapist relationship. They proposed a social constructivist view of psychotherapy, bringing the co-constructed counselling relationship to the forefront of consideration about factors that contribute to efficacy. Sexton and Whiston's review of studies showed the importance of facilitative conditions and the working alliance to psychotherapy outcome, in accordance with the findings of many other reviewers (Klein, Kolden, Michels, & Chisholm-Stockard, 2002; Horvath & Symonds, 1991). Such reviews demonstrate that contextual factors beyond the choice of treatment and type of disorder are of utmost importance to clinical outcome; with the quality and strength of the therapeutic relationship being essential to consider (Horvath, 2001; Hubble, Duncan, & Miller, 1999).

History of 'The Alliance'

Sigmund Freud

Putting focus on the psychotherapy relationship dates as far back as Sigmund Freud's early theoretical work (Safran & Muran, 2000). Although Freud was primarily concerned

with the manner in which transference processes operate during analysis, there are three related areas of commentary that stand out regarding his view of the analytic relationship. Firstly, Freud encouraged making a collaborator out of the patient during analysis, such that analyst and analysand were working together in the tasks of analysis (Richards, 1974). Second, Freud expressed that there are aspects to the analytic relationship that should remain unanalysed, as this may be a powerful source of motivation for the patient to endure the ongoing challenges of analysis. This aspect of the therapeutic relationship was referred to as the ‘unobjectional positive transference’. Lastly, Freud gave recognition to the utility of allowing a friendly bond to develop with the patient in the form of an ‘analytic pact’ (Kanzer, 1981). There are also a number of implicit factors to Freud’s notion of the analytic relationship. The principle of maintaining clinical distance, for instance, is an intentional compromise between absolute aloofness and therapeutic zeal. Freud conceptualised the ideal therapeutic relationship as requiring a balance between emotional distance and closeness, allowing the analyst to intimately comprehend the transference of the patient without being overwhelmed by it.

Sandor Ferenczi

Ferenczi expanded on Freud’s conceptualisation of transference by suggesting that a patient’s historical problems must be relived in the context of the client-therapist relationship (Safran & Muran, 2000). It was thought that by reliving the client’s problematic pattern of relating to others, in the context of the client-therapist relationship, new opportunities to change the nature of this pattern were made possible. In this sense, the role of the therapist is to provide therapeutic conditions that are conducive to the emergence and successful resolution of problematic patterns in relating to others. Further to this, Ferenczi also emphasised the importance of the therapist’s personal experiences and character, insofar as

these factors being the foundation through which a patient is able to successfully work through their own obstacles.

Richard F. Sterba

Sterba further refined some of the distinctions that Freud had made previously about the positive transference that drives a client to seek out and maintain a therapy relationship (Meissner, 1996). Prior to Sterba's comments, Freud's view of the 'unobjectionable positive transference' held that primitive drives motivated the client to work collaboratively with the analyst. In contrast, Sterba proposed that much more developmentally mature aspects of the ego were responsible for the establishment of an analytic pact. Sterba characterised this alliance-forming ego in terms of being observant of reality, reasonable, and relatively autonomous from impulsive drives. He argued that in order to do this, the ego needed to split into two components – an experiencing component and an observing component. In this way, the observing component of the ego could join with the analyst to reflect on therapeutic work.

Some critics of Sterba's theory have argued against the idea that there is an aspect of the ego that can observe reality objectively (Friedman & Samberg, 1994). One of the criticisms here is that this places the analyst in an authoritative position with regards to distinguishing between fantasy and reality. Others disagree with this interpretation of Sterba, seeing his proposal of a reality-based observing ego as being about the efforts of a person to face the world beyond themselves, rather than addressing only inner experiences from moment to moment.

While Sterba's contribution to the concept of the therapeutic alliance clearly makes a distinction between rationality and irrationality (Safran & Muran, 2000), subsequent theorists have further developed his distinction to include irrational sources of motivation that drive a person to engage in psychotherapy. Stone for instance, held that the alliance is driven by

several forces, namely, a mature need for guidance, tender feelings directed towards identification with the analyst, a need for support coupled with a sense of confidence in the analyst, and a primitive wish to be nurtured (cited in Meissner, 1996). Such distinctions between primitive and mature transference paved the way for future theorists to consider developmental factors in the alliance.

Elizabeth Zetzel

Zetzel is credited with coining the term 'alliance', contending that each stage of psychotherapy mirrors developmental stages (cited in Marmar, Horowitz, Weiss, & Marziali, 1986). At the time of Zetzel's writings, the term 'transference' had come to be associated with the therapy relationship as a whole, including the mature and rational relations between client and therapist along with more primitive and irrational aspects of transference. According to Zetzel, in order for therapeutic processes to take place, a client must have the capacity to tolerate anxiety and be able accept the real limitations imposed by his or her present situation (Meissner, 1996). These capacities were considered to be made possible by positive infant-caregiver transactions in early childhood that afford a person with the capacity to engage in reality testing and allow them to endure the challenges of working with complex emotional material in session.

Psychoanalytic theorists criticised Zetzel's use of the mother-child relationship as a model for the therapeutic relationship a problematic comparison (Meissner, 1996). Some critics feared the implications of the idea that care and concern could be curative in their own right. From the standpoint of psychoanalysis, this presented a potential risk where resistance and transference might remain hidden behind collusion with the client.

Ralph Greenson

Greenson further demarcated the conceptual distinctions being made about the alliance, by referring to a transference template and real relationship, which subsequently laid the foundation for operationalisation of the alliance construct (Safran & Muran, 2000).

Greenson's description of the alliance was similar to Zetzel's; however Greenson placed much more emphasis on the rational aspects of agreement between client and therapist (Meissner, 1996). Although Greenson did mention the role of primal motivations (such as an affectionate bond between client and therapist) these aspects were underplayed by his focus on the actual interpersonal transactions that happened in session. Greenson recommended that an analyst should take steps to assess which of the client's reactions are inconsistent or out of place, and actively point out client misconceptions (Marmar et al., 1986). He focused primarily on how problems in the working relationship manifest in the form of resistance during psychotherapy.

Greenson's formulation of the 'working alliance' was criticised by some traditional psychoanalysts for overemphasising rational aspects of the alliance, at the expense of addressing unconscious factors that contribute to resistance (Meissner, 1996). One of the implications of his conceptualisation of the alliance is that it encouraged therapists to reflect with clients about interpersonal patterns being re-enacted in the therapeutic relationship, rather than exploring underlying sources of conflict. His critics saw this as a superficial and potentially problematic approach to psychotherapy. In fact, some later theorists were so sceptical about the limitations of Greenson's working alliance that they considered it to be merely one factor of the broader therapeutic alliance, which included all aspects of favourable relations between client and therapist contributing to therapeutic processes (Dickes, 1975).

Carl Rogers

Rogers (1951) agreed in principle with the psychoanalytic tradition when it came to the importance of the therapeutic relationship for the well being of clients. However, there are several points of divergence between Rogers' theories about relationships and those with their basis in the psychoanalytic tradition. By comparison to psychoanalytic theories of the alliance, the most striking feature of effective helping relationships according to Rogers is a genuine empathic relationship between client and therapist. While it is true that contemporary psychoanalytic theorists place much greater weight on the importance of the real relationship than their historical counterparts, it is still the transference relationship that dominates case conceptualisation amongst psychoanalytic practitioners today (Gelso & Hayes, 1998). Another important distinction of Rogers' theories about helping relationships is that he emphasised therapist-initiated conditions rather than discussing the interactive features of the psychotherapy relationship.

As part of his broader theory about the importance of personal relationships for all human beings, Carl Rogers (1980) proposed three main elements of an effective therapy relationship, which have come to be known as 'facilitative conditions'. The first of these facilitative conditions is 'genuineness', referring to the therapist openly and authentically expressing him or herself to their client. The second facilitative condition is 'unconditional positive regard' and refers to the cultivation of an accepting attitude towards the client. The third major facilitative condition is 'empathy' and refers to the therapist's accurate expression of empathic understanding about the client's otherwise private experiences. Rogers reasoned that genuineness, positive regard and empathy were the key features of all effective helping relationships. Meta-analytic reviews show the importance of genuineness and empathy (Elliott, Bohart, Watson, & Greenberg, 2011; Kolden, Klein, Wang, & Austin, 2011), but significantly less research has targeted unconditional positive regard (Farber & Doolin, 2011;

Wilkins, 2000). It is important to note that while different traditions of psychotherapy encourage different ways of using the client-therapist alliance (Gelso & Hayes, 1998), the facilitative conditions have remained widely accepted in principle by most traditions.

Edward Bordin

In 1975, Bordin explored the possibility that the psychoanalytic concept of the working alliance might be extended to other forms of psychotherapeutic orientations (cited in Horvath & Greenberg, 1986). He proposed three core features of the working alliance as it relates to all forms of psychotherapy. First, Bordin contended that the working alliance requires the client and therapist to agree on the overall ‘goals’ of the helping process. From the client’s perspective, this aspect of the alliance refers to their own understanding of goals that are personally relevant, as well as his or her identification with the broad aims of psychotherapy. Conversely for the therapist, this refers to the development of a sense that the client shares and accepts the goals agreed to during sessions. The second factor of the alliance from Bordin’s perspective is the level of agreement between client and therapist about tasks that they engage in during therapy; and that these tasks are seen as being reasonable, relevant and within their capacity to achieve together. Third and last, Bordin claimed that client and therapist experience a personal bond with one another, which may include mutual feelings of trust, understanding, liking and caring. These three factors were considered to form the basis for all helping relationships across the psychotherapy traditions, leading to the later creation of a pan-theoretical measure of the working alliance – the Working Alliance Inventory (WAI). The WAI is currently the most widely used self-report measure of its type (Ogles, Lambert, & Masters, 1996). It has been associated with therapeutic change as measured by a variety of outcome measures (Horvath, 2001; Horvath & Symonds, 1991; Kivlighan &

Shaughnessy, 2000; Mallinckrodt, 1993), supporting the view that a solid working alliance is integral to positive outcome.

Measures of the Alliance

Bordin's Working Alliance (WAI)

Research about the Working Alliance Inventory (WAI) requires special mention due to its widespread use in research. The uncomplicated conceptual breakdown of the sub-scales, along with its pan-theoretical basis has made it an attractive tool for quantifying the strength of the working alliance across different schools of therapy. Importing the concept of the alliance to many different schools of therapy has been the most significant contribution. Although the place of the therapeutic relationship has always been afforded a significant (albeit implicit) role in many different schools of psychotherapy (Gelso & Hayes, 1998), operationalisation of the working alliance in reasonably concise and broadly applicable terms has markedly raised the profile of the construct (Safran & Muran, 2000). In historical terms, this process has not only highlighted the essential value of considering common factors, but also led to more explicit attention being paid to features of the alliance across many different psychotherapy traditions (Gelso & Hayes, 1998; Greenberg, Rice & Elliot, 1993). One problem with the WAI, however, is that it is reflective of Bordin's conceptualisation of the alliance, rather than being derived from any particular theoretical model of psychotherapy (Gaston & Marmar, 1994). As such it does not draw upon some of the important subtleties of the alliance as they are conceived by some traditions of psychotherapy, which, in some instances, makes it difficult to adequately account for specific features of the alliance that influence therapeutic processes.

The Helping Alliance Scale (HA)

Lester Luborsky contributed to the creation of the Penn Helping Alliance (HA) Scale – the first such measure for direct application to actual psychotherapy sessions (Alexander & Luborsky, 1986). The HA system conceptualises the psychotherapy relationship in terms of two main types of alliance that are typically co-existing. According to the HA system, a ‘type 1’ helping alliance depends on the client feeling that their therapist is warm, supportive and helpful. It includes the client’s sense of being understood, respected and valued by their therapist, as well as their belief that therapy is helping them to make constructive changes. A ‘type 2’ helping alliance comes from Freud’s notion of an ‘analytic pact’ (Kanzer, 1981) and focuses on the client’s sense of collaboration with the therapist. In addition, this aspect of the alliance includes the client’s ability to do what is necessary to make positive changes in conjunction with their therapist. The HA system for rating the alliance has been shown to have convergent validity with other commonly used alliance instruments such as the Californian Psychotherapy Alliance Scales (CALPAS: Luborsky et al., 1996) and the WAI (Hatcher & Barends, 1996). Although the HA system benefits from being derived from a conceptualisation of the alliance that is grounded in clinically relevant factors, the measure also lacks a solid theoretical link between features of the alliance and widely understood mechanisms of change (Gaston & Marmar, 1994).

The Californian Psychotherapy Alliance Scale (CALPAS)

Another group of measures for the alliance that has been quite broadly used are the Californian alliance scales (Marmar et al., 1986). The CALPAS is theoretically derived from psychoanalytic conceptualisation of the psychotherapy relationship (Gaston & Marmar, 1991). A number of revisions of the Californian series have been made over the years (Gaston & Marmar, 1994). The most recent revision with broadest use in research has been

the client-rated version of the CALPAS (Gaston & Marmar, 1991). The widespread use of the client-rated version stems from the regularly confirmed finding that client-rated assessments of the working alliance are better predictors of therapeutic outcome than therapist or observer-rated assessments (Barkham, 2003). By comparison to the more broadly applicable WAI, it is informed by a conceptually rich and subtle interpretation of the psychotherapy relationship derived directly from psychoanalytic theories. This is reflected in the four sub-scales of the CALPAS, which are comprised of ‘Patient Working Capacity’, ‘Patient Commitment’, ‘Working Strategy Consensus’ and ‘Therapist Understanding and Involvement’.

The ‘Patient Working Capacity’ sub-scale of the CALPAS comes from Sterba’s ego alliance, targeting the ability of the client to actively engage in therapy by oscillating between modes of experiencing and observing (Gaston & Marmar, 1994). This includes attributes such as the ability to self-disclose, to tolerate powerful emotions, and to use what is discussed in session for positive change (Gaston & Marmar, 1991). The ‘Patient Commitment’ sub-scale is grounded in Greenson’s notion of the therapeutic alliance, referring to the client’s attitude towards the therapist and therapy, including his or her feelings of trust and commitment (Gaston & Marmar, 1994). It incorporates the willingness on the client’s part to tolerate difficult moments in the normal course of therapy and to make sacrifices, such as time and money (Gaston & Marmar, 1991). ‘Working Strategy Consensus’ is the third sub-scale, describing the extent of agreement between client and therapist about the goals and strategies of therapy. This requires some shared sense about how people change in psychotherapy, what the client wants from the therapist, and whether they are working in a united way. The last of the CALPAS sub-scales, ‘Therapist Understanding and Involvement’, is drawn from psychoanalytic theories about the importance of conditions of psychotherapy that are established and maintained by the therapist (Gaston & Marmar, 1994), namely, the therapist’s

level of empathy and understanding for the client's difficulties. Part of this includes the therapist's active role in expressing understanding through appreciation for the client's point of view, the use of tact and timing, and generally keeping the best interests of the client at heart (Gaston & Marmar, 1991). These components come together to share much common ground with other measures of the alliance, but incorporating a slightly broader range of subtle interpersonal processes. More importantly, they are conceptually linked with processes of change grounded in a psychoanalytic perspective.

Summary

Measures of the therapeutic alliance have been shown to be equivalent predictors of treatment outcome measures (Horvath & Symonds, 1991). The range of alliance measures are thought to draw on related aspects of the same underlying factor in psychotherapy process (Cecero, Fenton, Nich, Frankforter, & Carroll, 2001), which is consistent with the moderate to high correlations between sub-scales of these measures that are conceptually related (Price & Jones, 1998). Early efforts to evaluate the factor structure of the alliance construct were hampered by an inadequate number of participants. More recently however, Hatcher and Barends (1996) addressed this matter by recruiting a large sample (n=231) to evaluate the factor structure of the most widely used alliance measures (the CALPAS, the WAI and the HA) demonstrating that there is a strong general factor common to the various measures of the therapeutic alliance. This supports the notion that the therapeutic alliance is a uni-dimensional construct (Horvath & Greenberg, 1989). Subsequent studies show that the quality of client-therapist interaction is responsible for the largest proportion of alliance ratings (Price & Jones, 1989). Of the different measures used for the working alliance, the CALPAS is considered to be more direct, eclectic in orientation, and inclusive of a wider

range of factors such as warmth, understanding and emotional engagement (Cecero et al., 2001; Ogles et al., 1996).

Contextual Factors in Service Delivery

Background

One of the key points to emerge from these efforts to establish evidence-based principles in psychotherapy is that contextual factors beyond choice of therapy and type of disorder have been shown to be integral to clinical outcomes. This mirrors the latter part of Paul's (1967) question, who asked researchers to consider, "What treatment, by whom, is most effective to this individual with that specific problem, and under which set of circumstances" (p. 111). Although the sentiment of Paul's question has directed research towards greater specificity, to date, only part of Paul's question has been addressed, namely: what treatment works with a specific problem? The added specificity of the APA Division 17 guidelines has refocused attention towards contextual factors, although much more research remains to be done. Principles about ESTRs and common factors might have clarified some of the broad details about the relational context that psychotherapy occurs in, but in a sense, these efforts have had the effect of adding weight to the perception that all psychological approaches are uniform.

One way that researchers might clarify the effect of contextual factors on the delivery of psychological interventions is to consider the various modalities of communication that therapists use to interact with clients. Specific psychological interventions can be delivered in a multitude of ways to treat a target problem. A key consideration in contemporary Australia is whether psychologists can harness the new ways that people use technologies to relate with one another. In particular, recent advances in telecommunication technology have profoundly changed the ways that people communicate in daily life (Spennemann, 2006). Given the

importance of contextual factors, these different modes of communication that psychologists use represents an emerging contextual variable of interest. In terms of Paul's (1967) question, providing information about such contextual matters would facilitate the generation of knowledge about "which set of circumstances" (p. 111) are most effective for the delivery of psychological interventions for specified psychological problems.

Telecommunication Contexts

Over the past few decades, a large number of technological developments have changed the manner in which many psychologists perform their work. This trend reflects both the changing needs of clients and the accommodation of more effective methods into practice as new methods became available. These developments occur in the setting of a wider technological revolution, where changing perceptions of self and other continue to alter the way relationships are formed (Jerome et al., 2000). The use of this technology has made it possible for psychologists to interact with people in new ways. Australian psychologists have a responsibility to research this area to remain at the forefront of best-practice standards in this emerging domain of contact with health consumers.

Telecommunication advances have been at the leading edge of recent technologies affecting the delivery of health services to consumers (Yellowlees, 2001). Researchers have used the term *telehealth* to collectively describe these technologies (Jerome, DeLeon, James, Folen, Earles, & Gedney, 2000), which has been defined as "the use of electronic and communications technology to accomplish health care over distance" (p. 407). This includes the use of telephones, videoconferencing and the various forms of computer-mediated communication available over the Internet.

Telephone Counselling

Telephone counselling is the most widespread of telehealth services provided by psychologists (Reese, Conoley, & Brossart, 2002). A variety of different psychological services are available in Australia over the telephone including recorded information, live information and referral services, crisis counselling, and longer-term counselling (Coman, Burrows, & Evans, 2001). Despite the history of telephone counselling and the frequency of its use in Australia, only a small number of studies have explored the effectiveness of psychotherapy over the phone.

In a survey of 1000 members of the APA, VandenBos and Williams (2000) found that 68% of registered psychologists indicated that they provide individual psychotherapy by telephone. The most common type of telephone counselling service provided in Australia is crisis counselling, where clients speak to a therapist over a short period of time (Coman et al., 2001). Most of these services have expanded to include ongoing telephone counselling, catering to regular callers. These services typically offer 24-hour access. Coman et al. (2001) cites the following therapeutic characteristics as typical to telephone counselling services in Australia:

- Therapists work with clients to find better ways to address specific issues;
- Therapists provide relevant information about the issue;
- Sessions are structured, logically progressing from one session to the next; and
- Therapists endeavour to provide a supportive and caring relationship incorporating emotional support, shared concern and feedback.

The vast majority of studies examining the effectiveness of telephone counselling have focused on specific areas such as smoking cessation and not on the general effectiveness of the medium for addressing psychological disturbance (Zhu, Stretch, Balabanis, Rosbrook, Sadler, & Pierce, 1996a; Zhu, Tedeschi, Anderson, & Pierce, 1996b). Such studies typically

demonstrate the self-reported effectiveness of telephone counselling in reducing problematic behaviour. Some recent meta-analytic reviews have emerged regarding the use of telephone-administered psychological interventions for depression, showing reduced symptom severity and low attrition rates (Mohr, Vella, Hart, Heckman, & Simon, 2008). One study exploring the use of telephone counselling applied to general psychological difficulties has shown strong levels of client satisfaction and a therapist-client relationship that is comparable to face-to-face counselling (Reese et al., 2002). In this study, the measures used included self-reports from participants indicating problem reduction, overall improvement of emotional well-being and satisfaction with the treatment itself. A pattern was also identified in this study between the duration of treatment and overall improvement, with clients who received telephone counselling over a prolonged period indicating statistically higher levels of improvement. Measures of the therapeutic relationship indicated that characteristics of the working alliance paralleled those typically observed in traditional face-to-face counselling. That is, stronger therapeutic relationships spanning a longer period of time were associated with better client outcomes.

Videoconferencing

Another telecommunication medium that health professionals use is videophone or PC-based teleconferencing: collectively known as videoconferencing or interactive televideo (IATV). In North America, IATV is mainly used in specialist health care, forensic and correctional settings, and in the armed forces (Jerome & Zaylor, 2000). In specialist health care, IATV facilitates greater interaction between psychologists across geographic expanses and gives specialists the capacity to provide services to clients who would be otherwise unable to access their services. In forensic settings, IATV allows psychologists to provide specialised assessment and treatment to inmates, thus overcoming the expensive practice of

providing secure transportation of prisoners to clinical settings. In the military, IATV is being used to give deployed soldiers access to specialised psychological services.

Although the therapeutic use of videoconferencing is more widespread in North America (Maheu & Gordon, 2000), it is clearly an area of rapid growth in Australia. Since 1995, the Queensland Telemedicine Network has grown to become the most widely used videoconferencing network in the world (Yellowlees, 2001). This system is primarily utilised to extend medical services to regional and remote areas of Australia.

The existing outcome research concerning videoconferencing has shown promising results, with a general pattern of clients reporting levels of satisfaction and therapeutic alliance that are equivalent to those observed in face-to-face therapy (Glueckauf, Fritz, Eckland, Eric, Liss, & Dages, 2002). Recent studies have shown that there is no significant difference in the working alliance formed with patients receiving CBT for the treatment of post-traumatic stress disorder over videoconferencing by comparison to face-to-face therapy (Germain, Marchand, Bouchard, Guay, & Drouin, 2010). Researchers have shown adaptive changes in behaviour resulting from interventions applied over videoconferencing across a broad range of settings, including educational institutions, psychiatric care, health related settings, and prisons (Antonacci, Bloch, Saeed, Yildirim, & Talley, 2008; Hufford, Glueckauf, & Webb, 2002). Psychologists themselves have been less receptive of this approach, expressing negative expectations about the detrimental impact of this mode of communication on the client's perception of their warmth, empathy, and understanding (Rees & Stone, 2005).

Email 'Therapy'

The largest proportion of behavioural health practitioners offering services online use email as their point of contact with clients (Heinlen, Welfel, Richmond, & O'Donnell, 2003;

Maheu & Gordon, 2000). However, email is the most controversial method of therapeutic contact amongst the different types of telecommunications (Barak, 1999). Across the literature, most criticisms of the use of email for therapy pertain to the relative lack of non-verbal communication when text is used alone (Anthony, 2000a).

In more synchronous forms of telecommunication (such as instant messaging and Internet relay chat), misunderstandings can rapidly become apparent, giving people an opportunity to revise the way they are communicating for the sake of better understanding (Fenichel et al., 2002). However, because longer periods exist between email messages, the difficulties that people have in relating to one another can take much longer to become clear (Barak, 1999). With regard to the therapeutic alliance, such long waiting periods mean that ruptures in the alliance are likely to be much more difficult to recognise and resolve (Safran & Muran, 2000). Aside from developing a verbal contract with clients to agree on the frequency of email messages (Barak, 1999), there appears to be little information in the literature about how this problem might be addressed. This has led some critics to assert that online services equate to giving advice rather than psychotherapy (Pelling & Renard, 2000).

A related criticism is that email is perceived and experienced as a written exchange, thereby losing a sense of personal presence. Anecdotal evidence, however, shows that both clients and therapists often experience and recall these interactions as genuine interactions, much like a conversation (Anthony, 2000b; Suler, 2000). There is increasing evidence for the notion that written communications can provide a sense of social presence for some people, especially in the forms of immediacy and interactivity (Lombard & Ditton, 1997). Given that shared involvement between client and therapist is widely accepted as a central component of therapeutic engagement (Hazler & Barwick, 2001), when therapists deliver interventions via email, appropriate steps ought to be taken to ensure that this aspect of the therapeutic relationship is strengthened. Recent studies reinforce the view that therapists can enhance

their overall sense of presence online by commenting on the specific descriptive words and phrases that clients use to describe their experiences, which from the perspective of clients, adds a dimension of realism to the client-therapist relationship (Anthony, 2000b).

Email appears as though it were a typed letter, which allows clients to edit messages before sending. The formality of this appearance and process has led some critics to conclude that written communications lend themselves to emotional distancing (Hancock & Dunham, 2001). Some researchers have argued that written transactions online are simply incapable of conveying the levels of intimacy required for therapy (Robson & Robson, 1998). There is an implicit paradox to the notion that one could feel a close personal connection, capable of transmitting sensitive emotional and psychological material, and yet remain so isolated from the other person in every physical sense (Hanley & Reynolds, 2009). However, while email lacks the level of immediacy present in face-to-face encounters, there is much evidence supporting the therapeutic value of emotional expression using the written word (Wright & Chung, 2001).

Although the expressive art therapies draw on a tradition relying on process rather than outcome (Levine & Levine, 1999), writing therapies are receiving increased research interest (Esterling, Antoni, Fletcher, Margulies, & Schneiderman, 1999) and are being incorporated into a range of clinical treatments (Lange, Van de Ven, Schrieken, & Emmelkamp, 2001; Nunally & Lipchik, 1989). Some theorists have argued that clients using email for the purpose of receiving support from a psychologist is a modern variation of journal writing, in that people externalise their feelings and experiences in the written word to gain perspective, distance, and reflection (Chechele & Stofle, 2003).

A review of the literature has demonstrated the importance of emotional expression in writing and its relationship with positive health outcomes (Smyth, 1998). Structured writing therapy assignments delivered online and supported by therapists over the Internet have been

linked with reduced symptoms of trauma and psychopathology in controlled clinical trials (Lange et al., 2001). Some clients using email clearly benefit from the use of structured writing therapies (Childress, 1999) and there are some studies that have shown that process variables, such as the therapeutic alliance, function at comparatively equivalent levels to face-to-face therapy (Reynolds, Stiles, & Grohol, 2006). Recent researchers have found few differences between those who receive email therapy versus face-to-face therapy in terms of client demographics (Murphy, Mitchell, & Hallett, 2011), satisfaction, and global assessment of functioning post-treatment (Murphy, Parnass, Mitchell, Hallett, Cayley, & Seagram, 2009). Unfortunately though, when one considers the large proportion of online therapists using email and the minority adhering to professional compliance standards (Heinlen et al., 2003), it seems unlikely that many therapists are adopting the structured approaches that are recommended by researchers.

Internet Chat

Polls conducted by the American Psychological Association (2010) indicate that while telecommunication use is on the rise amongst psychologists, most of the increase is in the use of email for consultation. Within practitioner groups who specifically offer services over the Internet however, a large proportion offer online services via synchronous 'Internet chat' (Heinlen et al., 2003), with recent surveys showing that up to 87% of such practitioners offer Internet chat as a mode of service delivery (Finn & Barak, 2010). There are a number of synchronous forms of communication available over the Internet, most of which use programs of the type referred to as either 'instant messaging' or 'Internet relay chat' (Suler, 2004). The relatively simultaneous nature of this type of communication permits a rapid flow of ideas across the Internet and has therefore contributed greatly to the development of 'online communities' (Grohol, 2003; Gwinnell, 1998). The qualities of relationships that form

between users of these technologies are much more immediate and dynamic by comparison to email exchanges and therefore more closely aligned with the flexible qualities of off-line relationships. Anecdotes concerning the intimacy and depth of relationships formed over the Internet are common, particularly those involving people who report falling in love (Gwinnell, 1998; Hardie & Buzwell, 2006). Given that such important relationships frequently develop over Internet chat communications (Baker, 2002) and that such a large proportion of psychologists online are using this mode of service delivery (Heinlen et al., 2003), the formation of therapeutic relationships using Internet chat is equally worthy of consideration.

Early theorists about relationship formation on-line contended that relationships formed over Internet chat are grounded in the context of the medium in which they occur; thus online communication has been criticised for being more austere than expressive efforts made in face-to-face transactions (Hancock & Dunham, 2001). However, through anecdotes and case examples, theorists like Suler (2011) have illustrated that despite the limitations of the medium, users comfortable and familiar with Internet chat are able to harness this medium creatively for self-expression, enhancing their ability over time to relate with one another. He also points out that because computers mediate the interaction between people on-line, the notion of transference requires some adaptation when applied to the context of Internet chat (Suler, 1998). He adds that in some instances, personalisation of a computer functions in such a way that the machine is perceived as being an extension of the self. While Suler's theories are popular amongst many psychotherapists working on-line (Fenichel et al., 2002), it remains to be seen whether such theories can be supported empirically.

There are a number of studies that have explored the use of Internet chat for socialising purposes. Bargh and McKenna (2004) review some of these studies and argue for a transactional view of computer-mediated communication. That is, they argue in favour of a

view that the effects of the Internet depend very much on the goals of people using this medium. Although this view emphasises the goals of people who use the Internet, it also acknowledges the unique strengths and limitations of the medium for communicating. This view differs markedly from the widely stated criticism that computer-mediated communication determines the constraints of interaction on-line. Such criticisms conform to McLuhan's (2002) credo that 'the medium is the message'. By disregarding the content of expressive efforts that are made by people using the Internet to socialise, criticisms of this sort overlook the broader implications of relationships formed between people on-line. A series of studies reviewed by Bargh and McKenna (2004) show how the goals of those people who use Internet chat for communication can result in distinct interpersonal outcomes. These findings have significant implications for the issue of relationship formation using Internet chat for the purpose of delivering psychological interventions.

McKenna, Green, and Gleason (2002) explored the effect of self-disclosure on the quality of relationships formed over the Internet in several studies. In the first of these studies, 568 people who met others on-line, completed surveys about their levels of social anxiety, loneliness, and self-disclosure, in addition to providing details about the subsequent social outcomes of the relationships they had formed on-line. McKenna et al. showed that people who felt more isolated and anxious about social situations were more likely to express aspects of their personality on-line that they did not feel comfortable sharing with others face-to-face. For those who expressed more of themselves over the Internet, on-line relationships formed very quickly and in many cases, resulted in a transition from static exchanges like e-mail, to synchronous chat or telephone conversations as a bridge between meeting in-person. A path analysis demonstrated that unless relationships had progressed to level where telephone conversations were taking place, it was unlikely that people who met over the Internet would ever meet face-to-face. The implications of this study regarding the use of Internet chat for

therapeutic purposes are that social anxiety and relational issues are likely to feature strongly, and that the client's sense of forming a relationship with their therapist is likely to be rapid. Results of the path analysis would suggest that therapists ought to establish contact with their clients by phone in cases where face-to-face counselling is needed, as means to ease the transition between modes of therapeutic contact.

In another study by McKenna et al. (2002), a group of 31 men and 31 women who had never met before were split into three conditions to become acquainted with one another during two 20 minute periods. In the control condition, dyads met each other twice over Internet chat using a computer. In the 'chat' condition, dyads first met one another via Internet chat and then face-to-face. In both the control and 'chat' conditions, participants knew they were meeting the same person each time. In the final condition (termed 'trading places'), dyads met one another both in person and via Internet chat, but believed that they were meeting a different person each time – in both cases however, they were meeting the same person. Results from this trial showed that partners expressed greater liking for one another when they first met via Internet chat. In the 'trading places' condition, participants reported that they knew their partner from synchronous chat better than the partner they met face-to-face (which was actually the same person); and further to this, it was shown that they were more likely to tell their partner exactly what they liked about them when chatting over the computer. The key factors influencing the degree of liking between dyads were:

- The perception of certainty about the partner;
- Thinking that they could predict the attitude of their partner;
- Discussion of a range of topics and smooth transition between topics; and
- A sense that they could share personal details with the partner.

These findings illustrate that first impressions formed during synchronous chat sessions are vital to consider in the development of trust and general sentiments of liking. Concerning

the delivery of psychological interventions using synchronous chat, this study shows that the affective ‘bond’ aspect of the alliance is likely to be enhanced by some of the key features of Internet chat as a mode of interpersonal transaction. That is, anonymity, distance, and the absence of inhibiting social cues (Fiske, 1993) may encourage some clients to be more candid with their therapist on first meeting than they otherwise would.

Further studies by Bargh, McKenna, and Fitzsimons (2002) explored the different aspects of self that people are comfortable expressing over Internet chat in comparison to meetings in person. In their experiments, it was shown that self-descriptors that participants attributed to their private self (which the authors termed ‘true self’) came more easily to mind in a reaction time test for those who had just finished chatting with a person over the computer. Further experiments showed that people using Internet chat showed a greater liking for one another, expressed more of the traits they ascribed to their private self to their partner, and had a far greater tendency to ascribe qualities to their chatting partner that they had previously stated were qualities of an ideal friend. On the basis of these findings, Bargh et al. concluded that two main factors account for the greater levels of liking that are generally reported amongst strangers who meet over the Internet. First, due to relative anonymity and because the social consequences of interpersonal exchanges are decreased on-line, people are more likely to express aspects of themselves that they would otherwise keep private. Second, avenues for the expression of implicit signs of disapproval (such as subtle facial expressions) are greatly reduced during Internet chat, making it much more likely that idealised qualities will be projected onto their chatting partner. These conclusions suggest that therapists need to be mindful that inhibitions are often not as prominent during Internet chat sessions and that clients may have a tendency to idealise their Internet therapists.

Several experienced practitioners in the field of Internet chat therapy have developed theories about how to use elements of text-based communication to build rapport with clients.

Murphy and Mitchell (2009) describe a range of techniques to enhance the formation of a therapeutic relationship, including methods such as ‘emotional bracketing’, ‘descriptive immediacy’, ‘descriptive imagery’, and ‘time presence’. Derrig-Palumbo (2010) describes how specific questions and statements communicated by a therapist over Internet chat can be incorporated into a conversation to express empathy, draw out problem areas, and build hope and confidence in the therapeutic process. These techniques highlight the importance of developing a therapeutic relationship and help to span the conceptual divide between the processes of change that occur over both Internet chat and face-to-face therapy.

Nagle and Anthony (2011) describe how a variety of psychotherapeutic approaches can be implemented over Internet chat communication, theorising a staged model of therapy processes. They describe an early rapport-building phase at the beginning of therapy where some of the techniques described above are instrumental for establishing the foundation for further work. Assessment and goal setting phases follow on, where probing questions and clarification takes place, to construct a formulation of the problem and prompt the client to look towards areas to make changes. They describe a stage of engagement, with the client deepening their involvement in therapeutic processes. A closure and follow-up phase towards the end of each session focuses on summarising information and directing the attention of a client to the ongoing work ahead.

Chechele & Stofle (2003) highlight the need to address foreseeable practical problems and contract the therapeutic work ahead with a client before the process commences. Suler (2008) also highlights the importance of initial assessments and goal setting, charting out the specific needs and preference of the person seeking support. Suler’s ‘cybertherapeutic theory’ describes a range of dimensions that practitioners might assess at intake in order to select the most appropriate modality of on-line communication. These areas include the preferences for the level of synchronicity in communication, for text or other modalities (e.g., audio/visual),

the level of real versus imaginary engagement, the level of interaction with a person versus an automated system, the level of visibility they seek, or whether they want a personal or group experience. Preferences for Internet chat therapy would clearly not suit all of those who seek psychological services on-line. These factors of consideration about the preferences and needs of a client closely align with the general areas of consideration for the suitability of a person for Internet therapies developed by the International Society for Mental Health Online (Suler, Barak, Chechele, Fenichel, HSuing, Maguire, Meunier, Stofle, Suler, Tucker-Ladd, Vardell, & Walker-Schmucker, 2001).

Qualitative research of psychotherapy using synchronous text, has added support to the argument that therapeutic relationships can develop between client and therapist over the Internet. Although there has been some research that has explored the use of Internet chat for group support and in outreach roles (Stofle, 2002), the following summary of studies will focus primarily on individual therapy approaches over this medium. Studies of individual therapy more clearly identify the shared processes across various modes of communication.

Anthony (2000b) used Content Theme Analysis of Internet chat therapy to explore the therapeutic alliance from a Rogerian perspective. Experienced online therapists were recruited for the study, with both client and therapists being invited to provide information about their relationship independently. Findings indicate that rapport was enhanced through the intentional openness and receptiveness of therapists in the early phases of interaction and was facilitated by the active steps therapists made to express shared understanding and congruence, using the written word. The text-only dialogue reduced inhibitions for many clients, who reported that they felt free from judgement, thereby increasing their willingness to disclose personal information and maintain an open approach across time. Anthony (2000a) concluded that relationships formed between client and therapist online should be

considered therapeutic given that they possess much of the qualities of therapeutic rapport as defined by Rogers (1951).

The relationship that develops between client and therapist using synchronous textual communication has also been assessed using standardised measures. Cook and Doyle (2002) used the WAI to assess the relationship between client and therapist, comparing this to a representative sample of clients receiving face-to-face counselling. While the online sample size for this study was quite small (n=14), the results appear promising, with alliance levels being significantly higher amongst the online sample. The researchers concluded that clients who choose to engage with a therapist in this way find the method suitable for developing an empathic connection with their therapist. Although online participants made stronger evaluations of their relationship with therapists when compared to face-to-face participants, therapist-rated alliance was not investigated. Considering that counselling over distance could result in quite disparate perceptions of alliance between client and therapist, comparing client and therapist-rated alliance seems essential for this type of therapeutic interaction. In addition, although the WAI is the most widely used measure of alliance, its focus is considered less comprehensive than other measures of the therapeutic alliance (Cecero et al., 2001). Essentially, a more thorough approach is required to adequately address concerns about the capacity to develop a therapeutic relationship using text alone.

Mallen et al. (2003) assessed some of the important relational features of Internet chat for therapeutic work. Using broad indicators for emotional understanding, self-disclosure, sense of closeness, and depth of processing, Mallen et al. noted several distinguishing features of relationships that emerge over the Internet. It was found that pairs who conversed face-to-face were significantly more satisfied with developing a stronger sense of being close to their chatting partner and making more frequent self-disclosures. Participants were also better able to recall facts about their conversation when their conversation took place in person. Conflict

was shown to be greater amongst those who conversed over the Internet, possibly due to the uninhibited manner that people express themselves on-line, or the lack of non-verbal information that would otherwise qualify expressive efforts. More promising, however, was the finding that conversing parties in both groups were equally able to accurately judge the basic emotional state of those with whom they were chatting. A major limitation of this study, however, is that the context of a relationship where people are chatting for the first time is obviously quite different to a psychotherapy relationship.

Rassau and Arco (2003) explored the use of Internet chat-based CBT with a case study design. They focused specifically on levels of anxiety and study-related behaviours, showing that after six weekly sessions of chat with a psychologist, levels of anxiety decreased and stabilised. Measurable improvement in study-related behaviour was also shown in terms of the hours of study per day, number of pages read and the amount of notes taken.

Notwithstanding the generalisability of a case study, these results do seem to indicate the positive therapeutic potential of Internet chat for psychological interventions in some cases.

The use of Internet chat for small group work using CBT has also been explored as a way to address feelings of loneliness associated with physical disabilities. Hopps, Pépin, and Boisvert (2003) found that 12 weeks of CBT in a small group format led to clinically significant reduction in loneliness maintained at follow up. This research is important not only for the fact that cognitive interventions were examined over text-based communication, but also because the focus of the therapeutic work was relational in nature.

Controlled process-outcome research, examining both synchronous and asynchronous textual communication, reinforces the conclusion that textual relationships can be considered therapeutic in some circumstances. Lange et al. (2001) demonstrated the importance of appropriate pre-therapy screening, thorough instructions about therapy procedure online, and the use of structured writing assignments, with respect to positive therapeutic outcome.

Structured writing tasks were clearly a challenge in this study, but in hindsight clients reportedly perceived these tasks as fundamental to the process. Clients also indicated feeling the presence and support of their therapists throughout tasks, despite vast distances between them. Findings from trials such as these demonstrate the importance of relational factors in on-line interaction and its association with positive changes in cognition, behaviour, and emotion in both general and specific treatment areas (Celio, Winzelberg, Wilfley, Eppstein-Harald, Springer, Dev, & Taylor, 2000; Lange et al., 2001).

Some research has been conducted with single-session online counselling services, such as Kid's Helpline Australia, a service which caters for young people aged 5 to 25 years old (2010). King et al. (2006a) compared single-session telephone counselling with a web-chat based online counselling service provided by Kid's Helpline. Although both forms of treatment led to improvement, results showed higher baseline levels of psychological distress for young people who access online counselling and a stronger treatment effect for telephone counselling services. They also found stronger therapeutic alliance scores for young people who used telephone-based support services and a deeper therapeutic impact, using the Session Impact Scale (SIS). The researchers conceded, however, that time may have been a critical factor in their study. That is, it may be the case that some of these disadvantages are overcome when Internet counselling spans a longer period of time.

Additional research about the Kid's Helpline service has shown that one of the main reasons why young people seek online counselling is the perception of an increased sense of safety and a decreased sense of emotional exposure (King et al., 2006b). This qualitative study raised some concerns from young people using the service about time, in that they felt rushed in the single-session model of interaction. Counsellors from this service also report that the distant feel of Internet chat communication may be associated with the greater sense of emotional safety (Bambling, King, Reid, & Wegner, 2008). Counsellors noted that many

young people found the service less confronting than a telephone call and that some young people would not seek help if that were the only option available to them. At the same time, counsellors were concerned about underestimating the severity of their clients problems due to missing some of the subtle but important emotional details during a counselling session.

Recently published transcript analyses of the Internet chat support service at Kid's Helpline suggest that much of the emphasis is on information gathering during these single one-hour sessions (Chardon, Bagraith, & King, 2011). It has been suggested that the emotional distance and the superficial level of depth that is covered in this single-session treatment model corresponds to a decreased working alliance (Bambling et al., 2008). Acute models of support like these are better suited for immediate crisis intervention, and may also be a distancing factor in terms of developing a therapeutic alliance over the Internet.

Other researchers identify favourable outcomes when exploring the use of Internet chat to provide support services to young people. Hanley (2009) reports preliminary findings from research about a UK-based counselling service for young people (Kooth.com). After 6 weeks of accessing the website, young people completed measures of the alliance with their therapist; the measures indicated a large proportion of medium (58.7%) and highly-rated (17.4%) alliance scores. The young people who participated as clients reported that they could talk about a broader range of subjects via Internet chat than they normally would face-to-face and that they valued being able to access support on their own terms, at a time and place that suited them.

In the Netherlands, the 'Dutch Kindertelefoon' service has also shown that positive outcomes can be achieved through single-session Internet chat support for children seeking help for their problems (Fukking & Hermanns, 2009). This research shows that the 'faceless' and 'voiceless' nature of Internet chat communication is less threatening for some children when discussing personal problems, by comparison to a conversation over the telephone or

face-to-face. Another study by Fukkink (2011) analysed Internet chat transcripts in a youth support service where young volunteers (aged 16 to 23) were trained to provide social support to adolescents looking for help with social-emotional problems. This content analysis showed that in longer conversations, where there was a greater range in the type of support that was given, there were higher ratings of the quality of the support services that were offered. This aligns with the research of Barak and Bloch (2006) with adult populations, showing that longer conversations which have greater depth and smoothness, and which evoke emotions or positive feelings after the session, are rated as being more helpful by comparison to other Internet chat conversations. These studies seem to indicate that longer and ongoing contact with a therapist via Internet chat may allow for deeper conversations and stronger alliances.

A recent study also explored the ability of trainee counsellors to establish a therapeutic alliance and accurately diagnose the condition of a confederate playing the role of a client (Mallen, Jenkins, Vogel, & Day, 2011). Confederates were given a specific character vignette, and trainee counsellors (n=42) were told they would be providing a single session of counselling via Internet chat to a real client. Outcome measures indicated a significant increase in the expectation of therapists that they could establish a therapeutic alliance with a client over Internet chat. Counsellors also rated a mean sense of closeness of 3.35 on a seven-point scale with the 'Inclusion of Other in the Self' measure, indicating some degree of distance in the relationship. Diagnostic accuracy with these cases was high for anxiety (86%) or depression (90%) alone, but for mixed conditions, counsellor diagnoses were far less accurate (36%). Transcript analyses revealed that reassurance and open questions were used frequently, whereas interpretation and direct guidance were used less often. Although this study lacked a comparison group and used a role play to simulate counselling processes, the conclusions closely align with similar studies of single-session Internet chat therapy where the subjects were young people, rather than adults. Specifically, these studies have in common the

observation that Internet chat therapy relationships are perceived as being more distant and counsellors often experience greater difficulty making subtle distinctions between problem areas that clients are experiencing.

In a review of quantitative studies investigating the outcomes of Internet therapies, Hanley and Reynolds (2009) identify that Internet chat therapy shows medium effect sizes (*Cohen's d* = 0.53) and moderate therapeutic alliance scores. Further research of Internet chat therapy is needed to confirm these conclusions using well-established measures, with genuine client cases and also with adult populations. Direct comparisons need to be made with face-to-face treatment groups, over a duration of treatment that extends beyond a single-session.

Web-based Interventions

One of the important ways that psychologists provide much needed information over the Internet is through the use of websites. Much has changed about the Internet since the early 1990s when psychologists first began to consider ways to extend treatment options using the world-wide web. A large scale survey indicates that while most Australians look for mental health information by contacting a health practitioner in person, those who are younger and of the view that psychological problems should be handled alone are more inclined to reach out for help over the Internet (Leach, Christensen, Griffiths, Jorm, & Mackinnon, 2007). With a growing number of Australians regularly using the Internet and significant advances in technology, changes over the last decade have enhanced the way that people interact with websites. As a case in point, Australian Bureau of Statistics (2010) figures show that over the last decade access to the Internet at home has quadrupled. These changes are part of a global trend right across health care, with data from commercial health plans in the US showing that web-based behavioural health services are increasingly being offered to patients (Horgan et al., 2007). Barak et al. (2009) have identified three main types

of web-based interventions that have implications for psychology: (1) web-based education, (2) self-guided web-based therapy, and (3) human-supported web-based therapy.

Psychologists use web-based education interventions to display psycho-educational materials on a website to inform people about the known ways to address psychological difficulties. While there are many websites that provide psycho-educational resources for the public, only some websites contain static and structured information that is organised into modules. As a result, it is generally only these educational modules that have been put to the test in research. There is some meta-analytic evidence that specific web-based interventions can be quite beneficial to those who access such websites, with outcome measures showing a medium effect size at post-test (Barak et al., 2008). An obvious comparison can be made between web-based education interventions and standard bibliotherapy approaches, which show small to moderate effect sizes both for general health issues (Donker, Griffiths, Cuijpers, & Christensen, 2009a) and for more targeted psychological problems, such as depression (Gregory, Schwer Canning, Lee, & Wise, 2004) and anxiety (Hirai & Clum, 2006; Marrs, 1995).

Many websites offering web-based education interventions also frequently offer self-guided modules. Self-guided web-based therapy involves the client interacting with an automated system on a website. These systems are informed by psychotherapy treatment principles used by practitioners with face-to-face clients in the form of structured therapy modules. In some instances, the client is provided with direct feedback to their responses, such as decision-tree branching to pages associated with the client's response, or score interpretation. In many ways this class of interventions is essentially a type of interactive self-help, which has some obvious interactive advantages over bibliotherapy. Meta-analyses show small to moderate effect sizes for web-based self-guided interventions without the support of

a psychotherapist for mental health conditions related to trauma (Amstadter et al., 2009), and also for self-guided CBT targeting anxiety and depression (Spek et al., 2007).

Human-supported web-based interventions are also automated in the same manner as self-guided interventions, however, in this mode of treatment, some of the feedback is provided by a therapist. Often, the communication between client and therapist occurs via email, Internet chat, or telephone. Interactions between client and therapist range from ‘partial’ contact (e.g., reminder prompts or answering queries) through to ‘high’ levels of contact over the course of treatment to give feedback and support about the self-guided treatment tasks (Barak, Klein, & Proudfoot, 2009). Meta-analytic studies demonstrate that larger treatment effects are associated with human-supported web-based interventions by comparison to those that are purely self-guided (Barak et al., 2008; Spek et al., 2007).

There is a trade-off here between the size of the treatment effect and the reach of the service. That is, while human-supported interventions seem to correspond to slightly better treatment outcomes, these services typically require the client to identify themselves and to pay for the services they receive. By comparison, web-based psycho-education and self-guided treatment tend to be free or low-cost and do not usually require the client to provide their identity. As noted by Amstadter et al. (2009), many of the behavioural features of mental health problems such as avoidance, alienation, and detachment are particularly salient factors that appeal to highly distressed people who would otherwise not seek treatment.

One of the often cited advantages of web-based interventions is the view that once they are established there are essentially no running costs. Whilst it is indeed the case that most self-guided web-based therapies are offered to consumers for free, this is certainly not the case for systems that require human feedback from a therapist. That is, when a therapist is required to engage with the client during the intervention, there are added running costs for providing the service that are not required by self-guided web-based systems. This added cost

is a potentially limiting factor for human-supported web-based interventions, given that the aim of such programs is typically to reach people who would otherwise not visit a consulting room. The critical question is how much added value is there to having a therapist involved in the process?

There is some evidence that health care interventions delivered over the Internet can be cost-effective, showing positive return on investment ratios with benefits exceeding the costs (Tate, Finkelstein, Khavjou, & Gustafson 2009). There is also some evidence demonstrating that computerised CBT interventions can be cost-effective (Kaltenthaler, Brazier, De Nigris, Tumor, Ferriter, Beverley, Parry, Rooney, & Sutcliffe, 2006). However, few researchers report the costs of establishing and maintaining Internet health services. Although some web-based services are supported with government funding in Australia, there is a sentiment in Australian culture to seek help only when in dire need, compounded by unfavourable public perceptions about psychologists (Dempsey, 2007; Hartwig, 2002; Hartwig & Delin, 2003; Sharpley, Bond, & Agnew, 2004) or those that refer clients to them (Mental Health Council of Australia, 2011). Those who are not inclined to access psychological care in-person may be more inclined to access web-based interventions, at least in the first instance.

There are also a growing number of controlled studies indicating that greater levels of therapist involvement are associated with better treatment outcomes for specific mental health conditions and with adherence to treatment across a wide range of presentations. Clough and Casey (2011) review the variety of ways that psychological treatment can be enhanced with the use of smart phone applications, electronic questionnaires, video games, and monitoring or support provided via email and Internet chat communication. A review of self-help and minimal contact therapies for depression and anxiety conducted by Newman, Szkodny, Llera, and Przeworski (2011a) found that online interventions with greater levels of therapist interaction were associated with better treatment outcomes for those experiencing obsessive

compulsive disorder, social anxiety disorder, simple phobia, and severe levels of depression. It has been theorised that the socio-relational context of interacting with a therapist may serve to activate critical aspects of specific disorders in the case of social anxiety and depression (van't Hof, Cuijpers, & Stein, 2009). In the case of simple phobia and OCD, greater involvement with a therapist may help the client to alleviate and better manage their distress in successfully carrying out exposure tasks (Newman et al., 2011a). This is a similar finding to reviews exploring the efficacy of self-administered treatments for addictive behaviour, showing more sustained levels of improvement with greater levels of therapist involvement (Newman, Szkodny, Llera, & Przeworski, 2011b).

Further evidence from controlled studies is required to account for the findings of some researchers that web-based interventions without therapist support fare equally well to email and telephone based support systems (Berger, Caspar, Richardson, Kneubühler, Sutter, & Andersson, 2011). Some research has indicated that even a small amount of contact with a therapist can help a person to maintain web-based treatment, which is important to consider, given the fact that therapists are generally in short supply and time with a therapist is costly (Marks & Cavanagh, 2009). One of the ways that mixed findings may be partially accounted for is that clients who expect that web-based therapy may work for them are probably more inclined to volunteer for research about these novel interventions, which may result in similar treatment outcomes across the various online treatment groups. This self-selection bias is not altogether negative, due to the fact that such individuals are the ones most likely to utilise these forms of treatment in the general community. Therefore, part of the added value of web-based interventions is that they reach a distinct subset of the wider population. In light of the likely positive health outcomes associated with reaching underserved sectors of the population, it is encouraging that Australian researchers are at the forefront of research about web-based psychological interventions (Klein, 2010).

MoodGYM (<http://moodgym.anu.edu.au/>)

Launched in 2004, the MoodGYM training program developed by Australian National University was one of the first freely available web-based self-guided CBT services. This program consists of five modules designed to treat and prevent depression including interactive games, psychometrics for anxiety and depression, downloadable audio files for relaxation, a workbook, and feedback to the user about information they have provided. Randomised controlled trials with adult populations demonstrate that MoodGYM significantly reduces depressive symptoms and dysfunctional thinking (Christensen, Griffiths, & Jorm, 2004) with a greater treatment effect found for those who complete at least three web-based modules of 20-40 minutes duration each (Christensen, Griffiths, Mackinnon, & Brittliffe, 2006). Long-term treatment outcomes have been evaluated at the 6-month and 12-month mark, showing continued reduction of symptom severity over time with statistically significant superiority by comparison to a control group (Mackinnon, 2008). Research conducted with adolescents shows that two modules of MoodGYM delivered during school hours resulted in a reduction of depressive symptoms, but not at a statistically significant level (O'Kearney, Kang, Gibson, Christensen, & Griffiths, 2007). In addition to MoodGYM, the e-hub centre at Australian National University also runs a similar service called e-couch with a more interpersonal element, inclusive of relationship problems, the experience of loss, and stress. There is limited information available about the effectiveness of the e-couch system.

CRUfAD Virtual Clinic (<http://www.virtualclinic.org.au/>)

The Clinical Research Unit for Anxiety and Depression (CRUfAD) is a not-for-profit initiative run by the Saint Vincent's Hospital in Sydney. Their virtual clinic runs a number of programs with a general format comprised of web-based questionnaires, scenarios in the form

of comic book stories, weekly homework assignments, Internet chat groups, and supporting emails from a therapist. Web-based treatment modules are specified for a range of conditions including social phobia, depression, generalised anxiety disorder, and panic disorder.

Initial trials of the 'Climate Panic' program run by CRUFAD to treat panic disorder has shown moderate to large treatment effects following six weeks of web-based interventions, with supporting emails from a therapist and the use of an on-line discussion forum (Wims, Titov, & Andrews, 2008). The therapist-assisted 'CRUFADclinic' module for depression has demonstrated large treatment effect sizes in reducing symptoms of depression and anxiety, as well as showing strong satisfaction ratings from participants (Perini, Titov, & Andrews, 2008; Perini, Titov, & Andrews, 2009). A randomised controlled trial of the therapist-assisted CRUFAD module for generalised anxiety disorder (GAD) found strong treatment effect sizes (Titov, Andrews, Robinson, Schwencke, Johnston, Solley, & Choi 2009a). In this study, 79% of the participants scored below the cut-off score for a positive diagnosis for GAD at post-test, compared with 14% of participants in the control group. Various treatment modules have been developed in the 'Shyness' series for social anxiety, with reported results showing large treatment effect sizes for both therapist-assisted (Aydos, Titov, & Andrews, 2009) and un-assisted web-based interventions (Titov, Andrews, Choi, Schwencke, & Johnston, 2009b). In this research, an extra 33% increase in efficacy was associated with the addition of telephone reminders to un-assisted interventions. Large-scale randomised trials of the 'Shyness' module also show significantly reduced symptoms of co-morbid anxiety and depression for therapist-assisted web-based treatment targeting social phobia (Titov, Gibson, Andrews, & McEvoy, 2009c). Taken together, these studies provide compelling support for web-based psychological interventions, particularly when therapist assistance is provided.

Anxiety Online (<http://www.anxietyonline.org.au/>)

A number of web-based interventions have been developed at Swinburne University's 'National eTherapy Centre' for the 'Anxiety Online' program (Swinburne University of Technology, 2011). To access the system, prospective clients are directed to the 'ePASS' system, which is a web-based psychological assessment tool that uses decision tree logic to test the responses of the client against symptom criteria for anxiety disorders. After receiving the automated interpretation of their results, the user is given suggestions for self-guided and therapist-assisted treatment programs offered by the centre. The specific module that each person is directed to is matched to their results on the ePASS. Self-guided interventions are provided at no cost, but the therapist-assisted programs are associated with a small fee. The interventions comprise psycho-educative reading material, worksheets and audio files for structured relaxation tasks. Symptom severity is automatically logged and graphically plotted on a visual display for the consumer to monitor their own progress over the course of the program. At this early stage, there is limited data about the outcomes of this project. This project appears quite promising as it draws together a number of the positive elements of other web-based treatment systems that have proven to be effective.

Interapy (<http://www.interapy.nl/>)

Several high quality randomised controlled trials have also been conducted to measure the efficacy of the therapist-assisted web-based system called 'Interapy'. Like other programs mentioned above, this program from the Netherlands draws on a cognitive behaviour therapy framework to deliver treatment for eating disorders, depression, panic attacks, and various forms of trauma (Interapy, 2010). The assistance of therapists in both cases occurs via email, rather than Internet chat. Therapist-assisted modules for panic disorder show low drop-out rates (13%), large mean effect sizes ($d = 0.7$), with gains that are maintained and improved at

three year follow-up (Ruwaard, Schrieken, Schrijver, Broeksteeg, Dekker, Vermeulen, & Lange, 2010). Likewise, the intensive 11-week Interapy program for the treatment of depression shows low drop-out rates (10%), large pooled effect sizes ($d = 0.9$) and maintained gains at 18 month follow up (Ruwaard et al., 2009). It is noteworthy that this treatment program emphasises the involvement of therapists to maximise positive clinical outcomes.

Summary

Although early reviews reported large effect sizes for self-help interventions (Cuijpers, 1997), this finding has not been borne out by more recent reviews which have found only small treatment effects for self-help (Donker et al., 2009a). Recent reviews such as these are characterised by a broader pool of overall data to draw upon, with more stringent criteria that exclude studies where self-help is provided with the aid of a therapist. Likewise, greater treatment effects have also been linked with web-based interventions that are supported by a therapist, as compared to those that are purely self-guided (Barak et al., 2008). The meta-analytic review by Spek et al. (2007) shows large mean effect sizes for therapist-assisted interventions, by comparison to more moderate effect sizes for web-based interventions that do not involve the active involvement of a therapist. These findings suggest added value to the involvement of a psychotherapist in the delivery of such treatments.

A Social Cognitive Perspective for Relationship Formation On-line

In an attempt to understand the process of relationship formation over the Internet, Walther (1996) critically examined existing theories about social interaction in communications research. He discussed some of the problems with two popular perspectives about on-line relationship formation – perspectives that he named the ‘impersonal’ and the ‘interpersonal’ views. To explain reports that on-line relationships can exceed normal levels

of self-expression with regard to particular aspects of communication, Walther proposed a third perspective about relationship formation over telecommunications – the hyper-personal view. A brief overview of these three perspectives follows.

The ‘Impersonal’ Approach to Internet Relationships

‘Social presence theory’ proposes that the various forms of media that are used to communicate can be positioned along a one-dimensional continuum where those media that have more channels and symbols of communication result in a more detailed and deeper sense of communicating parties being ‘real’ and present with one another (Kehrwald, 2008). Extending from this theory, Daft and Lengel (1986) proposed the ‘media richness theory’ contending that the different sorts of media that people use to express themselves in communication vary according to the ‘richness’ of that mode of communication being used. These theories about the limitations of social expression over the Internet are collectively referred to as the “cues filtered out” perspective (Culnan & Markus, 1987). The essential feature of such perspectives is the view-point that the mode of communication forces a constraint on the quantity and quality of social and emotional information exchanged (Dennis, & Valacich, 1999). Although these theories appear to have sound face validity, researchers have failed to confirm the most fundamental processes they describe (Dennis & Kinney, 1998). The ‘cues filtered out’ perspective also overlooks the collaborative expressive efforts that people make to understand one another.

The ‘Interpersonal’ Approach to On-line Relationships

During the early 1990s, a second view emerged which tried to take into account the findings of research which did not conform to the ‘cues filtered out’ model; namely, the Social Information Processing (SIP) perspective (Walther, 1996). This perspective draws

most of its structure and content from the area of social cognition, putting explicit focus on the efforts of people to express themselves and form impressions about others through a hypothesis testing procedure (Fiske, 1993). The SIP perspective openly acknowledges that the rate at which social information can be transmitted over Internet chat is reduced, mainly as a result of having to type messages. The implication of this theory is that it takes longer for people to form accurate impressions about others over the Internet than face-to-face. It is argued by those favouring the SIP model that although on-line relationships may initially take longer to establish, eventually, the level of relationship development reaches an equivalent standard compared to face-to-face relationships, because the quantity of social information exchanged between people accumulates to a level that can provide reasonably accurate impressions.

There is considerably greater evidence for interpersonal theories about socialisation over the Internet. Walther (1996) points out that collective decision making takes around four times longer to reach a point of consensus when the group interacts online; however, an equivalent number of expressive efforts are made during this time. Other studies also show that when a person expects to have ongoing interaction with someone they are communicating with over the Internet, the level of relationship formation is comparable to face-to-face exchanges (Walther, 1994). Conversely, when people do not expect to have ongoing contact, relationship development is impaired by comparison to face-to-face groups. However, in many cases, people report heightened levels of interpersonal expression over the Internet, which has been difficult to explain using the SIP model. This has renewed theorising about Internet relationships in recent years.

The ‘Hyper-Personal’ Approach to On-line Relationships

Walther (1996) proposed the term ‘hyper-personal’ for theories of relationship formation that account for situations where the desired level of social communication surpasses the level that is normally experienced in face-to-face interaction. The most prevalent theory of this kind is the ‘social identity model of de-individuation effects’ (SIDE), which posits that anonymity changes the relative importance of personal versus collective identity (Reicher, Spears, & Postmes, 1995). The implication of the SIDE model for Internet communication is that when people are not proximal to one another, but yet still able to identify with another person, then positive attributions tend to be made about that other person based on the limited social information that is available. In contrast, when people are not able to identify with the other, negative interpretations tend to be made about them. In both of these cases, it can be seen that the limited amount of social information exchanged during on-line interaction is typically given far greater importance than it otherwise would. That is, impressions can become exaggerated to some extent, with people projecting either their hopes or fears about a person onto them, sometimes with disastrous consequences (Grant & Crawley, 2002).

Further to this, Walther (1996) proposed that people take advantage of the limited information that others have about them when communicating on-line, in order to selectively present themselves in a favourable manner. The features of Internet chat enhance this effect, by allowing people to read through the written record of the conversation to see how they have presented themselves, making socially strategic changes to their expressive efforts in an ongoing fashion. Enhanced control over one’s own presentation adds even more impact to the information that is drawn on to form impressions. With such emphasis placed on the written word and the capacity to exert tighter control over impressions, it is thought that mental attention can be re-allocated away from social apprehensions to some extent (Walther, 1996).

For instance, in the absence of physical appearance, concerns about common prejudices that a person might confront every day might not be so prevalent for some people. Walther contends that through this 'hyper-personal' process of selective self-presentation, idealisation by the receiver, and reciprocated interaction between parties, some people come to feel greater comfort expressing themselves over the Internet.

The hyperpersonal model has received increased attention in the last decade, with a growing level of support for the model in interactions between dyads and groups in social, educational and romantic situations (Walther, 2007). The hyperpersonal model is unique in focusing on how people use technology to afford them advantages to meet their relational needs. Of specific relevance to the present study, is research by High and Caplan (2009) showing that the more socially anxious a person is, the less their chatting partners perceive them to be so over Internet chat communication. In addition, this study found that chatting partners of those who have greater levels of social anxiety were more satisfied with the interaction afterwards. The same pattern was not found for dyads conversing face-to-face, which suggests that Internet chat communication is used particularly well to meet the needs of people who have greater levels of social anxiety.

Recent researchers have also expanded the hyperpersonal model by showing that the disclosure of personal information intensifies the development of intimacy between people using Internet chat communication when the receiver makes the appraisal that the reasons for disclosure are interpersonal (Jiang, Bazarova, & Hancock, 2011). These findings show that in conditions where there is low self disclosure, there are no significant differences between face-to-face and Internet chat communication in terms of developing a sense of intimacy. In both modes of communication, revealing personal information increased overall levels of intimacy; however, in Internet chat communication, this effect is significantly greater. In the study by Jiang et al. (2011, higher ratings of intimacy were associated with the receiver's

interpretation that the reasons for self-disclosure were linked to the relationship they had with the sender, rather than the receiver interpreting the cause as being linked to either the disposition of the sender, or the situational factors of the conversation. In the context of a psychological consultation over Internet chat, this communication modality effect may enhance the development of rapport.

Implications of the Hyper-Personal model for Internet Therapies

During the course of psychotherapy, there is typically an explicit focus on the client and therapist getting to know one another during the earliest phase of interaction (Teyber, 2000). In practical terms, this process is typically about the client and therapist developing a shared understanding about the client's problem area, with the aim of generating a strategy for resolving the problems for which that the client has sought psychotherapy. Due to the fact that client and therapist share a common purpose in discussing the client's difficulties at the outset of Internet counselling, the SIDE model predicts that positive interpretations will tend be made about the limited social information presented during these early exchanges. In other words, one would expect that the shared aim and focus on reaching some understanding of the client's experiences will foster positive projections based on the client's hopes about their therapist, due to the absence of interpersonal cues that could otherwise differentiate client and therapist. Reciprocation may follow, further strengthening the relational bond.

These possible processes take nothing away from potential resistance, for example, in instances where a therapist makes confronting statements. In this situation, early impressions that are built upon the client's idealisation of the therapist could potentially result in powerful objections to ongoing therapeutic work. By the same token, some clients may demonize the therapist (or therapists in general). With enhanced control over expressive efforts, therapists could alleviate the client's concern. Therefore, it is important to explore whether such

idealising or demonizing processes happen during Internet chat therapy, so that appropriate strategies can be put in place to handle these matters.

The Importance of the Therapeutic Alliance On-Line

Clearly, there are some considerable limitations to relationship formation over the Internet (and other telecommunications), which adds weight to criticism about whether effective working relationships can develop. When one logically considers that such technologies rely on the transmission of limited information over a distance, it is hardly surprising that some of the more subtle elements of communication are lost in the process. Whilst the research concerning relationship formation over telecommunication appears to reinforce the notion that psychotherapy could work over cyberspace, more rigorous exploration of the therapeutic relationship is necessary. A major flaw of the position maintained by those who support the idea of therapeutic relationships in cyberspace is the argument that online approaches should not be compared with face-to-face approaches (Anthony, 2000a; Fenichel et al., 2002). The reasoning behind this position is that different modes of transaction between people are qualitatively distinct from one another. However, the paradox with this line of reasoning is that typically those who make this claim employ psychotherapy approaches online that rely on theories about the alliance derived from face-to-face psychotherapy. Due consideration for the long-standing history of process research is required to adequately appreciate the potential therapeutic value of relationships formed online. Without this, appropriate validation of psychological interventions delivered over the Internet is simply not possible.

The Pros and Cons of Internet Therapies

One of the most frequently occurring commentaries across the literature concerning on-line counselling has been the ‘pro versus con’ comparison. That is, the overwhelming majority of articles about on-line counselling have typically discussed the theoretical positive and negative aspects of using the Internet to engage with clients. For instance, there are those who have framed this in terms of ‘benefits’ versus ‘limitations’ (Smith, 2002), ‘advantages’ versus ‘disadvantages’ (Gedge, 2002; Griffiths, 2001; Hunt, 2002), ‘strengths’ versus ‘weaknesses’ (Garcia, Ahumada, Hinkelman, Munoz, & Quezada, 2004), and ‘myths’ versus ‘realities’ (Fenichel et al., 2002). There is much in common throughout most of these commentaries, indicating some areas where there is considerable agreement. A brief summary of these issues is presented below.

Challenging Aspects of Using the Internet to Deliver Therapy

Confidentiality

Confidentiality issues are particularly problematic when engaging with clients over the Internet, mostly due to the fact that clients are not visibly present in the room, as they are in face-to-face counselling. Many writers on the topic have been critical of the notion that hackers may intercept communications over the Internet (e.g., Griffiths, 2001; Hunt, 2002; Smith, 2002), despite the low risk of such interception from external parties, particularly in light of ongoing improvements in encryption software and secure data storage. More likely is the interception by those who can readily access the computer terminal that is being used for online counselling, such as members of the client’s own family. Practical strategies, such as using a password at the outset of each session, could address this problem. In most cases, providers of on-line counselling in Australia tend to clarify the level of security provided through their service (Gedge, 2002).

Risk Management

Due to the distant nature of on-line therapy, risk management issues can be more difficult to address when there are imminent dangers to the client, such as self-harm or violence (Smith, 2002). Although providers of on-line services can attempt to screen out clientele of this nature, there is obviously no way to foresee all the problems that may come to attention across sessions. Laws may differ from state to state, further complicating ethical decisions about whether a therapist should inform appropriate authorities, and under what circumstances (Griffiths, 2001; Hunt, 2002). Therapists offering services over the Internet are bound by the same basic standards on-line as apply in face-to-face contact in most cases (Grohol, 2003). A reasonable approach to the legal issues surrounding this matter is for the therapist to adhere to standards of laws and ethical guidelines that apply to the location of both the client's place of residence and the practitioner's own setting, adopting the most conservative guidelines when in doubt. Obviously, it is important for this to be made transparent to clients who do not reside in the same area as the therapist. Similarly, therapists ought to familiarise themselves with local services available to the client, especially emergency contact points, as well as any particular resources the client might have in addition to this, such as support persons. In order to meet minimum standards of care, therapists may need the same sort of contact information gathered in face-to-face sessions, so that emergency agencies (such as police) can be alerted if need be.

Therapist Qualifications

Verifying the qualifications of a therapist can be difficult at times over the Internet (Fenichel et al., 2002; Gedge, 2002; Smith, 2002). This problem is complicated by the lack of guidelines about the levels of competence required for a person to offer therapy over the

Internet (Garcia et al., 2004). It was argued by Hunt (2003) that due to the popular demand for services over the Internet, along with the willingness of un-trained, un-qualified, and un-professional ‘counsellors’ ready to meet this demand, that trained and licensed professional therapists need to ensure that appropriate services are provided over the Internet. Lack of clarity around competence standards creates a situation where vulnerable members of the community can be exploited (Gedge, 2002; Griffiths, 2001). Therapists who wish to offer services on-line should familiarise themselves with the challenges inherent to this mode of client contact, and to develop skills to address these challenges accordingly. Fenichel et al. (2002) refer specifically to technical computer skills and fluency with expressive writing. In addition, it is advised that therapists use appropriate equipment to obtain and store data from sessions securely, and to become familiar with the nuances of on-line communication. On the personal level, Fenichal et al. note that those with a tolerance for technical glitches and general skills in clarifying verbal miscommunications will probably fare better in working with clients on-line. For clients, Smith (2002) stresses the importance of checking the credentials of on-line therapists through the variety of checking services available on-line.

Limited Information About the Client

Due to the level of control that clients can exert over the way that they present themselves on-line, it can be more difficult to assess the client’s state of mind (Smith, 2002). This can make it hard to assess problems due to incomplete information (Griffiths, 2001). Also, addictive behaviour associated with the Internet could compound their use of the medium, and with greater focus on psycho-educational material, it is possible that information overload could occur without the therapist realising it (Posen, 2003). There are also possibilities for disgruntled clients to initiate harassment or ‘cyber-stalking’ of the therapist in circumstances where the e-mail address or user-name of the therapist is known. Essentially,

these problems show that therapists need to be quite cautious at times about interpreting the limited information they receive from clients.

Misunderstandings

Problems in communication can result in dramatic misunderstandings on-line that otherwise would not occur over other modes of exchange. Simple spelling errors during an introduction may result in a misunderstandings about gender for instance (Fenichel et al., 2002). As mentioned earlier, written communications can be taken as being more serious than verbal communication, resulting in reactivity or guardedness for the reader (Hunt, 2002). Common technical problems, such as the communication line dropping out, or software malfunction, might also be distressing for both parties, especially if these occur during a sensitive moment (Griffiths, 2001). When working across distance, regional nuances in communication can also become more disparate, making disagreements about the meaning of words and phrases more likely (Smith, 2002). Careful attention needs to be paid to developing shared understanding and co-constructing meanings with the client in order to alleviate this problem.

Lack of Empirical Evidence

As has been shown, there is limited information available on the use of Internet chat for the delivery of psychological interventions. Garcia et al. (2004) point out that on-line interventions are generally utilised in conjunction with face-to-face counselling, rather than acting as a substitute for these services, and that many clients may not be suitable candidates for on-line therapy. They also note that the purely on-line clients are difficult to follow up later for research projects and researchers in the area often work in isolation from one another. While the emerging evidence is generally in favour of on-line interventions, many factors

remain unclear, despite some claims that on-line therapies are ‘evidence-based’ (Infrapsych, 2002). A related issue is that apart from a few exceptions, there are relatively few training programs based on a solid empirical basis that are available for on-line therapists to adapt their psychological techniques for use over the Internet. The lack of specific training in this area may affect the overall quality of service provision.

Positive Aspects of Using the Internet for Therapy

Improved Access and Convenience

The most frequently cited advantage of using the Internet for psychological purposes is to expand public access to psychological services (Griffiths, 2001). Wherever there are computer terminals linked to the Internet, there is the potential for services of some sort to be delivered to health consumers, whether that be the basic provision of education materials, or a more thorough consultation with a health professional (Smith, 2002). Demand for on-line counselling services is high, and with its ever increasing popularity, the Internet is an important vehicle for the promotion of psychological information and services into the future (Hunt, 2002; Martin, 2003). By breaking down the barriers imposed by spatial distance, the Internet allows clients in distant locations to locate specialists with skills to meet their particular needs, thereby expanding their choices (Fenichel et al., 2002; Kazdin & Blase, 2011; Martin, 2003; Smith, 2002). An obvious but often overlooked advantage that improves access for the public is that on-line counselling is much easier for the hearing impaired to use (Fenichel et al., 2002). Due to the widespread use of the Internet across a range of settings, and in particular, the presence of computers at home, clients may utilise psychological services at a time and place that is most convenient for them (Fenichel et al., 2002; Griffiths, 2001; Hunt, 2002; Smith, 2002). Internet chat groups and forums may also serve as an important link for distressed people to connect with mental health care practitioners (Stofle,

2002). In addition, therapists can draw on a range of psycho-educational, assessment and interactive resources available over the Internet during on-line consultations (Fenichel et al., 2002). Even so, those in remote or disadvantaged areas tend to have restricted access to the Internet in Australia (Martin, 2003) and that there are many people in the community who either lack the means to access, or are inappropriate candidates for counselling on-line (Garcia et al., 2004; Gedge, 2002; Smith, 2002).

Cost Effectiveness

Another important advantage to using the Internet as a means to engage with clients is that first consultations can happen quickly and with minimal expense for the client (Garcia et al., 2004). In terms of both prevention and early intervention, this is highly valuable for the community. Services provided on-line generally cost less and do not require transportation costs for both clients and therapists (Griffiths, 2001; Hunt, 2002). Sometimes, however, payment structures can be complicated and psychologists could find themselves working longer for less financial reimbursement (Griffiths, 2001). In terms of psycho-education or computerised systems used in conjunction with face-to-face therapy, such interventions can be delivered on a massive scale for prevalent mental health issues at little to no cost. Kazdin and Blase (2011) suggest that use of the Internet for therapeutic contact may help clients find an appropriate match to a therapist and save public resources by freeing up therapists to engage with those who are most in need, by utilising self-guided and minimal-support interventions online.

Sense of Safety and Client Openness

As previously discussed, some clients may have a tendency to reveal more of themselves on-line than they would face-to-face, due to an increased sense of safety and

control when using the Internet (Smith, 2002). Having the means to bypass some of the usual inhibitions experienced during personal transactions, makes it more likely that shy, introverted, or socially phobic individuals will receive counselling when they need it (Fenichel et al., 2002). The anonymity offered by some services can make it easier for clients to make important self-disclosures that could potentially save the lives of those who choose to reach out for help over cyberspace during a moment of crisis.

There are some challenges with this distant way of relating, in that rapport can be difficult to manage across time and local referral can be problematic for practitioners who are unfamiliar with services in the client's region (Griffiths, 2001). Also, therapists have been known to find on-line work isolating at times (Fenichel et al., 2002) and it is possible that some highly distressed people in the community could refuse to consult a psychologist in person, because they already have access to on-line support (Gedge, 2002). It is important to recognise, however, that many clients are unlikely to access a psychologist at all if not for those services that grant them a greater sense of security and control.

Having a Detailed Record

In each session during on-line counselling via synchronous chat, a log of the dialogue is generated on each user's screen, which is typically recorded as part of the case notes by the therapist. Having a detailed record makes it possible for therapists to check exactly what was said in prior sessions, which can be used in number of positive ways (Smith, 2002). For example, a therapist could note significant changes in the structure of a client's thinking processes, or reflect on problematic patterns in the therapeutic relationship. Similarly, clients sometimes keep their own records of each session to reinforce particular messages after the session and gradually internalise what was expressed at a more manageable pace (Fenichel et al., 2002). Although keeping records of this kind may increase accountability and make

clinical supervision easier, it also has the potential to be misused or to expose therapists to greater legal risks (Gedge, 2002; Hunt, 2002). For this reason, some guidelines about on-line practice recommend that the joint consent of client and therapist must be sought for session transcripts to be seen by outside parties (e.g., International Society for Mental Health Online, 2005).

Summary of Pros and Cons

Although the challenges and limitations of on-line therapy are considerable, there are advantages of offering services over the Internet. In particular, use of the Internet (and other telecommunications) appears to be essential in this era to ensure that those who would otherwise not engage with a therapist receive the most appropriate care possible. This means that those psychologists who want to harness the Internet must work within the limitations of this medium and harness the strengths of this mode of service delivery. In basic terms, practitioners need to appreciate the depth of issues concerning confidentiality, risk management, qualification standards, deception, misunderstanding and the lack of evidence about appropriate on-line practices – in addition to usual ethical considerations. At the same time, therapists working on-line should develop special skills in using the limited, but nonetheless, powerful tools they have available to help those clients who choose on-line therapy. In this regard, working as an on-line therapist would seem to require an additional set of skills especially suited to this mode of service delivery. This is consistent with the position of Stofle (2002), that for these alternative forms of therapy to be more widely accepted by clients and practitioners, new techniques should follow the existing principles that apply to traditional face-to-face therapy, as closely as possible.

Conclusions

Traditional views maintain that psychotherapy requires face-to-face interaction to be effective and that psychotherapy would be rendered ineffective over the Internet (Kalb, 2001; Sanders & Rosenfield, 1998). The most common rationale behind this is that the subtleties of non-verbal cues are impaired by the modality of communication when counselling occurs over the Internet (Robson & Robson, 1998). This view is counter-balanced by several factors.

First, people seeking therapy of this kind often do so by choice, selecting a mode of therapeutic contact which is less confronting for them. While face-to-face therapy offers therapists the means to help most clients feel at ease, some clients are so guarded when they are faced with a therapist, that it may render therapeutic interventions of little value. For these people, counselling at a distance provides safety in the sense that they can access services whilst in their own controlled environment and without exposing themselves to interpersonal cues that they find distressing (Coman et al., 2001).

Second, people are generally aware of the limitations of the Internet and therefore cannot be considered passive agents in their efforts to express themselves. As such, expressive acts over the Internet reflect consideration for the limitations presented by the mode of communication. For example, during a telephone conversation, speakers rarely presume that listeners are aware of events occurring on the opposite end of the line. Instead, people adapt their way of communicating to suit the medium and are able to exert some control over how they present themselves (Hancock & Dunham, 2001; Walther, 1996). Critics arguing that communication technology prevents client and therapist from relating effectively do not seem to account for the adaptations that people make over the Internet.

Third, despite limitations to the cues available, non-verbal information is usually still detectable, albeit in a different form. Whilst expressive body language and other interactive behaviours (like passing a tissue) are not possible, cues such as timing, intonation, and other

signs of emotional expression are still typically evident in one form or another. Some psychologists have claimed that effective paralanguage is simply not possible over these mediums, despite the adaptive efforts made to enhance communication. Robson and Robson (1998) for instance, argue that adaptive efforts are unlikely to adequately address the loss of non-verbal cues. Although the loss of most non-verbal cues is clearly important, current research shows the integral role of paralanguage across the various forms of telecommunication (Hancock & Dunham, 2001). Despite resounding criticisms about the limitations of on-line communication, there is an emerging body of research describing the ways that people adapt their communications to effectively relate with one another over the Internet.

The use of telecommunications for psychotherapy clearly presents some formidable challenges for psychologists. With fewer modes of information exchange, the attention of client and therapist is drawn to the limited information presented (Reese et al., 2002). In a review of research concerning the therapeutic use of videoconferencing for instance, Jerome and Zaylor (2000) explored the qualities of transactions where sight and sound were the only information available. Although in some cases sophisticated technology has been used to facilitate therapy, the behaviour presented through videoconferencing is emphasised at a perceptual level and masks some behaviour that is off-camera. These findings align with what we know from other forms of telecommunication, in that when limited cues are available, people focus more on the immediately apparent information at the expense of other factors (Hancock & Dunham, 2001; Reese et al., 2002).

On the whole, early research about the development of psychotherapy relationships over the Internet appears to be promising. Although some processes seem to take longer on-line, impressions and relationships develop rapidly, and in certain circumstances, they reach levels of depth that compare favourably to face-to-face relationships. One explanation for this

is that exaggerated impressions are typically formed when people engage with others over limited modes of communication, like Internet chat. To clarify these processes, much more detailed assessment of alliances that form on-line must be conducted. By developing greater knowledge about the distinctive features of working relationships that form over Internet chat, practitioners who choose to work with clients over the Internet can be informed about how they should manage the therapeutic alliance, in clinically meaningful terms.

Drawing together the theories and research about Internet chat communication and web-based psychological interventions, there are some clear advantages for a client in having face-to-face contact with a psychotherapist. Despite Internet chat conversations feeling more personal (McKenna et al., 2002) with a tendency for most communicators to idealise the other party (Bargh et al., 2002), there is evidence that people using Internet chat feel more distant from one another and experience more conflict in their exchanges (Mallen et al., 2003). In addition to the evidence of greater treatment effects being associated with greater involvement of therapists, there are strong theoretical reasons why one might lean towards the position that face-to-face psychotherapy is superior. Ultimately, it needs to be appreciated that psychotherapy itself has been developed over the years for the face-to-face context, which is why adaptations need to be made to these techniques for use over the Internet in the first place. While there are several decades of empirical research in support of psychological interventions delivered in person, Internet therapies are a relatively recent development with only tentative support. Regardless of the adaptations that people make to the medium, in the end there is still less information exchanged over the Internet. Even so, research in this area is both promising and critical as we see growing numbers of people choose to reach out for help over the Internet.

Addressing the Gaps

There are a number of missing pieces of information in the research about the use of Internet chat as a communication tool for the delivery of psychological interventions. The most important current shortfall is the lack of a direct comparison of treatments delivered face-to-face by comparison to those delivered over Internet chat. This information is critical, because researchers currently do not know how the processes and outcomes of this mode of service delivery actually correspond with the usual patterns seen in conventional forms of treatment. This is a pressing issue for Internet chat in particular, due to the widespread use of instant messaging and other similar forms of interaction that continue to grow in popularity. With more psychological services being delivered in this way, researchers and practitioners need to know more about how to develop and utilise these services.

Previous studies have also struggled to obtain large enough samples of clients and have had a limited number of therapists providing services over Internet chat, which has resulted in underpowered statistical analyses. This has made it difficult to generalise across to the broader population of people who would typically access such services, or to extend the findings to therapists other than those who have a special interest in the area. These problems have also resulted in underpowered statistical results.

Relatively few studies have investigated bona fide therapy situations, where the client has actively sought therapeutic services via Internet chat to address their psychological distress. Although several prior researchers have attempted to simulate some of the conditions of therapy (such as chatting with a stranger), or used random allocation to control factors related to the modality of communication, both of these forms of research do not genuinely reflect the way that people access therapy over Internet chat across broader society. Allowing clients to self-select their preferred form of communication, and receive therapy from a large

and consistently trained group of therapists, will make it possible for modality effects to be investigated more comprehensively.

Another considerable gap in the literature is the fact that different researchers have focused on different aspects of therapy, with some researchers investigating process variables and others looking at outcomes. To date, the available research has tended to explore either client or therapist factors, but generally not both. It is important to assemble information about both the processes and outcomes of therapy over Internet chat, to clarify how therapy might function when delivered over this distinctive form of communication.

The next logical step in research is to compare Internet chat and face-to-face interaction directly, with the same group of therapists providing services over each of these modalities. Taking measures of process and outcome in both treatment groups will allow for a consistent comparison of key variables of interest that come to bear on the effectiveness of these therapy approaches. Given the exploratory nature of this early research, qualitative information about the experience of undertaking psychological therapy over Internet chat is also important to obtain from both the perspective of therapists and of clients.

Chapter Two

Study 1: Alliance and Outcomes of Internet chat therapy

Introduction

This study compares the effectiveness of psychological interventions applied across two different modes of service delivery: face-to-face therapy and Internet chat. Therapists applied psychological techniques to clients who self-selected for either Internet or face-to-face therapy, with all therapists from the face-to-face condition providing services in the Internet chat condition with an additional three therapists. This research focused on early outcomes over the first three sessions of psychotherapy, given that Internet chat therapy often spans a brief period of client contact (Richards, 2009). A critical question in this study was whether assessment of the therapeutic alliance using a comprehensive measure would show a similar pattern over the first three sessions in both treatment groups. Understanding how such process variables apply over the Internet is critical to the question of how techniques for managing the alliance and addressing therapeutic ruptures translates to the context of Internet chat communication. In addition, symptom severity measures were used in this study to investigate clinical outcomes for both treatments. A direct comparison was made between Internet and face-to-face treatment groups in order to assess the effectiveness of this new approach by comparison to traditional forms of psychological intervention.

Given that face-to-face psychotherapy has a long applied history and that therapists are more familiar with how to employ psychological interventions in person, it is predicted that face-to-face therapy will show greater levels of client improvement in symptom severity. In a similar way, due to the ease of both verbal and non-verbal communication in a face-to-face therapeutic encounter, it is predicted that superior therapeutic alliances between client and

therapist will form over face-to-face therapy. The hypotheses for this research are outlined below.

Hypotheses

There are two conceptually distinct sets of hypotheses: One set makes predictions about the session effects (Session 1 versus Session 3), and the other makes predictions about the modality effects (Internet versus face-to-face).

Session effects

H1a: In both the Internet chat therapy group and the face-to-face therapy group there will be a statistically significant increase in client-rated therapeutic alliance from Session 1 to Session 3.

H1b: In both the Internet chat therapy group and the face-to-face therapy group there will be a statistically significant increase in therapist-rated therapeutic alliance from Session 1 to Session 3.

H1c: In the Internet chat therapy group there will be a statistically significant increase in observer-rated therapeutic alliance from Session 1 to Session 3.

H1d: In both the Internet chat therapy group and the face-to-face therapy group there will be a statistically significant reduction in client-rated symptom severity ratings from Session 1 to Session 3.

H1e: In both the Internet chat therapy group and the face-to-face therapy group there will be a statistically significant reduction in therapist-rated symptom severity ratings from Session 1 to Session 3.

Modality effects

H2a: After Session 3, clients receiving face-to-face therapy will rate therapeutic alliances significantly higher by comparison to clients receiving Internet chat therapy.

H2b: After Session 3, clients receiving face-to-face therapy will rate their symptom severity significantly lower by comparison to clients receiving Internet chat therapy.

H2c: After Session 3, therapists will rate the therapeutic alliances significantly higher with their face-to-face clients by comparison to their Internet clients.

H2d: After Session 3, therapists will rate symptom severity significantly lower with their face-to-face clients by comparison to their Internet clients.

Participants

In total, 176 people registered their interest to participate as clients across the data collection period. Participants were primarily drawn from the Curtin University Adult Psychology Clinic in response to newspaper articles (Appendix A) and advertisements offering free services (Appendix B). Drawing the sample from a single site connected to the university where this project was being run, allowed for greater ease of data collection and more control over the procedure, as described in the 'Procedure' section that follows. Of those who lodged their details, 115 people provided enough contact details to be sent a participant pack. Therapists were allocated to 97 participants who verified receipt of materials in the mail. There were 69 clients who started Internet counselling, 16 of whom later withdrew. The remaining 53 Internet chat therapy clients were distributed across 20 therapists; 25% of the Internet therapists saw just one client. Seventeen of the 20 Internet therapists were also involved in face-to-face therapy; 75% of the therapists saw just one client face-to-face. In order to apportion equivalent weighting to therapist and client data across the two modalities,

therapists who saw multiple face-to-face clients randomly selected one face-to-face client each for inclusion in the sample. The sample therefore consisted of 20 Internet therapist-client pairs and 17 face-to-face therapist-client pairs; each of the 37 clients was distinct; however, the 17 face-to-face therapists also took part in the Internet condition.

The gradual attenuation of the sample was associated with variety of factors linked to each stage of the process. At the registration stage, a third of those who had provided identity and contact details could not be verified. Prior to mailing out materials, a number of people reported technical problems that would prevent them from participating. Once the materials were received, there were some whose circumstances had changed and were no longer able to make an appointment during working hours. At the point of allocation to therapists, most of those who withdrew were either no longer interested in taking part or they had begun seeking face-to-face services elsewhere. Those who withdrew after starting Internet counselling provided a range of individually specific reasons, such as experiencing serious health issues, a death in the family, or not forming a good working alliance with their therapist.

The sample of 37 client participants was comprised of 12 males and 25 females. A larger proportion of males were in the face-to-face client group, forming 47% of the sample, with only 20% of Internet clients being male. Client participants ranged in age from 20 to 59 years, with a mean age of 38.92 years across both the Internet and face-to-face groups. The composition of each group in terms of age was almost identical with a mean of 38.93 years in the Internet client group and 38.91 years in the face-to-face client group. Consistent with the call for client participants experiencing a broad range of difficulties, the clients presented with a variety of psychological problems as evident from baseline measures of symptom severity using the BSI (see Table 4, page 91). All clients were assigned to their preferred modality of receiving treatment, either choosing Internet chat therapy or face-to-face therapy.

There were 20 therapists who contributed to this research, recruited primarily from Curtin University Adult Psychology Clinic. No specific age data were collected from the therapists; however, the group was comprised of people in their mid-20s through to late 40s. All of the therapists had been trained in cognitive-behavioural therapy (CBT); however, some of the therapists had also been exposed to other psychotherapy styles in previous work. The interventions used in both treatment groups was predominantly CBT. In the Internet chat therapy group, this was confirmed by viewing the recorded transcript of chat sessions. In several instances, therapists also revealed discussing CBT formulations during supervision for face-to-face cases, as a point of comparison to their online work. The therapists were provided with individual supervision for all cases. Therapists were primarily recruited as part of their post-graduate placement in the Master of Clinical Psychology training program at Curtin University. Therapists were not paid for their involvement, but rather, volunteered in the research to gain experience in a novel treatment approach.

Measures

California Psychotherapy Alliance Scale (CALPAS)

The CALPAS was used to measure the therapeutic alliance in this study (Gaston & Marmar, 1991). This 24-item Likert scale measure takes between 5 and 10 minutes to complete and is done at the end of each session to maximise recall. The CALPAS yields both a total alliance score and a score for each of the four subscales: Patient Working Capacity, Patient Commitment, Working Strategy Consensus, and Therapist Understanding and Involvement. The internal consistency of the four subscales of the CALPAS shows Chronbach's alpha coefficients ranging between .95 and .97 (Gaston & Marmar, 1991). Alliance measures have been shown to be equivalent in their association with therapy outcomes (Horvath & Symonds, 1991) and are considered to draw on different aspects of the

same underlying phenomenon (Cecero et al., 2001). There are moderate to high inter-correlations between similarly defined sub-scales of different measures and the quality of client-therapist interactions is responsible for the largest proportion of alliance ratings (Price & Jones, 1998). Hatcher and Barends (1996) note a strong general factor common to alliance measures, supporting the notion that the therapeutic alliance can be considered unidimensional (Horvath & Greenberg, 1989). Of the different measures used for the working alliance, the CALPAS is considered to be more direct, eclectic in orientation, and inclusive of a wider range of factors such as warmth, understanding and emotional engagement (Cecero et al., 2001; Ogles et al., 1996). The CALPAS includes client, therapist and observer-rated versions that have similar psychometric properties (Gaston & Marmar, 1991).

Brief Symptom Inventory (BSI)

The BSI is a self-rated 53-item measure of symptom severity, taking between 5 to 10 minutes to complete. The BSI is typically preferred as a shorter version of the widely applied SCL-90 (Morlan & Tan, 1998; Ogles et al., 1996; Vahle, Andresen, & Hagglund, 2000), particularly as a measure of general symptom severity. The BSI has shown strong internal consistency with Chronbach's alpha coefficients ranging between .71 and .85 for subscales (Boulet & Boss, 1991). The Global Severity Index for the BSI has excellent test-retest reliability with a coefficient of .90 demonstrating the stability of this measure. The BSI has subscales measuring the symptom dimensions relating to somatisation, obsessive-compulsive disorder, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoia and psychoticism.

Symptom Checklist 90 Analogue (SCL-90 Analogue)

The SCL-90 Analogue provides therapist ratings of symptom severity. This measure is a 'visual analogue scale' version of the SCL-90, using the same symptom dimensions as the BSI. Although the SCL-90 Analogue has only been used in a limited number of studies, it was used because it is specifically designed for use by practitioners who do not have in-depth knowledge about psychopathology. In the first phase of data collection some of the therapists did not have a background in psychology, so it was important to ensure they could supply meaningful ratings of symptom severity. With brief training in the subscale dimensions, the SCL-90 Analogue has been found to have excellent inter-rater reliability (Fals-Stewart, Lucente, Shanahan, & Brown, 1995).

Procedure

Data collection was broken down into two phases in order to build the sample to a sufficient level. In both phases, the client group, the modes of service delivery, and the treatment, remained consistent. The client participants self-selected for inclusion in the study to receive either Internet counselling or face-to-face counselling for up to five therapy sessions. Therapists provided psychological services in both treatment conditions, with a case-load of Internet clients and face-to-face clients. The measures assessed the working alliance and symptom severity levels at the first and third session only. Ratings for each of these measures were provided by both clients and therapists. All measures were administered in paper and pencil (hard-copy) form.

Phase 1

An agreement was established between the researcher and a counselling agency to undertake an evaluation of their 'e-counselling' service in 2004. The agency assumed

responsibility for recruitment to the study and the delivery of questionnaires, with the aim of protecting the confidentiality of each participant. All materials for the research were provided to the counselling agency in bulk to be distributed. Administrative staff members were thoroughly briefed on the procedure for accurate distribution of participant packs.

Phase 2

Due to the small number of participants involved in the first phase, a decision was made to open the study up to other agencies which expanded the rate that services could be delivered by involving more therapists. In the second phase of data collection, the researcher developed an encrypted web-based chat system to turn the research into a multi-site study. An encrypted web-based chat system was embedded into a website developed for the research project to provide a location for both recruitment and participation in the study. For ease of implementation and control over the data, the services of clinical psychology trainees on placement at the Curtin University Adult Psychology Clinic formed the initial pool of therapists. Although there were a number of meetings with several large counselling agencies who had expressed a keen interest in taking part, ultimately none of these groups joined the study.

Advertising and Promotion

Just prior to the first wave of data collection in 2005, a call for participants was promoted over newspapers, magazines and radio (e.g., Appendix A). In the first phase of data collection a telephone number for the counselling agency was provided as the contact point for people interested in taking part. The call for participants specifically asked for people over 18 with a genuine problem for which they would like to talk to a therapist about. After the low rate of returned questionnaires from the first wave of data collection, efforts to promote

the study were boosted substantially. It was unclear how successful the prior promotional efforts had been due to the fact that the agency handled the initial point of contact in the first wave. To optimise the recruitment of participants to the study, a decision was made by the researcher to administer the first point of contact for all subsequent phases of data collection. This allowed each case to be monitored from the initial expression of interest to case allocation and through to completion. The second promotional campaign directed participants to the recruitment webpage. In addition to print media and radio, the researcher also hired a graphic designer to create a set of promotional fliers and posters to be distributed across the health sector and notice boards at all university campuses in WA (Appendix B).

Delivery and Return of Questionnaires

The participant packs that were provided to clients contained two sets of questionnaires. The first set was completed at the end of the first session, and the second was completed at the end of the third session. All questionnaires were returned to the researcher either by direct post or via deposit boxes located where counselling services were delivered. Clients who received Internet chat therapy were given the instruction to place questionnaires into a reply paid envelope (provided in their pack) as soon as they completed all questionnaires and to deposit that envelope in their local post-box. In a small number of cases, follow-up calls were made to clients who had received services but did not initially return their questionnaires. In most of these cases the materials were returned a few days after the follow-up telephone call.

Materials

There were four distinct packs provided to participants involved in this research, namely: (1) Internet clients, (2) Internet therapists, (3) face-to-face clients, and (4) face-to-

face therapists. Each participant pack contained an information sheet (see Appendix C), instructions (see Appendix D) and questionnaires. Internet counselling clients also received a quick reference card that provided a distinct username and password to log-in to the 'Virtual Waiting Room'. A reply paid envelope was contained in each Internet client participant pack to encourage clients to return all completed materials to the researcher. Each set of questionnaires contained a measure to rate the therapeutic alliance and a measure to quantify symptom severity. Participants in the Internet chat therapy condition were also asked to indicate how many hours in total they had spent on the computer that week.

Materials were coded in terms of the session number, the modality of treatment, and the identification of each client. This made it possible for the researcher to track each specific case across the course of therapy. This also allowed the data contributed by each therapist to be linked to the rest of their cases in the study. For the Internet counselling clients, this coding of materials made it possible to match the specific ratings of each therapist and client to an automatically generated transcript of each Internet session. In turn, this meant that the transcript could be scored by the researcher independently using an assessment tool that rates the therapeutic alliance from an observer's perspective. Hence, each case in the Internet condition had triangulated data about the therapeutic alliance, derived from client, therapist, and observer-rated measures.

Client Participant Registration

On arrival at the website, prospective participants lodged their interest by clicking on a button marked 'Register Here' which linked to a page explaining the limitations of the research. This provided information about data security, the limitations of disclosure, and some information about the qualifications of therapists providing services. Those who proceeded to the next page were briefed on the information they would need to provide in

order to take part. There were three main points of information requested here: postal address, name and address details to be verified through the electoral roll, and both telephone and email contact details. Those who proceeded were then directed to a form where they could provide all of those details. All data entered on this form was transmitted securely. Step-by-step instructions were given to each registrant following the submission of information on the research website.

As each participant confirmed the receipt of their materials in the mail, an intake sheet was created to provide their contact details to the counselling agency (Appendix D). These were manually delivered by the researcher to the counselling agency so that each case could be allocated. Once each client was successfully allocated to their therapist, the researcher simply monitored the process with regular site visits to the counselling agency. Services were provided to clients free of charge for up to 5 sessions in exchange for their time and data.

Preparing the Therapists

Prior to the delivery of Internet chat therapy sessions, the therapists undertook a structured training session briefing them on the work ahead. Therapists were familiarised with the measures used in the study and provided with opportunities to rate videotaped sessions, to practice applying the measures to content from an actual psychotherapy session. In each case, calibration of measurement ratings using the therapeutic alliance scales was successfully achieved within a few trials. Therapists were briefed on the typical style of communication on Internet chat as well as the use of emoticons, 'netiquette' and some of the popular theories about ways to adapt psychological interventions to the Internet. Ethical limitations and risk management protocols were discussed in detail to alleviate some of the initial reservations that some therapists had about working on-line. All training was conducted by the researcher.

In total there were five therapist training sessions. Although 60 therapists attended training sessions from the counselling agency that developed the 'e-counselling' service, only three therapists participated in the first wave of data collection. Further training sessions took place with the clinical psychology trainees at Curtin University, attended by 24 therapists. From this smaller but more focused group, a total of 17 therapists contributed data to the sample.

The Intervention

For the face-to-face treatment condition, counselling services were provided on-site at Curtin University's Adult Psychology Clinic. Each client booked appointments through reception and then attended in person at the clinic. Each client participant was offered a total of five counselling sessions. Quantitative measures applied to Session 1 and Session 3 only. The rationale for this decision was that data from large-scale naturalistic studies reveal that three sessions is the median length of treatment in the general community (Hansen, Lambert, & Forman, 2002) and meta-analytic reviews show that early estimates of the alliance are the most robust predictor of treatment outcome (Horvath & Symonds, 2001). Previous researchers have identified that the third session is the optimal point of reference to estimate outcomes from the alliance (Horvath & Luborsky, 1993). The additional sessions offered to clients were provided so that closure and appropriate referral could take place where required.

Clients receiving therapy over the Internet used a web-based chat interface, requiring both client and therapist to login with their username and password to begin. Over Internet chat communication, people type what they would like to communicate to the other party inside a 'message box'. When they hit the enter key or click 'send' their message appears in a dialogue box next to the alias they have chosen for the conversation. The dialogue box

provides an ongoing record of the conversation and reads much like a theatrical script. For an example of such a display, see Appendix E.

In both the Internet and face-to-face modes of service delivery, treatment was provided in accordance with the presenting difficulties of the client rather than the mode of service delivery. Therapists employed essentially the same techniques over the same period of time (one hour sessions), adapting their preferred techniques at their own discretion to suit the medium and the needs of each client. Transcripts from Internet chat therapy sessions indicated that a typical session lasted between 50 to 70 minutes in duration and was comprised of approximately between 1000 to 1500 words. Given that Internet chat brings attention to the structure and content of words in a dialogue, it was thought that a cognitive approach might lend itself to this form of service delivery in that CBT engages directly with specific statements that people use (Beck, 1995). All of the participating therapists had some training and experience with CBT interventions.

Research Design

There were 20 client-therapist pairs for each of the two Internet sessions (Session 1 and Session 3), and 17 client-therapist pairs for each of the two face-to-face sessions. Therapists 1 to 17 appeared in each of the four cells of the 2 (Session: 1, 3) x 2 (Modality: Internet, face-to-face) design. Each of the two Internet sessions included three additional therapists, 18, 19 and 20. The Internet clients were different to the face-to-face clients, so Modality was interpreted as a *between*-subjects factor. Within modalities, however, Sessions 1 and 3 featured the same therapist-client pairs. Session was therefore interpreted as a *within*-subjects factor. The classification of Modality and Session as between- and within-subjects factors was consistent with the pattern of correlations in the data. Within each of the two therapy groups, and for each of the four client and therapist rated measures, Session 1 scores

were significantly (and strongly) correlated with Session 3 scores. In contrast, for the 17 therapists common to both modalities, Internet chat therapy scores were not significantly correlated with face-to-face therapy for both Sessions 1 and 3.

Data Analyses

Four outcomes measuring client and therapist perspectives of the alliance and symptom severity were analysed as a congeneric set of outcomes using a 2 (Session: 1, 3) x 2 (Modality: Internet, face-to-face) multivariate analysis of variance (MANOVA). A univariate 2 x 2 analysis of variance (ANOVAs) was conducted on each of the four outcomes in order to investigate the significant multivariate effects, following a significant MANOVA result.

Evaluation of the alliance using the observer-rated version of the CALPAS was only possible for the Internet chat therapy treatment group due to the fact that a transcript of the session was generated automatically. That is, no session transcripts were available for the face-to-face treatment group. With the joint permission of both client and therapist, a total of 15 cases were made available for this analysis. The hypothesis applying to the CALPAS-R (H1c) was therefore tested using a one-way repeated-measures ANOVA across sessions, limited to the Internet chat therapy group.

In addition to standard hypothesis testing procedures, a Reliable Change Index (RCI; Jacobson & Traux, 1991; McGlinchey, Atkins, & Jacobson, 2002) was calculated for each client to determine whether the magnitude of changes in their symptom severity reflected more than the random fluctuations of unreliable measurement instruments. The following formula is used to calculate the RCI: $x_1 - x_2 / S_{diff}$. In this equation, x_1 and x_2 reflect a client's pre (i.e., Session 1) and post-test (i.e., Session 3) scores and S_{diff} represents the standard error of difference between the two test scores. An absolute RCI greater than 1.96 is deemed to

reflect a reliable change and hence, reflects a real change in the score rather than measurement error.

Reliable changes were then tested for clinical significance (Jacobson & Traux, 1991; McGlinchey et al., 2002), and the two groups compared in terms of the proportion of cases showing clinically significant improvement. Testing for clinical significance involves classifying changes in symptom severity in terms of the client being ‘recovered’, ‘improved’, ‘unchanged’, or ‘deteriorated’. Using this classification system requires cut-off points to be calculated. Three possible cut-off points are suggested in this system. Cut-off *point a* is where the post-treatment (i.e., Session 3) score falls at least two standard deviations beyond the mean of a dysfunctional population. Cut-off *point b* is where the post-treatment score falls within two standard deviations of the mean for the functional population. Cut-off *point c* is where the post-treatment score places that client closer to the mean of the functional population than it does to the dysfunctional population. Jacobson and Traux (1991) suggest that cut-off point *c* is the most preferable to use when norms are available for both the dysfunctional and functional populations.

The clinical cut-offs are used in conjunction with the RCI in the following manner. Clients can be categorised as ‘recovered’ when the RCI is greater than 1.96 and their post-treatment score is in the functional range, with the exception of cases that are in the functional range to begin with. If the RCI is above 1.96 but is not within the functional range, the client is categorised as ‘improved’. Where neither condition is met, the client’s condition is categorised as ‘unchanged’. In cases where the RCI is greater than 1.96 but the score has moved towards the dysfunctional population, the client’s condition is classified as ‘deteriorated’. Each client’s symptom severity score on the BSI was tested for reliable change and clinically significant change, and chi-square tests were conducted to determine whether

the two groups (Internet versus face-to face) differed in the proportions of cases showing reliable change and clinically significant change.

Results

Assumption Testing

Normality testing

Skewness and kurtosis were assessed for each dependent variable to identify violations of the assumption that the data is normally distributed. For both the skewness and kurtosis, each raw score was converted to a *z-score*, where a score over 1.96 is significant at the $p < .05$ level.

A positive skew was detected for client rated alliance (CALPAS-P) at the third session ($z = -2.81, p < .05$). This is what one would expect if the hypotheses of this research were confirmed. Likewise, the therapist-ratings on the CALPAS-T were positively skewed at Session 3 ($z = -3.81, p < .05$) in addition to being in a significantly leptokurtic distribution ($z = 7.78, p < .05$). These figures indicate that by the third session a high proportion of therapists rated the alliance positively. A visual assessment of histograms and probability-probability plots showed that the data were in the expected near-normal range.

Homogeneity of variance

Levene's statistic was calculated on all of the dependent variables used in the two-way repeated measures ANOVA to test for the assumption of homogeneity of variance. For all client and therapist rated measures, the figure generated for Levene's statistic was non-significant. Hartley's F_{\max} was calculated to verify this result (Keppel, 1991) obtaining a variance ratio below the critical *F*-ratio of 4.08 for this sample size: $F(1,37) = 2.59, p > .05$.

Demographics

Basic demographic information about the participants in this study was obtained with each questionnaire, limited to the age and gender for each participant. It should be noted that in some cases, participants did not provide this information. The tables below summarise the demographic details.

Table 1

Age of the Overall Sample and Each Treatment Group

Participants	<i>n</i>	<i>M</i>	<i>SD</i>	Lowest	Highest
Internet chat therapy	20	38.93	9.98	20	56
Face-to-face therapy	17	38.91	11.92	21	59
Overall sample	37	38.92	10.63	20	59

Table 2

Gender of the Overall Sample and Each Treatment Group

	Internet Chat Therapy		Face-to-face Therapy		Overall Sample	
	Males	Females	Males	Females	Males	Females
Number	4	16	8	9	12	25
Percent	20%	80%	47.1%	52.9%	32.4%	67.6%

Table 3

Hours per Week Spent on Internet by Participants in the Internet chat Group

Hours/Week on Internet	Frequency	Percent
0-2 hours	0	0%
3-5 hours	6	30%
6-10 hours	6	30%
11-20 hours	6	30%
Over 20 hours	2	10%

Table 4

Mean Hours per Week Spent on Internet by Internet chat Group across Sessions

Stage of Therapy	Hours per Week
Session 1	11.15
Session 3	12.05

Table 5

Baseline Symptom Severity on the Brief Symptom Inventory for Each Treatment Group

	Internet Chat Therapy		Face-to-face Therapy		Positive Diagnosis Cut-off*
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Somatization	0.89	0.81	0.94	0.59	0.70
Obsessive-Compulsive	1.73	0.85	1.94	0.93	0.99
Interpersonal Sensitivity	1.91	1.16	1.73	1.23	0.78
Depression	1.83	0.84	1.76	1.22	0.66
Anxiety	1.48	0.88	1.64	1.08	0.70
Hostility	1.29	0.90	1.20	1.09	0.83
Phobic Anxiety	0.69	0.81	1.12	1.07	0.38
Paranoid Ideation	1.31	0.89	1.18	1.04	0.83
Psychoticism	1.51	0.84	1.34	0.90	0.42
Global Severity Index	1.39	0.67	1.42	0.73	0.58
Positive Symptom Total	33.65	11.47	32.18	11.40	22.00
Positive Symptom Distress	2.10	0.51	2.23	0.53	1.79

* These cut-off values are derived from the operational rule for *caseness* provided in the BSI manual (Derogatis, 1993). In this system, a positive diagnostic case occurs where the value for the GSI, or two or more symptom dimensions, has a T score equal to or greater than 63 using the adult non-patient norms.

None of the demographic factors showed a statistically significant relationship to the dependent variables of interest. Subsequently, these demographic factors were excluded as covariates for the analyses. Descriptive statistics for all of the dependent variables are displayed separately below for the Internet chat treatment group (Table 6) and the face-to-face treatment group (Table 7).

Table 6

Descriptive Statistics for all Dependent Variables in the Internet chat Treatment Group

Dependent Variable	Session 1			Session 3		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
CALPAS-P	20	5.28	0.66	20	5.86	0.71
CALPAS-T	20	4.71	0.65	20	5.29	0.84
CALPAS-R	15	4.91	1.04	15	5.80	0.80
Global Severity Index	20	1.39	0.70	20	1.11	0.77
SCL-90 Analogue	20	35.51	18.20	20	30.47	20.43

Table 7

Descriptive Statistics for all Dependent Variables in the Face-to-Face Treatment Group

Dependent Variable	Session 1			Session 3		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
CALPAS-P	17	5.89	0.54	17	6.21	0.52
CALPAS-T	17	4.92	0.81	17	5.38	0.55
Global Severity Index	17	1.42	0.73	17	1.03	0.63
SCL-90 Analogue	17	53.71	27.53	17	50.92	26.74

Hypothesis Testing

A 2 (Session: 1, 3) x 2 (Modality: Internet, face-to-face) MANOVA conducted across the client and therapist outcomes (CALPAS-P, CALPAS-T, GSI, and SCL-90 Analogue) showed no significant multivariate interaction between session and modality ($F[4,32] = .608$, $p = .660$, $partial \eta^2 = .071$). There were, however, significant multivariate main effects for session ($F[4,32] = 11.257$, $p < .001$, $partial \eta^2 = .585$), and modality ($F[4,32] = 3.937$, $p = .01$, $partial \eta^2 = .330$).

A follow-up univariate ANOVA was conducted on each outcome in order to locate the source of the multivariate effects. There were no significant modality x session interactions for client-rated alliance (CALPAS-P) ($F[1,35] = 1.919, p = .175, \text{partial } \eta^2 = .052$), client-rated symptom severity (GSI) ($F[1,35] = .390, p = .536, \text{partial } \eta^2 = .011$), therapist-rated alliance (CALPAS-T) ($F[1,35] = .195, p = .662, \text{partial } \eta^2 = .006$), and therapist-rated symptom severity (SCL-90 Analogue) ($F[1,35] = .243, p = .625, \text{partial } \eta^2 = .007$). The non-significant interactions allow for the direct interpretation of the main effects of session and modality.

There was a significant main effect for session on the CALPAS-P ($F[1,35] = 23.021, p < .001, \text{partial } \eta^2 = .397, \text{Cohen's } d = 1.15$) indicating that client ratings of the alliance increased significantly from Session 1 to Session 3 at the same rate in both modality conditions. This result supports H1a. There was a significant main effect for session on the GSI ($F[1,35] = 15.191, p < .001, \text{partial } \eta^2 = .303, \text{Cohen's } d = .92$) indicating that client ratings of symptom severity decreased significantly from Session 1 to Session 3 at the same rate in both modality conditions. This result supports H1d. For the sake of comparison, Cohen's d was calculated individually for both groups, with strong effect sizes in both instances: for Internet chat therapy $\text{Cohen's } d = .96$; and for face-to-face therapy $\text{Cohen's } d = .88$. There was also a significant main effect for session on the CALPAS-T ($F[1,35] = 17.254, p < .001, \text{partial } \eta^2 = .330, \text{Cohen's } d = 1.01$) indicating that therapist-rated alliance increased significantly from Session 1 to Session 3 at the same rate in both modality conditions. This result supports H1b. In contrast, there was no significant main effect for session on the SCL-90 Analogue ($F[1,35] = 2.914, p = .097, \text{partial } \eta^2 = .077, \text{Cohen's } d = .41$) indicating that ratings of symptom severity did not change across sessions in either modality condition. H1e was therefore not supported.

There was a significant modality effect for the CALPAS-P ($F[1,35] = 6.972, p = .012$, partial $\eta^2 = .166$, *Cohen's d* = .76) indicating that clients in the face-to-face condition rated the alliance significantly higher than their face-to-face counterparts at both Session 1 and Session 3. This result supports H2a. There was also a significant modality effect for the SCL-90 Analogue ($F[1,35] = 6.981, p = .012$, partial $\eta^2 = .166$, *Cohen's d* = .76) indicating that therapists rated their Internet clients as having significantly lower symptom severity than their face-to-face counterparts at both Session 1 and Session 3. This effect is in the opposite direction to that predicted by H2d. There were no significant modality effects for GSI or CALPAS-T. H2b and H2c were therefore not supported.

Mean values for the CALPAS-P are displayed on Figure 1 below, showing differences between the treatment groups. Given that the overall CALPAS score is calculated from the mean of each of the sub-scales, any mean value sits within the range of the Likert scale used for each item on that scale. For client and observer ratings, the mean values for each treatment group ranged between 4.91 and 6.21. The 7-point Likert scale on the CALPAS assigns the descriptor 'a bit' to a score of 5 and 'a lot' to a score of 6. Hence, this makes it apparent that first impressions of the therapeutic relationship were reasonably favourable and grew to quite a strong level after three sessions. A visual assessment of this graph also shows that both client and observer-rated assessments of the therapeutic alliance in the Internet chat therapy group reach approximately the same level as first session alliances in the face-to-face therapy group.

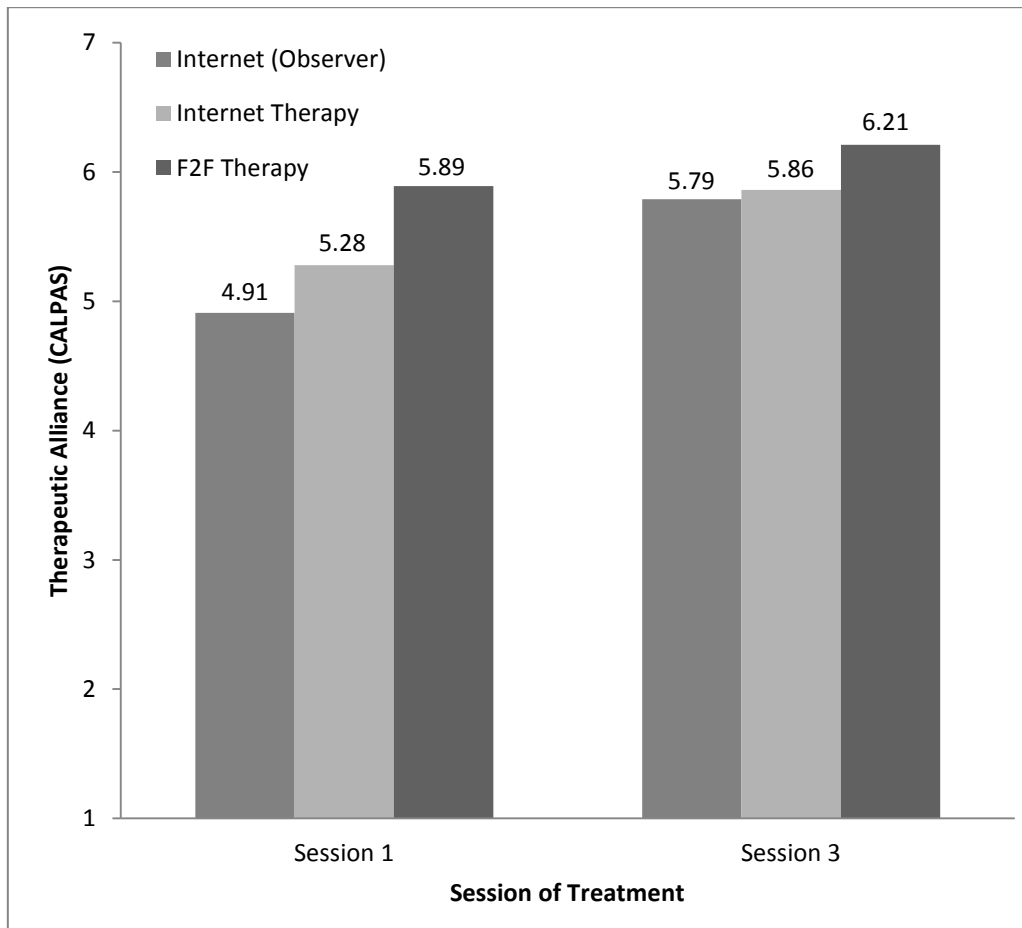


Figure 1. Mean values for client-rated alliance scores (CALPAS-P) for both treatment groups plotted against observer-rated alliance scores (CALPAS-R).

Mean values for each sub-scale on the CALPAS-P are also displayed on Table 5 below. These sub-scale means reveal that there were relatively modest increases in the alliance across time for the Internet chat therapy group, with the most substantial pre-post change occurring on the Patient Working Capacity (PWC) sub-scale. This is not the case for the face-to-face therapy group, where increases in the alliance were more evenly distributed across the various sub-scales.

Table 8

Mean Values for CALPAS-P Sub-scales

	Internet Chat Therapy		Face-to-face Therapy	
	Session 1	Session 3	Session 1	Session 3
Patient Working Capacity	4.59	5.52	5.43	5.87
Patient Commitment	5.39	5.74	5.92	6.30
Working Strategy Consensus	5.53	5.98	6.20	6.29
Therapist Understanding & Involvement	5.60	6.20	6.00	6.36
CALPAS-P Total	5.28	5.86	5.89	6.21

The graph below shows clients in both treatment groups beginning at almost identical levels of symptom severity with a reduction of symptom severity in both groups. Although the symptoms severity scores at Session 1 are lower in the face-to-face therapy group, the differences between these mean values is relatively minor.

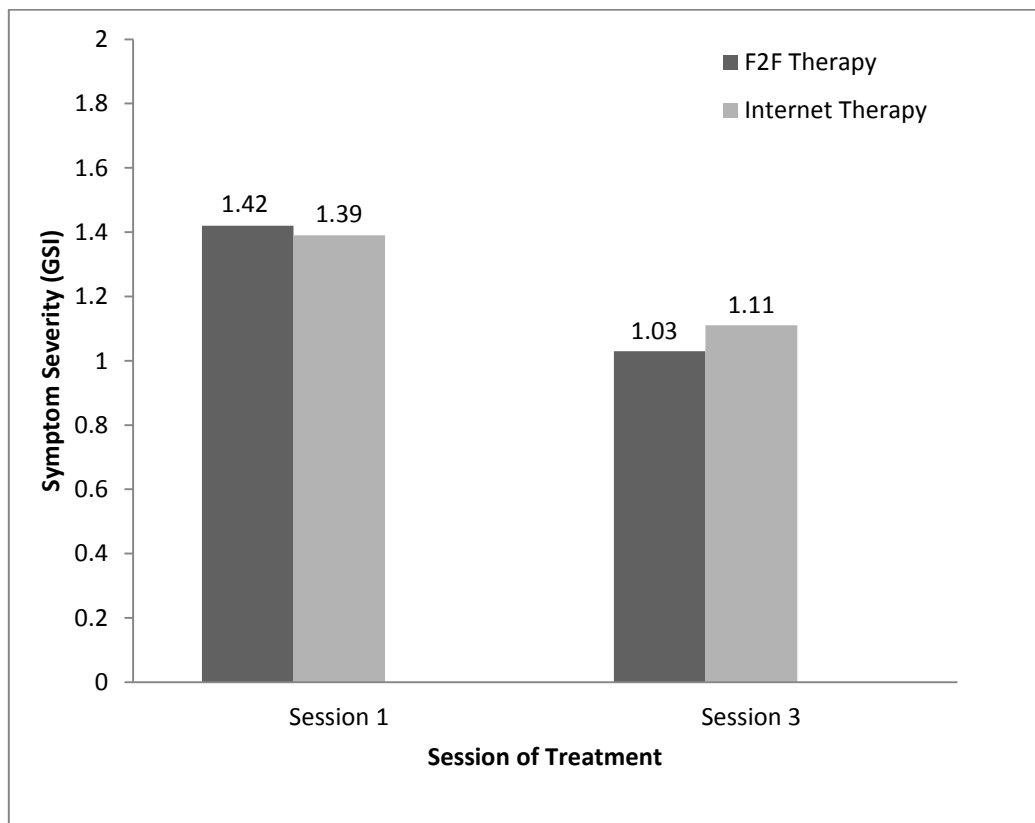


Figure 2. Mean values for symptom severity using the Global Severity Index (GSI) for both treatment groups across Sessions 1 to 3.

Mean values on the CALPAS across the three perspectives that were measured (client, therapist, and observer) indicate that observer-ratings were more closely aligned with client-ratings, particularly at the third session (Table 6). Therapist rated measures of the alliance were the most conservative by comparison to other ratings, particularly at Session 3.

Table 9

Mean Alliance Values Across Treatment Groups and Rating Perspectives

	CALPAS-P (client)		CALPAS-T (therapist)		CALPAS-R (observer)
	Internet	Face-to-face	Internet	Face-to-face	Internet
Session 1	5.28	5.89	4.71	4.92	4.91
Session 3	5.86	6.21	5.29	5.38	5.79

The one-way repeated-measures ANOVA for the CALPAS-R identified statistically significant change between Session 1 and Session 3: $F(1,14) = 14.971, p < .002$ *partial* $\eta^2 = .517$. This indicates that the therapeutic alliance significantly increased between Sessions 1 and Session 3 from the observer-rated perspective, using a transcript to evaluate Internet chat therapy sessions.

The computer program G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) was used to estimate the number of therapist-client pairs required for an 80% chance of capturing effect sizes of various magnitudes at an alpha-level of .05 and an estimated correlation of .5 between Session 1 and Session 3 scores. This estimated correlation for measures across sessions was confirmed in the present sample. The results indicated that the 37 therapist-client pairs in the present study would provide sufficient power to detect relatively large main effects. It must be acknowledged, however, that smaller interaction effects could have been missed. The fact that significant main effects were found for both modality and session indicates that these effects are relatively large in the underlying population.

Clinically Significant Change

An analysis for clinically significant change was also undertaken (Jacobson & Traux, 1991). Table 7 shown below displays the values that were used to calculate reliable and clinically significant change.

Table 10

Data used to Calculate Reliable Change Index and Clinical Cut-off for the BSI

Symbol	Definition	Value
S_0	Standard deviation of the normal population	0.31
M_0	Mean of the normal population	0.30
S_1	Session 1 standard deviation	0.70
M_1	Session 1 mean	1.41
rel	Reliability of the outcome measure*	0.90

* Value obtained from published test-retest reliability in the BSI manual.

Table 8 displays the formulae used to calculate whether changes in symptom severity were reliable and below the designated cut-off score indicative of a significant shift towards the normal population. Table 9 summarises calculations for each case in the analysis.

Table 11

Formulae used to Calculate the Reliable Change Index and Clinically Significant Change

	Cut-off c	Reliable Change Index	S_E	S_{diff}
Formulae	$c = \frac{S_0 M_1 + S_1 M_0}{S_0 + S_1}$	$RC = \frac{x_1 - x_2}{S_{diff}}$	$S_1 \sqrt{(1 - rel)}$	$\sqrt{2(S_E)^2}$

Table 12

Reliable Change and Clinically Significant Change for Each Client

Client	RCI score	Reliable Change?	Clinical Status
Internet chat therapy			
1	2.04	Yes	Improved
2	1.78	No	Unchanged
3	0.83	No	Unchanged
4	1.15	No	Unchanged
5	0.00	No	Unchanged
6	0.89	No	Unchanged
7	0.06	No	Unchanged
8	0.48	No	Unchanged
9	0.89	No	Unchanged
10	3.28	Yes	Improved
11	0.19	No	Unchanged
12	1.08	No	Unchanged
13	1.31	No	Unchanged
14	3.89	Yes	Recovered
15	- 0.19	No	Unchanged
16	- 1.69	No	Unchanged
17	0.80	No	Unchanged
18	1.50	No	Unchanged
19	- 1.37	No	Unchanged
20	1.50	No	Unchanged
Face-to-face therapy			
21	1.56	No	Unchanged
22	4.01	Yes	Improved
23	- 0.22	No	Unchanged
24	6.91	Yes	Recovered
25	1.56	No	Unchanged
26	- 0.29	No	Unchanged
27	1.75	No	Unchanged
28	0.80	No	Unchanged
29	0.73	No	Unchanged
30	0.80	No	Unchanged
31	3.12	Yes	Improved
32	0.16	No	Unchanged
33	1.66	No	Unchanged
34	0.73	No	Unchanged
35	- 1.98	Yes	Deteriorated
36	- 0.80	No	Unchanged
37	0.70	No	Unchanged

A standard error of difference score (S_{diff}) was calculated at 0.314, identifying the distribution of change scores that would be expected if there were no changes from Session 1 to Session 2. A cut-off (c) value of 0.639 points was calculated to determine the point at which scores were closer to the mean of the functional population than non-functional populations. Scores below the cut-off are generally recognised as being associated with a person being at near-normal psychological functioning. Table 10 shows the proportion of clients falling into each clinical category after three sessions of therapy for each group.

Table 13

Rate of Improvement over Three Sessions using Clinically Significant Change Criteria

Clinical Status	Internet Chat Therapy (n=20)		Face to Face Therapy (n=17)	
	Count	%	Count	%
Recovered*	1	5.0%	1	5.9%
Improved	2	10.0%	2	11.8%
Unchanged	17	85.0%	13	76.4%
Deteriorated	0	0.0%	1	5.9%
Above Cut-off at Session 1	18	90.0%	15	88.2%
Above Cut-off at Session 3	13	65.0%	11	64.7%

* In all instances displayed cases in the 'recovered' category were in the 'dysfunctional' category to begin with.

Chi-square analyses were conducted using Fischer's exact test (Field, 2009), to explore potential differences in the proportion of cases showing reliable change and clinically significant change in each treatment group. A 2 (Modality: Internet, face-to-face) x 2 (reliable change, no reliable change) chi-square test found no statistically significant difference between groups: $\chi^2(1) = .436, p = .404$. Similarly, a 2 (Modality: Internet, face-to-face) x 2 (clinical change, no clinical change) chi-square test found no statistically significant difference between groups: $\chi^2(1) = .058, p = .714$.

Discussion

General Findings

One of the distinct features of this research was the direct comparison of psychological techniques delivered face-to-face versus over Internet chat using the same group of therapists to deliver the treatment. To the researcher's knowledge, this is the first study to have the same psychotherapists deliver therapy to a case-load of clients that self-selected their preferred treatment over these two modalities of treatment. This made it possible for direct comparison of each way of delivering services. The results from this study provide general support for the use of Internet chat communication to extend the reach of practitioners to distressed people seeking help over the Internet.

Demographics of the Internet chat therapy sample in this study showed a similar gender-ratio to that found in large Australian studies of face-to-face therapy (Giese, Littlefield, & Mathews, 2008; Jorm, 1994). The finding that 80% of Internet clients were female was a comparable proportion to the 93.3% reported by Cook and Doyle (2002) and the 82.7% reported by Leibert, Archer, Munson, and York (2006). Although more men are using the Internet in Australia (Australian Bureau of Statistics, 2006), seeking psychological support over the Internet appears to be more popular amongst women. Surveys about gender differences in patterns of Internet use show that women are more inclined go online to seek information or interpersonal communication, rather than for leisure or entertainment (Fox et al., 2000; Weiser, 2000). These trends in the way that the Internet tends to be used by women are likely to increase the odds of women finding a psychologist over the Internet and subsequently seeking their support.

The average number of hours that people spent on-line in this sample was also similar to other studies about Internet chat therapy. With an average time of over 11 hours per week, those who opted for Internet chat therapy were well-versed with using computers and

therefore quite likely to be comfortable on-line. It is worth noting that there was very little change in the average number of hours spent on-line across the study. Regardless of fluctuations in Internet use over the trial, the fact that at least one hour of each week was being spent receiving psychological support was arguably a decent use of the time that was being spent on the Internet.

Baseline levels of symptom severity in the sample (Table 4, page 91) indicated that people who chose Internet chat therapy had similar levels of distress to those seeking face-to-face treatment. The most significant differences between groups on the symptom dimensions measured by the BSI were for phobic anxiety, with clients who chose Internet chat therapy reporting slightly lower levels than those who chose face-to-face therapy. The GSI rating between groups was essentially the same, with a mean of 1.39 in the Internet chat therapy group versus 1.42 in the face-to-face therapy group. Although the effect size for symptom severity improvement was larger for the Internet chat therapy group, the difference between groups was marginal, and hence, not significant.

Internet chat therapy

The results of this study confirm and build upon the observations of other researchers that psychologists can develop effective working alliances over the Internet (Anthony, 2000a; Cook & Doyle, 2002). Hypotheses 1a through to 1d were all supported, showing that there was a gradual increase of the therapeutic alliance over the first three sessions and a reduction in client-rated symptom severity in the Internet chat therapy group. In the context of treatment being delivered over Internet chat, it was important to rule out, as far as possible, the idea that favourable ratings of the alliance reflected any bias. The triangulation of client, therapist and observer perspectives of the alliance, all in alignment with one another, added weight to the notion that there was a genuine improvement in the therapeutic relationship.

The substantial increase on the Patient Working Capacity (PWC) sub-scale of the CALPAS-P measure over the first three sessions raises some questions (see Table 5). The PWC sub-scale is comprised of items that refer to the ability of the client to work with their therapist on the tasks of psychotherapy. These items explore the client's capacity to reflect, open up, express feelings, share personal material, deepen understanding, and look at their own contribution to the problems they are facing. The initially low rating that people in the Internet chat therapy group gave on this sub-scale may indicate that those who chose this form of treatment were more cautious in the beginning than their counterparts in face-to-face therapy. This would be consistent with the higher levels of base-line paranoid ideation in the Internet chat therapy group (see Table 4). It might also indicate that people in general take a little longer to learn how to use the medium of Internet chat to work effectively in psychotherapy.

Although clients reported significant reduction in their levels of symptom severity over the first three sessions of Internet chat therapy, their corresponding therapists did not. Therefore the Internet chat therapy component of the hypothesis regarding therapist-rated symptom-severity (1e) was not supported. Practically speaking, clients are in the best position to rate their own levels of psychological distress, particularly when the mode of communication between the two parties is limited to Internet chat. The implication of this is that self-reported symptom severity was the most accurate outcome measure available in this research. With that being the case, the question is why therapists did not rate any significant improvement in the condition of those they treated.

There are several possible explanations for this. Assuming that there was a genuine improvement in the condition of people receiving Internet chat therapy, it is possible that therapists were simply unable to detect any change in the level of distress of those they chatted with over the Internet. It may have been the case that people who opted for Internet

chat therapy were not inclined to reveal the true extent of their symptoms of psychopathology. Previous researchers have also pointed out that ratings of both alliance and outcome between client and therapist are typically more disparate in the early sessions of treatment, moving towards consensus as therapy progresses (Horvath & Bedi, 2002). That is, the 3 sessions of therapy included in this study may not have been long enough for therapists to form an accurate understanding of their client's situation. Another possible interpretation is that the SCL-90 Analogue was simply an unsuitable measure of symptom severity for this study. Several researchers have noted discrepancies between therapist-ratings on the SCL-90 Analogue and the corresponding self-reported results on the SCL-90 R (Fals-Stewart et al., 1995; Nahmias, Beutler, Crago, Osborn, & Hughes, 1983). It has also been reported that as many as 22% of clients who report elevated levels of symptom severity in a psychiatric setting have therapists who detect no signs of psychopathology (Kass, Skodol, Buckley, & Charles, 1980). These results from the Internet chat therapy group indicate that therapists providing services over the Internet may need to take extra steps to enhance their clinical judgment by using client-rated symptom severity measures.

Face-to-face therapy

In a similar manner to the Internet chat therapy results, the therapeutic alliance increased from the perspectives of both client and therapist over three sessions of face-to-face therapy. Clients also reported a significant reduction in their levels of distress. This confirms the face-to-face component of hypotheses 1a, 1b and 1d. The observed pattern of growth in the alliance over the first three sessions matches other research about the length of time it takes to form an optimal therapeutic relationship (Horvath & Symonds, 1991; Horvath & Luborsky, 1993). The finding that the therapeutic alliance and outcome follow a similar trajectory when the same therapist delivers psychotherapy to people in these two different

forms of treatment, supports the view that there is a similar process of change inherent to both forms of treatment.

Therapist-ratings of symptom severity did not reflect any change in the face-to-face group, meaning that hypothesis 1e was not supported in either treatment modality. This seems to reinforce the position that this measure was unsuitable, in that it did not correspond in any meaningful way with client-rated SCL-90 R scores in either treatment group. Further to the points made above regarding the Internet chat therapy group, in this short period of treatment therapists may have been unwilling to make assumptions about the presence of symptoms without further clarifying information that might have been obtained with time. Likewise, clients may not have felt comfortable enough to make open disclosures so early in the therapeutic process. From the perspective of those receiving treatment, clients may have found it less confronting to complete a questionnaire about the intensity of their distress, safe in the knowledge that only the researcher would see that information.

Treatment comparisons

It was hypothesised that face-to-face therapy would outperform Internet chat therapy both in terms of building an alliance and reducing symptom severity over three sessions. The results show that only one of the hypotheses about this comparison was confirmed (2a); namely that client-rated alliance was significantly lower for clients who received Internet chat therapy. With all of the remaining hypotheses not finding support (2b to 2d), questions are raised about whether the differences between these forms of service delivery are substantial enough to warrant the criticisms that are typically directed at Internet chat therapy. Although the post-test mean for therapist-rated alliance was slightly higher for the face-to-face treatment group, the difference was not statistically significant. It would appear that after three sessions of treatment, therapist perceptions of the alliance in Internet chat therapy

stabilise to levels that are comparable to face-to-face therapy. In both conditions, clients reported nearly identical levels of symptom severity from the outset (Table 4), with no significant differences in the rate of improvement after three sessions in either form of treatment (Figure 2). From these results it would appear that both forms of treatment are similarly effective, at least in the short term.

In the view of therapists, the clients they provided services to over the Internet had significantly lower symptom severity by comparison to their face-to-face counterparts at both points of measurement, with no significant changes across time. Given the aforementioned problems with this measure of symptom severity, it is possible that the therapist-rated estimates of symptom severity were more reflective of the expectations held by therapists about these two ways of delivering psychotherapy. This could have included the assumption that those seeking Internet chat therapy are less troubled and that three sessions of therapy is not enough to produce any measurable difference. Similarly, this result may be reflective of a general scepticism held by therapists about the use of telecommunications for psychotherapy (Rees & Stone, 2005). In any case, the finding that significantly stronger therapeutic alliance ratings were reported by people who received face-to-face therapy aligns with research conducted by Leibert et al. (2006). As was the case in the present research, their sample was comprised of self-selecting clients who opted for their preferred form of treatment. The present research differed from their research in that the alliance and outcome were measured at a fixed interval (i.e., sessions 1 and 3). In addition, all prior research about Internet chat therapy has been largely over-represented by e-mail communication rather than Internet chat. The controlled nature of the present study builds on prior work, in terms of using just one mode of Internet communication and a fixed interval of measurement.

Clinically Significant Change

At the beginning of treatment, a similar proportion of clients in both groups were closer to the disordered population than the normal population (i.e., above cut-off *c*), at around 90% of the sample. Normative values for the SCL 90 R proposed by Tingey, Lambert, Burlingame, and Hansen (1996), show that the GSI ratings provided by clients at the first session were in the ‘severely symptomatic’ range of distress. After receiving three sessions of therapy in both treatment groups, around 65% of the sample in both treatment groups remained above the critical cut-off value, indicating symptom severity scores that were closer to the mean for disordered populations. Although there was a client who received face-to-face therapy showing a ‘deteriorated’ condition, this did not detract from the overall treatment effect for that group. On the contrary, change scores for the face-to-face treatment group were larger on the whole, resulting in a higher RCI value for that group (Table 10). It is possible that with a larger sample or a longer treatment period, the difference between these groups might have been more pronounced. In any case, the results from the present study show a similar rate of clinical improvement and recovery for psychotherapy delivered over the Internet.

In many ways, the fact that any clinically significant changes were detected after just three sessions is remarkable, in that clinically significant change is generally a difficult standard to establish (Tingey et al., 1996). These present findings show that approximately 15% of people indicate clinically significant levels of improvement after just three sessions of treatment in both forms of service delivery. In practical terms, these signs of early change are useful to take into consideration in the context of data from large-scale naturalistic studies showing that three sessions is the median length of treatment out in the general community (Hansen, Lambert, & Forman, 2002).

Limitations

Several limitations need to be taken into consideration to qualify these results. First, the clients who participated in this study selected their treatment of choice, which opens up the possibility of cohort effects. It may be the case that people who preferred Internet chat therapy had a different range of psychological problems by comparison to those who sought face-to-face therapy. Although this possibility cannot be ruled out completely, the similarity of baseline symptom severity scores would appear to indicate that the type and magnitude of distress was balanced across treatment groups, despite the fact that client participants opted for their treatment of choice. Part of the reasoning for allowing clients the freedom to select their preferred treatment was to evaluate how Internet chat therapy services function in practice. Future researchers may wish to explore whether similar positive results might occur in a randomly assigned sample.

Although there was a lengthy data collection period, it was not possible to collect a balanced number of client participants for each treatment group. A target sample of 50 cases was sought to achieve statistical power, however this was difficult to achieve whilst balancing Internet cases with face-to-face cases for each therapist in the study. The imbalance of cases across treatment groups limits the conclusions that can be drawn from comparisons between these modes of therapeutic interaction. This point applies predominantly to the results of the clinically significant change analysis. It may have been the case, for example, that the small number of face-to-face clients sampled was reflective of just a segment of positive treatment outcomes. A larger study with more clients and therapists could potentially resolve this problem.

Initially it was thought that clients receiving Internet chat therapy would only engage briefly, so the period of observation was limited to the earliest stage of treatment in order to obtain a large enough sample. In fact, the majority of participants who began Internet chat

therapy completed three sessions (77%). Although it was beyond the scope of the present study, it would be beneficial to explore whether clients would remain engaged and derive ongoing benefit from Internet chat therapy for periods that approach 15 sessions – the recommended minimum treatment period for most mental health disorders (Australian Psychological Society, 2010). Additionally, a longer-period of follow-up with outcome measures would allow for treatment outcomes to be assessed more comprehensively. In particular, follow-up measures of the outcomes of Internet chat therapy would help to establish whether ratings of the alliance around the third session of therapy predict long-term clinical outcomes, as previous research indicates for face-to-face therapy. While these present results do show some promise, they only provide a glimpse of the earliest stages of therapeutic work.

Chapter Three

Study 2: Client and Therapist Experiences of Internet chat therapy

Interviews

In addition to measuring the early outcomes of Internet chat therapy, a key element of this research was to understand the subjective experiences of both clients and therapists about therapeutic processes on-line. After the five sessions of therapy, a telephone interview was conducted with each client about their experience of Internet chat therapy. Therapists were also interviewed, with questions modified to reflect the perspective of their distinct role. In both cases, the semi-structured interview questions focused on the challenges that researchers have typically identified about online interventions (see Appendix F). The questions were grouped into categories relating to first impressions, communication, sense of self and other, the therapeutic relationship, and practical matters.

Participants

From the full sample, 10 of the therapists and 11 clients agreed to an interview about their experiences of Internet chat therapy. The therapists consisted of five men and five women; while the client group consisted of three men and eight women, ranging in age from 19 to 67 years ($M = 40.8$ years). Efforts were made to match as many client cases to each therapist case as possible to maximise those instances where clients and therapists referred to the same events. Of the client interviews, there were nine cases that were matched to seven therapists. The remaining three therapists and two clients were unmatched to their corresponding partner in the dyad who did not complete an interview in the study. Table 11 and Table 12 compare the interviewed sample with the broader Internet chat treatment group.

These descriptive statistics show that the interviewed sample was generally representative of the Internet chat therapy group on all of the key measures, with slightly lower values for the therapeutic alliance and some symptom dimensions.

Table 14

Mean Alliance Values for Internet Treatment Group and Interviewed Client Sample

	CALPAS-P (client)	
	Internet Chat Therapy Group	Interviewed Sample
Session 1	5.28	5.05
Session 3	5.86	5.70

Table 15

Baseline Symptom Severity for Internet Treatment Group and Interviewed Client Sample

	Internet Chat Therapy Group		Interviewed Sample		Positive Diagnosis Cut-off*
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Somatization	0.89	0.81	0.83	0.78	0.70
Obsessive-Compulsive	1.73	0.85	1.44	1.13	0.99
Interpersonal Sensitivity	1.91	1.16	1.91	1.23	0.78
Depression	1.83	0.84	1.68	0.91	0.66
Anxiety	1.48	0.88	1.20	0.62	0.70
Hostility	1.29	0.90	0.96	0.79	0.83
Phobic Anxiety	0.69	0.81	0.75	0.76	0.38
Paranoid Ideation	1.31	0.89	1.45	0.98	0.83
Psychoticism	1.51	0.84	1.40	0.86	0.42
Global Severity Index	1.39	0.67	1.24	0.73	0.58
Positive Symptom Total	33.65	11.47	31.82	12.79	22.00
Positive Symptom Distress	2.10	0.51	1.93	0.55	1.79

* These cut-off values are derived from the operational rule for *caseness* provided in the BSI manual (Derogatis, 1993). In this system, a positive diagnostic case occurs where the value for the GSI, or two or more symptom dimensions, has a T score equal to or greater than 63 using the adult non-patient norms.

Procedure

Interviews were carried out by the researcher and were conducted primarily over the telephone. Audio from the interviews was recorded using a telephone adaptor that inputted the digital signal directly through the microphone port of a computer. Two of the interviews were conducted face-to-face at the request of the participant, using an MP3 recorder to store the audio. The services of a professional transcription agency were utilised to convert the audio files to text. Accuracy of transcription was checked case-by-case by the researcher. Transcripts were then used as textual data for the qualitative analysis.

Data analyses

Along with quantitative details about the outcomes of therapy, this study also explored the subjective experience of Internet counselling for both client and therapists. Experiences of both clients and therapists who use Internet chat are an important factor to take into consideration given that little is understood about how psychological therapies might translate to the context of Internet ‘chat’ communication.

In this study, qualitative methods were used to complement the quantitative information by describing how people ascribe meaning to their interactions with a therapist over the Internet (Smith, 1995). An empirical (rather than reflective) form of phenomenology was employed in this research to explore the subjective experiences of both the client and therapists during their use of Internet chat therapy (Tesch, 1990) with the aim of using the participant’s own way of expressing their own experiences wherever possible. ‘Content analysis’ techniques were used to construct a general framework for the meaning of subjective information (Lindkvist, 1981). This procedure requires that written information is coded into general thematic categories (Carney, 1972). With these techniques, emergent patterns and consistencies were identified and gave structure to the qualitative findings.

Specifically, the ‘Interpretative Phenomenological Analysis’ (IPA) approach was used to sort the identified themes into superordinate domains (Smith, Flowers, & Larkin, 2009; Willig, 2001). The advantage of adopting this approach was that variability across individual experiences could be retained and interpreted alongside the core psychological processes at work. Qualitative data was organised into both ‘referential’ and ‘semantic units’ (Andrén, 1981), so that themes could be generated from the direct target of phrases used by participants and the similarity of ideas that were reflected upon. Categorical themes were identified by consistencies within each case, between the client and therapist groups, and across the sample as a whole (Kirby & McKenna, 1989). Meaningful relationships that were identified between categories led to the generation of meta-level themes (Carney, 1972), allowing for themes to be grouped together into related classes. For the purpose of this research meta-level themes are referred to as ‘domains’.

Generally speaking, qualitative methods sacrifice reliability for validity (Dick, 1999; Sapsford, 1998). In large scale studies, themes are typically allocated randomly to a team of coders who independently classify the information, with comparisons made between coders to determine ‘inter-coder reliability’ (Andrén, 1981; Stone, Dunphy, Smith, & Ogilvie, 1966). For the present study, the identified themes were initially identified by the researcher and then verified by an independent psychologist, who categorised every statement from a randomly selected transcript into one of the identified themes. Inter-rater reliability was strong, with 75.81% correspondence of words matching the same categories across independent raters. In those instances where words did not match the same categories, they tended to be categorised in conceptually related themes.

Thematic categories were grouped into seven conceptual domains corresponding to the experiences of clients and therapists with Internet chat therapy. Statements were coded

into themes within each domain, spanning across the various responses to each prompting question. The final set of domains and themes are displayed in the table below:

Table 16

List of Qualitative Domains and Themes Derived From Semi-structured Interviews.

Domains	Themes
Expectations	Scepticism Interesting opportunity Convenience Familiar form of expression Overcoming the problems of face-to-face communication
Anonymity	Sense of psychological safety Invisible client Unknown therapist
Relying on Text	Ambiguity of silence Slower Communication Understanding and misunderstanding Expressing emotions Assessing distress Reading the experiences
Practical Issues	Technical problems Privacy and security Strengths and limitations of Internet chat for therapy
Setting	Home Work Shared office
Sense of Person	Presence and engagement Distance and closeness Mental image
Therapeutic Alliance	Feeling less scrutinised Being personal in the therapeutic relationship Talking past each other Concealing and revealing Variable alliances

Expectations

In the lead-up to their work over the Internet, both clients and therapists began the process with some anticipation about what they expected would take place. Although this did affect their initial approach to Internet chat therapy, much of the time reality did not meet expectations. Clients approached Internet chat therapy with a range of hopes, whereas by comparison the therapists appeared to adopt a more reserved and cautious stance. After a few sessions, participants had formed a relatively balanced view about what to expect from Internet chat therapy, which was maintained across time. This domain consisted of five themes: ‘scepticism’, ‘interesting opportunity’, ‘convenience’, ‘familiar form of expression’, and ‘overcoming the problems of face-to-face communication’. The quotations in the following sections are coded in terms of clients (C) and therapists (T), followed by a number which was designated to specific interviewees.

Scepticism

A majority of therapists and some of the clients stated they were sceptical about how Internet chat therapy might work. Most concerns revolved around the issue of whether the limitations of Internet chat as a form of communication would prevent psychologists from being able to work in a therapeutic way. On the whole, therapists doubted whether the quality of the therapeutic work over the Internet would compare favourably to face-to-face therapy. In particular, therapists noted concerns about the limited non-verbal information available over Internet chat, including body language and tone of voice. As one therapist described:

I thought the difficulty would come out of not actually physically seeing the client and being able to read any body language, and also things like tone of voice. I guess, even

things like phone counselling, which I have done a little bit in the past, you had a tone of voice to kind of work with (T1).

In some cases, therapists extended the idea of there being difficulty with receiving information about the subtleties of interaction, through to the impact of that missing information on the level of connection and depth of work over Internet chat:

I think the biggest thing was that I wasn't sure if it was really going to work. Like, I didn't think you could really get the same sort of levels as sort of face-to-face (T7).

The inexperience that some therapists had with Internet chat was also a source of apprehension, which led to a sense of being in unfamiliar territory. One therapist described apprehensions about using this unfamiliar new way of communicating:

I think I was a bit apprehensive about it, mainly because I had had very little experience when it came to that sort of medium of chat. I hadn't used MSN or anything like that very much, so it was, I guess, a bit foreign to me.... I guess all our training has been with sort of face-to-face clients and all those sorts of cues and things like that that you would normally pick up, I was a bit concerned about not having to be able to make my judgement and also read the client and provide feedback to them (T3).

Some therapists described their initial sense of doubt as they adjusted to this new way of communicating. During that period of uncertainty at the beginning, therapists sometimes struggled with expression of sincerity over this foreign medium:

Initially I think it was quite a quick learning process because saying sort of empathic type statements to someone... can involve a lot of tone in things like that, but I found that when it was put up on screen it can seem a little bit more insincere I think; so I think that something that came up in my very first one was that they were, I guess, maybe thought that I was stating the obvious a little bit or something like that... like it

sounds a bit hollow, I guess. So that was one thing that came up from the early sessions, but after that first session it was a lot more smoother (T3).

Reflecting back on the experiences, nearly all of the participants said they were surprised by how easy it was to engage with the other person. After a brief period, all of the therapists reported that Internet chat therapy was a lot easier than they thought it would be and that they were surprised at the sense of connection they had formed with their clients over such a limited form of communication. In some cases though, therapists were left with some remaining doubts about whether the changes their clients had made would last over time:

I was probably a bit surprised how helpful people found it, yeah, quite surprised that people could find (pause) Because sometimes people are quite slow typers and even in the very, very limited amount of interaction people actually found that they got something out of that. Whether or not that sort of takes on board longer term, I'm not sure (T9).

Interesting Opportunity

Several clients indicated that one of the main reasons they decided to engage in Internet chat therapy was because they thought it sounded like a novel approach that might help people who otherwise would not consult a psychologist in person. In most cases they described this opportunity in an abstract way, talking about the benefit of these services to people in general. The idea that this form of therapy might be helpful for others was put by one client as follows:

I really was interested in the concept because I thought that there are many people who have issues that don't really want to go to a counsellor. I mean, we are not like the Yanks that have therapy sessions every week. Australians steer away from that, and I thought that this was really a nice way for them to get into it without going to that

formality... It wasn't anonymity; it wasn't safeness. It was the fact that here was an opportunity that people could get this counselling advice without ringing up or going to their doctor or all of that business (C7).

In some instances, a client's interest in the concept of delivering psychotherapy this way was offered as the primary reason for seeking services, rather than actually needing psychotherapy. At times, client participants associated Internet chat therapy with psychological advice rather than therapy per se, minimising the severity of problems that people might bring to Internet chat therapy. Even so, there was a general open mindedness and hopeful attitude about the effectiveness of Internet chat therapy, along with a sense of excitement that this approach might help them in some way. With some further questioning, most clients did reveal that they had in fact been experiencing some distress, for example:

I wanted to contribute, if you know what I mean. Obviously, you are doing a PhD and I just thought it would be a good idea. I hadn't worked for the last year and so I had the spare time...I had been off work for a year with quite a bit of emotional trauma I thought, 'Oh well, I might be able to get some benefits from this myself' (C10).

The therapists who described their involvement in the research as an interesting opportunity remained open-minded, with slightly more reservations about their expectations. In general, therapists described themselves as adopting an investigative stance, suspending judgement and exploring this novel treatment approach:

I didn't really have any reservations. I guess I was fairly open-minded to have a go, see how it turned out and take it from there (T4).

Convenience

Around half of the clients sampled reported that part of the initial attraction to this way of accessing psychological services was the convenient accessibility of Internet chat therapy.

They spoke about being able to receive support from home, meaning that they did not have to travel to a distant or unfamiliar location. Some indicated that this was a critical factor that made the difference for them about whether they decided to access therapy or not, due to busy lives, or living in a remote location. Others saw the convenient access as making it easier to start the process of receiving psychological support, because it felt less formal. Convenience also came to bear on access to information, in that being on the Internet during the consultation allowed some clients to search for relevant information with their web browser during the consultation. The expectation that Internet chat therapy would be more convenient was summed up by one client as follows:

I have had counselling before and I really got a lot out of it, but I've got kids at home and just busy, busyness. So, evenings are free, but then usually people aren't available in the evening. And when I first heard about it I thought, 'Oh, perhaps it could be something I could do at home' and I did that in the evening, but it was, yeah, just the fact that it was from home so you didn't have to actually get somewhere. Also, I live up in Roleystone so it is a bit of a hike to get anywhere. Yeah, so it is the fact that you can stay in your own home (C11).

In other cases, the sense of convenience was more about being able to access resources via the Internet during the appointment itself:

What other positives did I see? Oh, the ability to share information a lot quicker about certain things, as I said before, like 'Here is a web link' or 'Go get this book at the library' sort of thing (C4).

Familiar Form of Expression

For many of those who chose to access Internet chat therapy, the decision was also based on their expectation that they would be more comfortable expressing themselves

through the written word than verbalising their experiences. In this respect, using Internet chat allowed those clients to use a form of expression that was congruent with their perceived strengths. A portion of the client sample attributed this to their prior experiences with other forms of Internet chat (like MSN chat or Skype), while others accounted for this in terms of their ability to touch-type and their reliance on typing skills for work.

I talk a lot on MSN and most of the time on MSN I'm talking to my friends and I'm kind of talking to them about their problems. I just thought it would be a similar sort of experience, just like MSN...I think it is better [than face-to-face therapy] I liked it better. I thought it would suit me better (C6).

Other clients found that simply being on the computer or using writing to express their feelings made the process more familiar to them:

I've always been a letter writer and journal keeper, so I guess I'm always used to writing it down and I'm not uncomfortable at a computer (C3).

There was also a sense of control that went with using typed words, particularly given that sentences were not sent to the other party until the 'enter' key was pressed. There was also an added sense of objectivity connected to using words:

I just like that form of communication. I just prefer to express myself by writing things down, by typing because you can edit what you have said before you hit 'enter', and so you can see it written down and decide if it is exactly what you wanted to say... I wanted to be objective and honest, and I just find that easier by typing (C1).

Therapists who were familiar with Internet chat as a form of communication in their everyday life were more hopeful than their counterparts who did not have these experiences. Leading into their experience as an Internet therapist, these psychologists saw the potential for therapeutic processes to occur over Internet chat:

Relationships can certainly be formed over the Internet without ever meeting someone face-to-face, and that comes from my own experience of chatting with people over mediums like MSN and also seeing friends develop quite deep relationships with people over the Internet which have then gone onto them meeting the individual and fostering the relationship, but certainly there is that positive outlook in that this medium of communication has the potential to develop relationships, such as a therapeutic relationship which would be required in the interpersonal process (T4).

Overcoming the Problems of Face-To-Face Communication

There were several cases where clients reported having seen a psychologist in the past for face-to-face therapy, but had encountered a significant personal barrier in that process. In this respect, being able to access psychological services over the Internet was seen as a way of overcoming the difficulties that they previously encountered with face-to-face therapy. Those who spoke about Internet chat therapy in this way expected that they would get more out of the process in terms of focused reflection on the issue that they wanted to bring to psychotherapy. One client recalled that being in the same room as a psychologist led to the formation of such a friendly rapport with the psychotherapist that they were no longer inclined to be open and honest about their feelings:

One of the problems I had in the past with face-to-face counselling is that—and I know this is a fault of mine I guess—I get to the point where I developed a rapport with the counsellor and then I want to say the ‘right’ things (C1).

Others reported feeling as though the situation of being in the same room with a psychologist was so overwhelming that it interfered with their ability to concentrate on the issues that they needed to work through:

The idea appealed to me because it kind of lets you focus more on what you are talking about. Like, I found I went to counselling a few years ago and I didn't find that it worked for me because I was quite intimidated by the whole going into an office, sitting there with a counsellor, having to deal with that sort of factor, but I did want to talk about my problems (C6).

Psychologists seemed to detect this during their work as an Internet therapist:
Some clients are too frightened to go in and see a therapist face-to-face at first. You know, they may have a social phobia or they are house-bound and they can't get out or it is probably cheaper (T8).

Summary: Expectations

From these results, it is evident that there is an adjustment period over the first few sessions of Internet chat therapy, where initial expectations are modified to align with reality. For clients, it was often the case that positive expectations came into conflict with limitations they observed in the first few sessions. The sceptical expectations of therapists were based on what they imagined would be missing from the interaction, particularly for those who had limited experience with using the Internet to relate to others. It is possible that caution from therapists in their attitude towards Internet treatment in general is also associated with the early stage of research in the field (Kraus, 2011). In any case, this initial position gravitated towards the formation of a more moderate stance from both parties, with clients becoming more sceptical and therapists becoming more hopeful about the benefits of Internet chat therapy.

Clients who received Internet chat therapy minimised the severity of their psychological distress, despite the fact that their symptom severity was rated at a comparable level to their face-to-face counterparts (see Table 4). A calculation of the base-line GSI scores for

participants who contributed to the interview data, shows that this group of clients had levels of symptom severity that were at essentially the same as the rest of the Internet client sample (with a mean of 1.24 points). This discrepancy between elevated symptom severity scores and descriptions of distress that appear quite minimal might be accounted for by several factors.

It is possible that many of the clients in this sample were concerned about the stigma associated with seeing a psychologist in person, making access to psychological services over the Internet an easier option for them to begin seeking help. This possibility is consistent with the common story of many clients that they had found face-to-face psychotherapy too intense in the past. Regardless of whether clients previously became too close to their face-to-face therapist to be honest, or whether they felt too heavily scrutinised, the end result was that clients became more withdrawn from their therapist. There is an obvious appeal for such people to be able to access psychological services in a familiar setting, at a safe distance from the psychologist, using a communication style that feels less formal; and Internet chat therapy provides this.

These stories of clients who accessed Internet chat therapy provide illustrative examples of highly distressed people who had refused to access psychological support due to fears associated with their condition and previous experiences with face-to-face therapists who had made the process unhelpful. This is consistent with the common claim that Internet therapies have specific appeal for marginalised sectors of the mental health population (Amstadter et al., 2009). Given that in the present sample there were no obvious differences in symptom severity across the various dimensions of distress, between Internet chat therapy and face-to-face therapy clients, further information is required to identify the distinctive features of those who are more inclined to seek Internet chat therapy. It is possible that personality or other factors may be more relevant to consider on this issue than symptom severity alone.

These findings are consistent with a range of theories that have been proposed in the area of communication research and social cognitive theory that attempt to explain why people are often more prepared to disclose information over the Internet. For example, the subjective report of participants in this study is consistent with the SIDE model, which proposes that the sense of anonymity experienced by people interacting over the Internet greatly reduces the perceived risks of revealing sensitive personal information, because there are few visible signs of disapproval and the other party does not have access to the person's immediate social group (McKenna et al., 2002). Likewise, these results are also consistent with the hyperpersonal model, in that positive client expectations about therapy and their favourable impressions of the therapist may have shaped their subsequent judgements about the relative emotional safety of making personal disclosures (Jiang et al., 2011). It is worth noting that some of these processes are also at work in face-to-face therapy in a more limited sense. That is, psychologists generally try to refrain from being overtly judgemental and that the unique context of psychotherapy creates a situation where a person can reflect with someone who is outside of their usual social groups. However in the case of Internet chat therapy, it is obvious from the reflections shared by clients participating in this study that several clients were particularly sensitive to the idea of being seen in a distressed state and judged negatively. In that respect, Internet chat therapy provides a practical way to consult a psychologist with fewer of those risks.

Anonymity

An obvious feature of Internet chat as a mode of communication is that there is no visual sense of the person aside from what they care to describe to you. Clients described a sense of anonymity in accessing therapy over the Internet. This appeared to alleviate some apprehensions for clients, but raised concerns for therapists. The perception of anonymity was

therefore a point of tension between the client and therapist, in that it was an attractive feature for clients but a limitation from the perspective of therapists. This domain consisted of three themes: 'sense of psychological safety', 'invisible client', and 'unknown therapist'.

Sense of Psychological Safety

A large proportion of those who chose Internet chat therapy said that they felt they could reveal more about their distress and difficulties when they were not feeling watched by the other person. This perception of being safe from scrutiny made it easier for people to open up more than they usually would. One client explained:

Well, because you can't see the person you can't see the shame or the disgust in their eyes or anything like that, it makes it a bit easier. Not that there were any incidences of shame or disgust, but that anonymity, that certain level of anonymity, does allow you to just pour your guts out a little bit more (C4).

Another factor associated with anonymity was the perception of clients that they could not be easily identified afterwards. Not having to be visibly present to a psychologist alleviated some of the concerns people had about encountering their therapist outside of the session:

You don't have to worry about what people are going to think of you in the future because you are probably never going to see them or meet them again (C1).

Like their clients, several therapists reported that it felt easier when distracting elements of the interaction were filtered out of the process. On some occasions when therapists were stressed or emotional, the anonymity helped them to feel less self-conscious as a practitioner:

I found sometimes it was easier...if I wasn't feeling particularly up for a counselling session...if I was feeling a bit emotional or whatever, they couldn't see that (T9).

Invisible Client

Although many clients preferred the perception of anonymity, therapists were typically concerned about the fact that they could not see their client. Most of the time, this concern was directed at uncertainty about the current emotional state of the person, making it difficult for the practitioner to tell if they were applying psychotherapy skills effectively. Therapists found it helpful when clients gave them feedback about this:

Some of the clients actually thanked you at the end for listening, for being there, sort of stuff, and that they have got a lot out of it, which was really good because you are not sure. Like, because you know you haven't done as much as you would face-to-face, it is still actually nice to kind of get that feedback of them saying, 'Oh, this has been really helpful' (T7).

Therapists sometimes adjusted to this issue by being more direct with their clients:

To compensate with that I think I just became a little bit more direct in my approach. Rather than being more Socratic as you would with a face-to-face client I was probably a little bit more direct. One client did comment that I was quite direct, but she said that she appreciated it because there was none of this misunderstanding...you have just got to be a little bit more up-front, I suppose, because you can't see them and you can't see their body language and you can't really hear their tone of voice either (T8).

The inability to see the client also resulted in problems with recall for some therapists. That is, in the absence of a visible reminder of the individual they were interacting with, therapists sometimes struggled to remember the personal issues of the individual:

You would actually kind of forget almost who you were speaking to because it is quite anonymous. You know, if they have got, like, a handle, like a different handle, or they have just written maybe their first name it is actually kind of really hard to remember

which client was which...face-to-face you can kind of think, 'I can't remember what that person's issue is' until you actually see them (T7).

The difficulties of handling cases where a client expresses suicidal ideation were also magnified over the Internet. Not being able to see their client meant that therapists felt less able to be supportive or to confirm the level of distress that was being experienced with non-verbal information. This elevated the anxiety level of at least one therapist who had a client disclose suicidal thoughts:

The hard thing is when people were quite upset and you can't obviously tell unless they tell you they are. That was a bit hard. I did have one client who was expressing suicidal thoughts. She wasn't going to act on them but it got my heart racing to think, 'How do I manage this?' She was in a different state - we were on a computer - that was a bit difficult. We got through it, but it was a bit hard (T7).

Unknown Therapist

The recipients of Internet chat therapy also wanted to know more information about their therapist. Clients expressed curiosity about age of their therapist, their qualifications, and details about their appearance. This seemed to be important for the sake of making a personal connection to the individual on the other side:

Even though I found face-to-face a bit confronting...it would be good to know who you were talking to and to know that they are aged 23 or a male or something like that....so you kind of know who they are (C2).

Summary: Anonymity

The interviews reveal that clients are much more comfortable with the sense of being anonymous over Internet chat than psychologists. There is an inherent tension to this

situation, in that psychologists actively inquire about the psychological distress of their client, whereas many clients intentionally choose Internet chat therapy to conceal the full extent of that information. To a lesser degree, there also seems to be a similar state of tension where the client wants to know more about the therapist as a person, but has limited information to go by. These tensions might be accounted for by concerns about being emotionally overwhelmed, judged, or even rejected in the therapeutic encounter. In any case, a greater sense of anonymity when using Internet chat appears to enable some clients to express thoughts and feelings that they might otherwise keep to themselves, as social cognitive theories would predict (Fiske, 1993). These findings also confirm that many adults seek out online counselling for similar reasons as young people - namely, an increased sense of safety and decreased emotional exposure (King et al., 2006b). This further supports the notion that Internet chat therapy reaches isolated sectors of the population who may otherwise not reach out for help.

Being unable to see the client was clearly a concern for therapists who were new to Internet chat communication. One of the most effective ways this was addressed by therapists was to ask the client how they felt at various points in the therapeutic process. A potential problem with this, however, is that clients may not feel comfortable with disclosure if they are uncertain about their level of trust towards the therapist (Farber, Berano, & Capobianco, 2004). Given that clients frequently reported in the interviews that they were curious about the personal traits of their therapist, the client's level of trust could potentially be enhanced through the use of relatively minor self-disclosures by the therapist. In addition to the information that Henretty and Levitt (2010) recommend as being suitable for self-disclosure (such as demographics, thoughts about the therapeutic process and conceding to mistakes in therapy), the data highlights the importance of revealing details to the client that they would otherwise see during a face-to-face therapy session. This adds further confirmation to the

theorised value of describing emotional reactions to a client (Mitchell & Murphy, 1998) and using the written word to articulate the elements of rapport associated with Carl Rogers' facilitative conditions (Anthony, 2000b).

Relying on Text

There were a variety of characteristic features to the style of interaction between client and therapist that extended from the fact that communication relied upon the written word. In all of these cases, there was a contrast between the available information versus the missing information. Complex issues around the interpretation of both words and silences came to the forefront. Reading between the lines was a necessary feature of Internet chat for the purposes of understanding the complexities being discussed during a psychological consultation. This domain was comprised of six themes: 'ambiguity of silence', 'slower communication', 'understanding and misunderstanding', 'expressing emotions', 'assessing distress', and 'reading the experiences'.

Ambiguity of Silence

During short periods of silence, some people reported having difficulty interpreting what might be going on for the other party. Clients tended to assume that silence from the therapist meant that they were distracted, which was occasionally experienced negatively:

Sometimes if the response took a little while to come back, I might think, 'Oh, you know, perhaps they are chatting to someone else in the office or they are taking a phone call.'

It's not a nice feeling, but it didn't happen often... it could be quite frustrating and maybe hurtful (C11).

Therapists grappled with this issue, but were aware that interpretation of this situation was rather ambiguous. This made them mindful that pauses could be misconstrued when there are

no other qualifying channels of communication, such as posture, gaze, and facial expression. When therapists did speculate about why their client was silent, it was more often accounted for in terms of the client struggling to express sensitive emotional material:

If there was a pause, I would read that as being quite hard for them to write what they were talking about...it was difficult, just to know, yeah, if it was sensitive for them or not (T6).

Slower Communication

In nearly all cases, when people were asked what it was like to type rather than talk to the other person, the experience was described as being slow and frustrating. For those who were fast at typing, there was often a sense of disappointment that the other person could not match the speed. Conversely, it was clear that those who were slower at typing detected some signs of disappointment and felt pressured to keep up. Spelling and grammar issues came to bear on this problem, because accuracy needed to be sacrificed for the sake of expediency. A client described the sense of this pressure as follows:

You want to get it as short as possible and you miss out on a lot of the information because, 'Oh, that poor counsellor, she is sitting there waiting'...I know what it is like waiting for her to respond and she is probably typing a hell of a lot quicker than I am (C7).

In some cases, slowing down helped the client to organise what they wanted to say:

I'm the type of person who when I talk I just say things and they come out, which isn't always a good thing, but you can't help that. So when I was typing, I kind of stopped and thought about what I was typing and in a sense it was easier to explain myself typing the words rather than blabbering something out and then having to correct it and then getting all muddled in my sense of what I was trying to say (C2).

Interpretation issues also arose from the pace of typing. Sending a message was important to show the other party that comments were being attended to. This led to a situation where messages had to be assembled, piece by piece:

You can't type as fast as you can speak, so sometimes I would be on a bit of a rant and I would send something that would make more sense once I had sent the next sentence (C6).

Nearly all of the therapists expressed concern about the effect of typing speed on the limited time that they had to work with each client. The slow pace of this mode of intervention led to the perception that they had covered less ground than they ordinarily would in a face-to-face therapy session:

You just can't cover as much as you would face-to-face. So, one session is really equal to about a third face-to-face because the biggest issue is waiting for somebody to write back, and especially if they have got either a lot to write or they are very slow [at] typing. I think that is the biggest issue... I just think it would take longer than face-to-face would (T7).

Understanding and Misunderstanding

In the absence of non-verbal information that might have otherwise qualified the meaning of statements, there were some instances where clients and therapists misunderstood either the meaning or the tone of what was expressed. On the whole, misunderstandings had a relatively minor impact, aside from slowing down the rate of communication:

The counsellor was explaining something and asked whether I could see the link and I said, 'No, no I don't see the link.' But I was expecting him to be putting a hyperlink. But then he explained again, and after a little while he explained the situation and we both had a laugh (C5).

Another common problem that led to misunderstanding was when client and therapist ended up out of synch with one another. When messages could not be assembled quickly enough, the other party would sometimes respond prematurely. This meant that the intention of a comment was sometimes misunderstood by the reader out of wanting to respond quickly:

If you write something and you wanted to add to it but they have already replied, it kind of goes a bit off course because it is not exactly what you intended because you haven't written the other thing. You can't type your thoughts fast enough basically (C6).

According to most of the participants, misunderstandings were much more common in the first few sessions, until each person adjusted to the communication style of the other. For therapists, the detection of misunderstanding was usually based on statements seeming out of place or unexpected. In most cases, therapists attended to misunderstandings by periodically checking their understanding with the client:

I think you have to read between the lines a little bit and if you are not sure just clarify it with them, 'Did you mean this? Did you mean that? I just want to get this clear' you know and things like that (T8).

Expressing Emotions

After making some initial adjustments to the way they communicated over Internet chat, most of the therapists found that they reached some level of comfort with handling sensitive emotions that their clients shared. However, in every instance the therapists indicated that they did not feel as emotionally connected to their clients as they did when they were working face-to-face. One of the therapists explained:

You could see that they were going through a tough time, but that feeling, it did come out I think, you could feel for that person, but I guess not to the same extent as if you saw someone that was saying something and their voice was quivering or tears were

kind of starting to come down... online I felt even a little bit more disconnected as such (T2).

This sense of disconnection was alleviated to some extent when their client shared information with their therapist about the emotions they were experiencing at the time. Even so, some therapists were concerned about deepening emotional exploration over Internet chat:

I had a couple of clients that sort of indicated things like they were actually crying during sessions and things like that. So, there was a degree of emotional connection, I guess, going on there... I did find it hard to try to communicate that sense of empathy that I might with a client who is in the room...I was feeling a little helpless, I guess, to be able to communicate that to them...whereas you can do it with sort of body language and tone and things like that when you are in a session with someone... at a point where a woman was bringing up some quite sort of lifelong problems, I did find that quite, yeah, hard because I really didn't feel like I had the ability to deal with...I almost felt like I should bring it back to a more surface level. I felt like I was sort of opening a can of worms that I wouldn't necessarily be able to deal with through that medium (T3).

Again, therapists relied on timing cues to judge the intensity of emotions that clients were experiencing:

The only sort of indications I had as to how people were struggling was the length of time it was taking to make a response, so just doing things like watching the time, how long do they normally take to respond to three lines' worth and how long did it take them to give me one line's worth this time (T10).

Clients confirmed that they had some difficulties articulating emotions to their therapist, but attributed this to the limitations of the medium. Although some clients stated that using the written word to share their feelings was a familiar form of expression, in nearly all cases

they spoke about limitations with emotional expression, particularly in communicating the degree of emotional intensity they were feeling:

When the counsellor says, 'What are your emotions?' and you say, 'Angry'... you don't get any indication of how angry or what the anger is... There are degrees of emotion that can't be expressed (C7).

Assessing Distress

Therapists found it challenging to gauge the psychological distress of their clients accurately over the Internet. They struggled to interpret shifts in the client's tone of writing. Without additional information that would help to confirm or disconfirm their theories about a client's current psychological state, therapists felt uncertain:

I certainly wasn't conceptualising the clients at a level that I would a face-to-face client, simply given the comparison that I had at the time, which was working in the Curtin Clinic where their procedure was a two-session intake. That is a lot of information that could be gathered, when really this was the first session was sort of an intake, information gathering, it often felt like I was jumping into the intervention stage sort of half-cocked, half blind (T4).

There was a shared perception amongst most of the therapists that their clients were less severely psychologically distressed than people they saw face-to-face. For these clinical psychology masters trainees, the distinction was typically framed in terms of 'counselling cases' rather than 'clinical cases'. In a few cases though, after contributing to the research, some of those clients who received Internet chat therapy services decided to continue with psychotherapy by accessing face-to-face services with the same therapist. In all cases discussed in the interview process, therapists reported being surprised:

I thought she was actually quite less distressed than when she came in and I realised just how complicated the whole picture really was. There was a lot going on for that client and I haven't sort of touched the surface of a lot of it...I'm very used to doing an assessment beforehand with quite a detailed case history and just not having that information made it quite difficult to tailor things specifically for the client. It was easy to give them more broad-based intervention stuff (T9).

Reading the Experiences

Due to the fact that Internet chat is comprised of written statements, the record of a discussion can be re-read by both participants after the event and during the discussion itself. One of the simple ways that re-reading was used was to go over recent comments when a misunderstanding was detected, to try to make sense of where the confusion might be. In addition to this, there were a number of more complex ways that reading the log was used. During the interviews, several clients stated that reading their own words was quite a different experience for them than using the spoken word. For them, speaking about their experiences meant that often they did not reflect on their own words, whereas typing them out they did:

It was interesting for me from the perspective that sometimes the way I would write something and then I would see what I had written and I would go, 'Oh, I didn't realise that was sort of what I thought about something.' So, it was I suppose seeing what I was saying, as opposed to just putting it out there verbally and maybe not registering what I am saying, was a bit different (C8).

Therapists found that there were a number of benefits to re-reading the discussion. Most therapists who commented on this topic found that during the session, re-reading the material as the session proceeded allowed them to keep the conversation on topic, rather than losing

their focus on side issues. They also used the log for material to reflect on in supervision, as the follow therapist explained:

I found that in supervision that because we had this great log, we had a very clear idea of how I'm wording questions, how a client responds to that... you can get a little bit lost face-to-face on side issues. When it is just that meeting on the Internet you kind of just stay really, really focused. And so if people start to go off you kind of go, 'Hang on! Let's go back to this point' and you stay really focused (T7).

Having a written record automatically generated by the computer also took some of the pressure off for some therapists in terms of note taking. In the following explanation, a therapist describes how having a written record allowed more engagement and afforded the ability to stay present with their client:

Instead of note-taking you can just be focused on what they are saying because you can constantly stand back to see what it is that they talked about, and you can actually find where you might have gone wrong in terms of a misunderstanding that has occurred (T10).

Summary: Relying on Text

The most obvious hurdle with using writing as a form of expression was the experience of waiting for the other person to reply. During that waiting period, there was a tendency to make assumptions and generate theories to account for a delayed response. Whilst therapists tended to assume their client was struggling with difficult emotions, clients often took silence to mean that their therapist was not paying enough attention to the session.

These findings have obvious therapeutic implications for psychologists, during moments when they are waiting for their client to elaborate on a point. Unlike face-to-face therapy where anticipation of more details might be expressed with a glance, during Internet

chat, psychologists may be required to show a clear written indication that they are carefully attending to the client's words. Consistent with the theories of Murphy and Mitchell (2009) about email as a modality for therapeutic interventions, when therapists describe their activity of reading and considering the clients perspective during a session, this may lead a client to develop a more vivid sense of the immediacy and presence of the therapist. Further to this point, it may also be helpful for therapists to shape the interpretation of silences in a more active manner, by offering an explanation for their own silent periods before or after these events whenever a significant period of silence occurs during a session.

Typing is a slower form of communication than speaking and this led to mixed outcomes. When people took time to elaborate, using the written word helped them to reflect more deeply and organise their thoughts, before expressing them to the therapist. When frustration was detected in the other party, it often led to a sense of being under pressure to communicate at a faster rate. In these instances, accuracy of communication was frequently traded off against the need for a timely reply. These findings may have implications for those with psychological disorders that are characterised by self-criticism, excessive concern about being scrutinised, and perfectionism (Luyten et al., 2007).

The perception of therapists that they covered far less material during Internet chat therapy matches the findings of other researchers, insofar as the rate of information exchanged via Internet chat is slower and therefore decisions often take longer than when having a verbal conversation (Hancock & Dunham, 2001; Walther, 1996). Therefore, it is not surprising that clinical decision making would also take longer over Internet chat communication. Perhaps the slow rate of information gathering over Internet chat contributed to perceptions of therapists that problems being experienced by clients were not as severe as the face-to-face comparison group. That is, as clients gradually disclosed information about their psychological distress, therapists may have had more time to stay calm and potentially

fail to remember prior details that have previously been disclosed relating to psychopathology. Furthermore, the pressure to provide helpful interventions during each session left therapists with less time to explore the fine details of problems that their client disclosed. It is worth bearing in mind that people who are more reserved, sensitive to scrutiny, or wary of stigma about psychological disorders, may have chosen Internet chat therapy for the purpose of using the written word to control the impression being formed.

A promising finding of this study was that after a short period of adjustment, the misunderstandings that are often associated with textual communication occur less frequently and are resolved more quickly. There were two clear areas of adjustment that were identified by the participants: (1) becoming familiar with the communication modality of Internet chat; and (2) modifying the style of communication to suit the idiosyncratic style of the other person. This data adds further detail about the ‘compensatory skills’ people apply when they use Internet chat (Mitchell & Murphy, 1998), demonstrating that making adjustments is just as important to the process of Internet chat therapy for clients as it is for therapists.

Participants stated that reading was experienced in a different way to listening, bringing out a more structured, objective, and analytic style of reflection that directed focal attention to the content of what was said. Therapists used this to guide the direction of a session, but more importantly, the written record of the discussion allowed words to be read several times over, both during and after each session. Many clients found this beneficial because it allowed them to externalise their thoughts and clearly identify problem areas for further psychological work. These findings reinforce the ideas proposed by a number of theorists about the features of written communication online (Fenichel et al., 2002; Smith, 2002). The subjective report of participants in this study also provides psychological detail to add to our existing knowledge about the neurological and physical differences between writing and speaking (Buchweitz, Mason, Tomitch, & Just 2009; Esterling et al., 1994). This is particularly important to

consider in the context of psychological interventions, which depend upon expressive and receptive communication.

The perceived sense of being emotionally detached from the other person appears to be a problematic area for Internet chat as a tool for psychological consultations. The experiences of participants in this study confirm the conclusions of researchers in the area of computer-mediated communication and extend these theories to the context of therapeutic relationships online (Hancock & Dunham, 2001). Although participants in this study were capable of accurately expressing and identifying the type of emotion being felt, they noted difficulty using the written word to communicate the intensity of emotions. This converges with the findings of some recent researchers that general emotional states can be identified over Internet chat (Mallen et al., 2003), yet it raises doubts about theories that propose that deeper aspects of the self are more accessible over Internet chat (Bargh et al., 2002). One possible interpretation is that Internet chat lends itself to more rapid and frequent disclosures, but can still leave a person feeling emotionally detached.

Practical Factors

Practical issues affected the capacity of a person to use Internet chat for therapy in a variety of ways. These factors tended to be addressed partially, or overcome completely, with a minor adjustment as explained below. Participants referred to the practical functions of the system and whether this allowed them to carry out their goals. Clients were more focused on connectivity and access issues, whereas therapists emphasised the therapeutic limitations of using Internet chat. While there was sometimes an initial shock when practical problems were first detected, they were typically not perceived as being problematic over time. There were three themes in this domain: ‘technical problems’, ‘privacy and security’, and ‘strengths and limitations of Internet chat for therapy’.

Technical Problems

Although the web-based Internet chat system worked quite efficiently, there were times when technical problems were experienced by clients and therapists. Most problems were resolved quickly and people were generally forgiving. Appointments needed to be rescheduled on occasion, when too much time was spent trying to fix the problem. Likewise, therapists sometimes felt pressure to get the same amount done in the limited time they had left when technical problems were fixed. In most instances, these problems resulted from the inexperience of the person using the computer and with time these issues were resolved as each person became familiar with how to use the system. There were still some cases though, where people became quite upset as a result of confusion around technical matters, as this example illustrates:

I hadn't touched my computer so my status went to 'away'. So she actually got annoyed. Like, she stopped what she was writing and wrote me a little thing like... "I'm so boring, you know, you mustn't want to even hear me" or something like that, or something like "you must have more important things to do." I had to write, "I'm still here, it is just that I haven't touched my computer for a while and it went to 'away'." So, then for the future, if people were taking a while, I would just sort of move my cursor around and make sure it was still online (T7).

As can be seen from the above quote, technical problems sometimes elicited powerful defensive reactions, functioning as a prompt for projections about the therapist (Grant & Crawley, 2002). These accounts provide a genuine example of the transference processes theorised by Suler (2011), whereby difficulties with using the computer to communicate with another person can result in psychologically defensive patterns emerging. Although therapists may be inclined to focus on reassuring the client that the problems being experienced are

simply a technical hurdle, the identification of projections may allow therapists to explore fears and problematic patterns in relationships.

Privacy and Security

Both clients and therapists were satisfied with the use of encrypted communication as a security measure. In particular, several participants specifically noted their satisfaction with the fact that there was no record of the conversation once the web-browser had been closed. Clients associated privacy with being able to make an appointment at a time when they could use their personal computer free from interruptions. Although therapists had a trusting relationship with their colleagues about handling sensitive information, there were some concerns about the potential for colleagues to look over their shoulder and see what they were typing. In some cases, therapists indicated that they were generally wary about the Internet itself, prompting some degree of caution, as one of the therapists explained:

It is like anything - if people really wanted to know what was going on in a clinic you could get a parabolic ear and off you go...likewise with the Internet if people really want to get at the information then they will find a way...It is just my own general paranoia about the Internet (T10).

Strengths and Limitations of Internet Chat for Therapy

Most therapists took the opportunity to talk about some of the ways that using Internet chat affected their capacity to carry out psychological interventions. In the view of therapists, it was a challenge at the beginning of therapy to structure the session or to initiate therapeutic work, particularly when clients were interested in telling their story. Therapists sometimes felt limited in the techniques they could apply without being in the same room as their client. The

complexity of the client's needs sometimes determined whether Internet chat was a useful way of delivering psychological interventions, as the following therapist explained:

Things like that [introspective exposure] I couldn't do with her online because it was impossible, and the breathing, slow breathing practice and things like that, but I felt like the other people that had just everyday sort of hassles and just wanting some solutions, it was quite effective in that way. So I think it depends on the level of severity (T6).

Explaining the principles of cognitive-behaviour therapy (CBT) was also something that therapists found more challenging over Internet chat. Not wanting to take up too much time or interrupt the client as they were reflecting, therapists sometimes relied on using illustrative examples to help clients understand key concepts:

I found like a lot of the clients used analogies to explain things. Like, they found that easiest to kind of explain what was going on for them...some examples really stuck for them so that they kind of went, 'Oh yeah, I see' and they did get a better understanding of that. That kind of cleared things up a little (T2).

Some therapists found it useful to rehearse the application of CBT worksheets in session with their client. This overcame some of the problems with tasks not being applied outside of each session:

I would kind of at the end of the session be going, 'Oh, we have run out of time; I will send you, like, an email with a response in it' and people just weren't getting the emails or weren't checking it or things like that...So, instead of sending information as we go by email, I would say, 'Okay, now on helpful thinking styles, here is a worksheet on that' and so they would open it up and then we would go through it right then and there in the session (T7).

Worksheets from websites dedicated to CBT were also harnessed in conjunction with the reflective work carried out during each session. Therapists provided websites to their clients to obtain structured information that they could work on between appointments:

I found modules were great, using them, something a bit more structured. It was a lot easier. When I got onto that that was good for the client and myself, rather than just sort of vague chatting...I was very surprised how much clients got out of even two or three sessions, but particularly I think the CCI stuff [Centre for Clinical Interventions] was invaluable there to be able to send modules that they could work through on a weekly basis. I found that invaluable (T9).

Aside from noticing a loss in the immediacy of communication over Internet chat, clients seemed to make considerable changes from this limited interaction with a therapist. Some clients described how they applied the techniques they learned to make real changes to the way they handled situations beyond the confines of the Internet:

He gave me an exercise to do which I have put into practice and that is very good too...the exercise was, 'What is the feeling that you have when you are feeling yuck, when you have got an emotional feeling, and, you know, what is your belief?' I would say, 'Well, mine would be that everything goes wrong for me.' And then he would say, 'Well, you have to have evidence for and against that belief system.' ... And, you know, 'What is your evidence that everything goes wrong?' I would compile a list and then he would say, 'Now we want evidence against that belief system and make a list of that'. So I found that very beneficial, and I practice that now all the time (C10).

Summary: Practical Factors

Frustrating technical problems are a feature of any work that involves a computer. For psychologists wanting to provide services over the Internet, the expectation of a client that

they will only pay for services that have been received is likely to be at odds with the therapist's expectation to be paid for their time when a technical problem disrupts the session. Even in this study where services were free, therapists still felt obliged to fit the same amount of work into a smaller session as a result of technical problems taking up some of the available time. Although many psychologists who provide services over the Internet settle payment for services prior to each session (Derrig-Palumbo & Zeine, 2005), the experiences of clients and therapists in the present study highlights potentially sensitive issues associated with technical problems. Therapists offering their services online may need to consider the impact of payment quite carefully and refund policies on clients who experiencing technical problems in addition to their psychological distress. Such considerations may present more significant challenges for practitioners working in isolation than those who work for agencies, due to a lack of technical support available.

Provided that users of the system are able to set aside time where they will not be interrupted, it would seem that most concerns about security can be addressed by using encrypted communication and designing the system so that no record of the conversation is stored on the client's computer. Participants in this study were satisfied with these security measures, which are a common feature of many communication systems used by therapists who provide services on-line. In the case of programs where the history of communication can be stored, it is important to clients that they know how to turn off that setting. Most ethical guidelines about the delivery of psychological services over the Internet highlight these issues (Anthony & Jamieson, 2005; Martin, 2010; McAdams & Wyatt, 2010; Symons, 2010).

The limitations of working over Internet chat prompted therapists to adapt their approach to the constraints of the medium. The typical view from therapists was that they could not offer as much to their clients as they ordinarily would in person. Waiting for a client

to describe the presenting problem at the beginning of client contact added to the perception of being held back. The main way that these practical considerations were addressed was to direct a client to useful self-help or psycho-educational materials.

Setting

The place where people accessed the Internet was important for both psychological and practical reasons. Clients explained how their decision to access Internet chat therapy was often associated with the setting where they would access the computer, without needing to visit a clinical setting with a psychologist. The therapists in this study had no choice over the setting where they accessed the terminal, however, they still spoke about the impact of being in that place on their experience of doing Internet chat therapy with their clients.

Home

In most cases, clients accessed the Internet from home when they had an appointment. Being in their own controlled and comfortable territory meant that they could relax more fully without feeling self-conscious and manage some of the outward features of their distress. For some, being at home made the experience feel more personal. For the most part, clients were able to manage distractions effectively at home, however, there were some instances where distractions interfered with therapeutic work, as this client explained:

My home has been my healing parlour for the last year, so, yeah, you are certainly more comfortable. You can go and wash your face...you are in your own territory, so you are not in this room - - I mean, I remember having some counselling once and it was running a camera...I said, 'Well, you know, I didn't put my lipstick on, and it had better be on my best side.'I wasn't really comfortable with that. I feel like you are being scrutinised to the limit...[with Internet chat therapy] I had a couple of people knock on

the door, so I had to sort of go to the door and say, 'Look, I can't talk at the moment...but I was very aware that I didn't miss anything...everyone was ringing me, you know. I got to work out that you just took the phone off the hook so there were no disturbances (C10).

Work

Some clients decided to plan their appointments to occur over a computer at work so that they could avoid the distractions they associated with home life. In contrast to those who had their appointments on a home computer, those who engaged in sessions when at their workplace, tended to find the idea of having an appointment at home too private. The work setting appeared to be a safe compromise between the extremes of visiting a psychologist at their consulting room on the one hand, or engaging in therapy at home on the other:

I work until 5.00 and our sessions were 5.00 until 6.00, so I just stayed at work and used the Internet there. I think it made it flow easier. It probably would have been easier if I was at home, but then I don't know. I think home would be a bit too personal. I think being at work it was like a kind of middle ground sort of thing for me...I wasn't at home but I wasn't in some strange place in a clinic where I don't know anything and it is freaky (C2).

Shared Office

Therapists accessed the Internet from a room with multiple terminals that was only accessible to the clinical psychology trainees completing a placement at the clinic. On the one hand, having multiple computer terminals in the one room meant that there were occasional distractions from other therapists in the room. On the other hand though, therapists spoke

about the value of being able to receive peer support and reflection ‘on the fly’ from their colleagues during difficult moments in an Internet chat therapy session:

It didn't feel like a normal session in that you were in your room with your client, so having the possibility of somebody walking past, we all understood that it was confidential and people wouldn't be reading your screen. At the same time, if you were sort of sitting there and absolutely just losing the plot, you could sit there and if somebody walked past you could pull a face and help yourself calm down or you could go, 'Mm', you know, 'not good'. They could see that you were on the computer and then you know that you could go and talk to them about it afterwards. So, in that sense, it allowed you to vent some of those emotions that you might normally have without worrying about what the client was going to be thinking, because obviously they couldn't see it (T10).

As a practical point, the chairs in the shared office were not as comfortable as the ones that therapists would usually sit in during a face-to-face therapy session, which reduced the level of physical comfort during appointments. Therapists also spoke about the problem of multitasking, particularly in a room where their colleagues were actively involved in other tasks. The splitting of attention between tasks led to greater feelings of distance:

If you are feeling a lot more comfortable, you will feel a lot more relaxed and able to kind of go about what you have to do...In our office in particular where we share with five people, kind of working with someone and there are people going on in the background I guess that was probably the thing that probably distracted a little bit and did make the kind of empathy a little bit more difficult...that distraction pulled me away from maybe being more with the client (T2).

Summary: Setting

One of the advantages of Internet chat therapy is that the Internet connects people who are in two different locations. Whilst previous researchers have theorised about the importance of the setting for clients choosing to access a psychologist via distance technologies (Day & Schneider, 2002), the descriptive accounts of participants in this study outline some of the reasons why people choose to access services from familiar settings rather than the therapist's consulting room. Clients chose their mode of service delivery according to the perceived barriers obstructing them from accessing face-to-face services. When a client prioritised being comfortable and wanting a more personal experience, being at home was the preferred option; whereas in cases where home was seen as being too personal or otherwise distracting, clients accessed the Internet from work. In this study the therapists had no choice of setting, but their recollections about working in a shared office environment did highlight difficulties with distractions and the need for comfortable chairs. Aside from the question of how comfortable those chairs in the shared office were, it may be the case that being unable to physically express the full range of emotions with body language, facial expressions and gestures over Internet chat, is in itself, a physically uncomfortable process for therapists to undergo.

Sense of Person

Two critical questions in this research were how well people were able to form an impression of the other person over Internet chat and what comprised that impression. Although these impressions were not as vivid or coherent as those formed of other people in a face-to-face interaction, both clients and therapists formed a surprisingly detailed sense of person with whom they were interacting. Based on the limited information they had about the other party, participants described a sense of relative closeness or distance from the other

person, and a sense of the interaction between them. This domain was comprised of three themes: ‘presence and engagement’, ‘distance and closeness’, and ‘mental image’.

Presence and Engagement

The instantaneous nature of Internet chat communication led people to form the perception that they were having a real conversation. At times, emotions like frustration were detected in the tone of language used by the other person, reinforcing the sense that they were dealing with a human being. Therapists recalled that their conversations felt more authentic when clients were being natural, open, and descriptive in the way they communicated, rather than trying to type perfectly. Joking played a role in humanising the other party, in addition to each client having idiosyncratic forms of expression. Delayed replies led to a sense of disengagement by the other. One therapist explained their sense of presence as follows:

I felt like I was chatting to a real person. I think what makes it more real though is when the person is not trying to make it perfect. I did have one who, as I said, I was the second priority. There were times where she was answering other phone calls and you would have no text for minutes at a time, about 10 minutes and then sort of come back saying, ‘Oh sorry, I had a phone call’ and you think, wow! You know, the polite thing would have been to say, ‘I have got to take a phone call. I’ll be back in a minute’ so I knew what was going on. So that person definitely wasn’t present but I think with the majority of the other ones, you know, you did get that connection...[another] person would make a few jokes, you know, while she was talking and you could kind of relate to that. And it wasn’t too different to being face-to-face (T7).

Distance and Closeness

For the majority of clients in this study, there was a strong link between anonymity and the sense of being distant from the other person. The perception of being more distant from the therapist was one of the critical factors that allowed some people to feel safe enough to reveal their psychological distress. Due to the fact that attention was focused on their words and not on their visible emotional reactions, being distant from their therapist helped many people to reveal more about their distress and hence, feel closer than they would otherwise allow themselves to if they were in the same room as their therapist.

I would say close enough because the whole reason that I think face-to-face counselling didn't work for me was because, like, you know this person and you see this person. Like, I wouldn't say it was distant...I think other factors were stripped away and it kind of just makes it, 'This person is here to talk about this.'... 'close enough' meaning that you feel safer knowing that you have never met this person and you are not going to see this person down on the street and bump into them and stuff and they knowing about your personal issues...They don't know what you look like or who you are (C6).

By comparison, therapists experienced that distance from their clients as being more removed and detached from the other person, which was often associated with the time delay between responses and the coherency of communication. Even so, in most instances therapists in this study found that the distance did not prevent them from helping their clients:

There was a certain closeness but I think some of the aspects of being online did make it more removed...there is a certain amount of distantness to it, I guess, because you would type something and then you would wait for them to sort of complete the answer so that I guess then there are all the other questions that come along and you just have to wait... they would be quite open with you and quite revealing at times and kind of

letting you into, 'This is my world; this is what is going on for me' ...it is a different sort of relationship than that you develop face-to-face (T1).

Mental Image

All but one participant recalled forming a mental image of the person they were chatting with over the Internet. In most cases, the mental images were not highly detailed, but did include features such as age, height, weight, hair colour, and ethnicity. In some instances people furnished the mental image with a sense of the surroundings of the other person (i.e., client impressions of the clinic where the therapist was, and conversely, the therapists impressions of the client's home or workplace). The following client shared reflections about impressions of the therapist:

Obviously he is male. Well, he might not be male. He could be female and pretending to be male, who knows? But, I don't know, it was a kind of age, height, not too much detail. I don't know. I'm trying to think back to when I was typing and stuff. What I imagined was probably between 20 and 30. I don't know. I don't know if that is how old he is. I think I imagined him with brown hair. He was kind of dark, like in a shadow...just kind of casual, jeans and a coloured shirt, sort of thing, going on (C2).

For the most part, the mental images that people formed were positive impressions; however, in some cases, the images that were formed were negative (e.g., imagining that the therapist was disinterested and had wandered off during a long pause). In the case of the one person who did not form a mental image, this was explained by the client in terms of their therapist having the same name as someone who had harmed them in the past over the Internet and hence, the client did not want to conflate these impressions. In a few rare cases, clients described negative impressions of the therapist that went well beyond the information that was available:

It was just like that she was a fairly young girl that was unmarried and hadn't had children...some of the questions that she asked. I could imagine what she sounded like...I said, 'I was right' [about the impression]. I don't know whether I was or wasn't (C7).

In some instances, therapists built the detail of their mental image on information that their clients provided. As more information was revealed, therapists often revised their impression accordingly:

I had one woman saying that she had not had a relationship for quite a long time and was quite self-conscious about her weight—I guess things like that would start to form images of the person for me, so they built the description...I would sort of extrapolate based on what they had told me and at times when something else would come up I would think that that, I guess, was something that was contradictory to what I had almost assumed, I would sort of modify it again based on what came up (T3).

The impression formed was at times based on memories of other people. Persons of significance to the therapist were used as a default reference point to guide the impression of a client as it formed, in terms of both expressive style and visual appearance:

I could imagine I think at one point - - And these are all sort of my own sort of transference and countertransference things that are occurring for you while you are doing it. I think that was what was shaping my images of these people. So, I know that things like at one point I was wondering if this woman looked like my first grade teacher because of the way she was sort of responding over the Net and because of some of the problems that she was talking about, but at other points she reminded me of someone that I used to know through university, so I think it was those sorts of things that was bringing up those sorts of images (T10).

Both therapists and clients said that the experience of forming a mental image over Internet chat was analogous to imagining a character in book. This mismatch between the impression that was being formed and the actual person, led to some level of caution:

I did compare it to reading a novel, for example, and as you are reading that novel you may begin to construct a mental image of the physical features of the individual...quite often people see a movie after reading the book and feel dissatisfied because the character in it didn't represent the character that they had mentally constructed (T4).

In cases where the therapist actually went on to meet the client face-to-face for ongoing psychotherapy after the study, there were occasions where the traits that came across over the Internet were not conveyed in person:

I imagined them online to be quite a warm person, and in person I didn't find them to be that warm at all, and the connection wasn't there in person, whereas I think it had been online (T6).

Summary: Sense of Person

From these themes, it appears there are essentially two main dimensions that shape the perception being formed of the other person over Internet chat: (1) a visual impression of the appearance of the person; and (2) their relative closeness or distance. The experiences of participants in the present study show that in the absence of confirming or disconfirming information, there is a tendency to generate a mental image of the other person automatically. Participants gave accounts of both inductive and deductive reasoning being used to test their theories about the other person as more information was revealed across time. They also described how their memories of other people shaped and distorted the impression being formed. These findings align with the social cognitive model, in that they illustrate how both

clients and therapists make reasoned assumptions based on limited details, going well beyond the available evidence (Fiske, 1993).

With the slower rate of communication and a limited range of information exchanged over Internet chat, participants in this study described how they focused on different aspects of communication than they ordinarily did. The other party was perceived as being more human when there were timely responses, mistakes, attempts at making jokes, signs of emotion, or when an idiosyncratic style of communication was used. These findings add to the repertoire of information about how therapists might enhance the client's sense that the therapist is present and engaged with them (Murphy & Mitchell, 2009).

There were major differences between the way that clients and therapists experienced their sense of distance from the other party. For clients, being anonymous was associated with being distant from their therapist and this was taken to be a positive aspect of Internet chat therapy, bringing a feeling of safety. Conversely, therapists associated distance from their client in terms of delayed replies and miscommunication; in this case, being distant from the client felt unsafe because they were concerned about being unable to provide adequate support.

Although it is obviously worrying for therapists when they feel distant from a client, this study shows that many clients are attracted to the notion of being removed from direct contact with a psychologist. Distance could be used evasively by a client to avoid painful psychological material or to construct a presentation of themselves to the therapist that is incongruent or misleading. It is possible that distance can be used by a client to serve a protective function, rather than merely being a sign of disengagement (Teyber, 2000). For instance, keeping relatively distant from the therapist is sometimes intended by a client to avoid being overwhelmed prematurely, before adequate levels of trust are reached. Although similar processes occur in face-to-face psychotherapy, the modality of Internet chat affords

further opportunities for clients to shape the impression that is being formed about them and to control the level of “therapeutic distance” (Mallinckrodt, Daly, & Wang, 2009, p. 241).

Therapeutic Alliance

A key question in this research was whether the working relationship that forms between client and therapist over Internet chat might be considered therapeutic. Clients tended to experience their therapist as providing a detached guide to their own personal reflections. This created a situation where the client was able to explore their problems, but with greater control over the amount of information shared. Both clients and therapists described interpersonal processes characteristic of therapeutic alliances in face-to-face therapy, including the experience of resistance and counter-transference. Therapists associated stronger alliances with disclosure of more complex problems and severe psychological distress. There were five themes in this domain: ‘feeling less scrutinised’, ‘being personal in the therapeutic relationship’, ‘talking past each other’, ‘concealing and revealing’, and ‘variable alliances’.

Feeling Less Scrutinised

The perception of being under intense scrutiny was an experience that limited the outcome of face-to-face therapy for some individuals. With the perception of being under less scrutiny, many clients felt like that they could concentrate more on the tasks of therapy and manage their distress more effectively than in a face-to-face session. For a large proportion of the clients who chose Internet chat therapy, being under observation when they were upset was such an unbearable experience that they reported being unable to concentrate on working through their difficulties. This came to bear not only on their hopes about the therapy process, but also their sense of being understood by their therapist, as this client explained:

It was easier for me because when I was in a room face-to-face with someone I was just emotionally crippled. I couldn't talk. I was basically in tears the whole time, so not being in the same room as someone and actually like through a computer sort of thing, it was like I could say what I wanted to say and I could write what I wanted to write and everything like that, without the feeling that if I look up that person is going to be looking me right in the eye and, like, it is going to freak me out and make me lose concentration...they still could reply back...in the same time...It was a lot easier for me...I was finding it hard to sit face-to-face with someone without bawling my eyes out for like the whole session, so I got nothing out of it but for me crying and feeling awful when I left...[on the Internet] we got it out within the first session. I managed to tell him exactly what I felt and why I felt that, and that helped kind of worked it out... I still get a bit choked up as well. I still do. Just talking about it I just get a bit, 'Mm.'...I wobble!...I probably would still find communication face-to-face with someone a little bit too confronting and emotionally draining and the fact that I can't communicate verbally if I try and get my thoughts out of my head to someone verbally, I find it easier to explain myself and what the hell is going on in my head if I can just write it down. That is probably the main thing that just worked for me was that you say it, it is said, and he got it (C2).

Being Personal in the Therapeutic Relationship

Communicating over the Internet was an impersonal experience for a number of people. On the client's side, a sense of emotional disconnection came with the lack of detail during the interaction. For some therapists, this modality of communication was experienced as lacking a fuller human quality to it. At times, therapists also reported that their clients did not

take the interaction as seriously as they would in a face-to-face psychotherapy session. Even so, there was still some sense of the person on the other side:

It is impersonal. Basically you are typing on a computer. You know, you are just typing out your feelings. It is almost like you are writing in a journal or whatever, but you are actually sending it to someone else you don't know (C6).

Typing messages to a therapist generated an impression for some clients of the interaction being more professional. Conversely, therapists sometimes found that their interactions felt less professional because they received less information about their clients. A client described what this was like for them:

It is not like you build up a rapport and think, 'Oh they are being mean to me' or 'they just want to be nice to me because they like me' or whatever. It is kind of, 'She is just doing her job.' That takes that bit out of it, yeah. It became more personal and less personal at the same time... it was kind of like, 'Well, she is a professional and she sees that this, this, and this is happening, and this is the response that she is giving me from a professional point of view'... rather than thinking you are building up a relationship and being friendly... it is very much about you, which I suppose is good and bad (C11).

But for others, the limited information they had about the person of the therapist coupled with being by themselves, allowed clients to focus more on their own personal reflections. The sense of detachment and distance allowed people to reflect more openly:

There is that disassociation on the Internet where you can sort of step back from yourself a little bit, well, not from yourself, but from your identity and be able to communicate openly about yourself. So, there is that. I have always seen the Internet like that (C4).

Talking Past Each Other

Clients reported that their therapist was at times misaligned to them in some critical way. This created obstacles to developing a sense of collaboration between the client and therapist. In some cases the issue was that therapist did not provide what the client expected or the client simply misunderstood what the tasks of therapy were. In other cases, clients reacted to the fact that the therapist did not explicitly acknowledge a key issue they were distressed about. The effect of this was that those clients felt dismissed, whether that was intended or not, as the following client recalled:

I just typed in: 'I just had a bucket of water thrown over me containing bleach from the woman next door' and he ignored it. He didn't acknowledge it.... I thought, 'Oh maybe that is because he wants to just stick to that subject' and I thought, 'You silly sausage! You shouldn't have mentioned that anyhow.' But that was what had actually happened to me and I would have liked to have talked about that because that was a present time issue...I mentioned it again in the last session and he goes, 'Yeah, you typed that in', but that was all really...It might have been, 'Oh gee, that must be awful for you' you know...I reflected on myself that I can't dwell on it and focus on one particular subject and I was going off on a tangent...It is not nice. I thought maybe it didn't even go through, you know, but I see it had gone through...There was a feeling of, 'Well, we don't want to hear about that so we won't even acknowledge it' (C10).

On the whole, therapists reported being aware of those moments when their efforts were at odds with what their clients wanted out of the process. Disagreements about the tasks and goals of therapy were sometimes about confusion regarding the process of psychotherapy, as in the following case where the client expected directive advice about what to do:

He was like, 'What do I do?' or 'Tell me what to do'...[he] had no empathy for other people as well, and that was what he was coming for, to understand his wife's position

and then, yeah, he wouldn't take anything on board, so we were going around in circles the whole time (T5).

Concealing and Revealing

Several clients reported that they held back their feelings at times, either because of the limited time they had with their therapist (five sessions) or because they were still becoming familiar with the therapist. After several sessions, most clients did allow themselves to become more emotional; however, they often did not report that to the therapist. Even if the therapist had touched on an emotionally sensitive area, clients were inclined to keep that to themselves rather than share it openly with the therapist. The tendency was to put the focus on processing thoughts, and making sense of behaviours and interactions, rather than being emotionally understood:

I did a lot of crying, and I was sort of crying and then my glasses were fogging up and then I couldn't see to type. That was about the only problem I had with that...I experienced the emotions when they came up. But, of course, the counsellor wouldn't have known that I was crying...I didn't tell him I was crying... I didn't say, 'I'm crying now'...I expressed it at that depth, but the physical emotions that I was experiencing he wouldn't have been aware of because he couldn't see me, you know. There weren't tears on the paper...I just got on with it. I just took the glasses off and wiped them and wiped my face and got on with it, refocussed on not making any spelling errors (C10).

Therapists would also conceal some of their feelings from the other party at times, keeping their countertransference reactions to themselves and taking a moment to gather their thoughts and organise their feelings before responding:

If the client sort of said things and you either weren't too sure of your response or they said things that would probably annoy me, you know, that you get frustrated with, you

have got time to, I guess, cool your emotions in a sense, and react a bit more objectively... you can hide that in a sense. You don't have the facial reactions to go, 'You know, that pushed my button' in a sense. You can kind of reflect back, 'Why are you asking that?' or 'What is going on here between us right now?' (T7).

Variable Alliances

On the whole, clients reported that the therapeutic alliance grew over time. Clients typically became more comfortable with their therapist over the first few sessions, reporting that they felt their therapist began to understand them more over time. In some cases, this level of understanding was attributed to the continuity from one session to the next, indicated by their therapist recalling target issues that the client had previously raised.

The first session was just a mess really, and then from the second one on, yeah, definitely it was good. And also she seemed to remember what we had talked about. So, we were maybe talking about something and it was totally different to what we had talked about before but somehow they linked, and she would bring that up, which was good because sometimes it can feel like you are starting from scratch every time... she was professional and perhaps either read back on what we spoke about before, you know, to be professional and ready or that she cared and remembered. It didn't matter either way (C11).

In cases where the client reported a diminished working alliance, this was explained in terms of not having received helpful information, or the problem area having resolved itself naturally over time.

My situation changed—the situation I was talking about. That changed, so I felt less of a need to discuss that particular situation and it became a bit less involved because

there were less things I felt that I needed to release, I suppose. But that is not to do with anything else other than the situation (C6).

Therapists gave a mixed report of the developing alliance, depending on the circumstances the client was facing at the time and the client's level of commitment to the therapeutic process. Some therapists differentiated between clients who they believed were simply seeking advice versus those who had a genuine psychological disorder, indicating that the therapeutic alliance did not seem to change with people who were simply seeking advice. The general pattern with therapists was that alliances differed from client to client:

There was one that had a quite specific issue that she wanted to address and I think I found that a lot easier to work with than someone who had, I guess, a lot more general problems in their life. So I think it was a bit dependent on the type of things they were coming up with, and the more specific the issue the more I felt like we could actively work together towards a solution...I think it did sort of build across those sessions (T3).

Summary: Therapeutic Alliance

The report from both clients and therapists that the alliance grew over the first few sessions provides further confirmation that working relationships can form over Internet. The sub-set of client participants who were interviewed rated the therapeutic alliance slightly lower than the mean for client participants in the Internet chat treatment group (Table 11, page 119), yet still had a number of positive observations to make about the alliance. The qualitative findings from this study illuminate several characteristic features of therapeutic relationships over Internet chat communication.

The experience of several clients that in previous face-to-face therapy consultations they had felt so intensely scrutinised that they became distracted and unable to focus on their distress, suggests a cohort group amongst those who seek out Internet chat therapy, which is

consistent with the theories proposed by many experts working in the area (Fenichel et al., 2002). This study shows that people who have been overwhelmed with the intensity of face-to-face psychotherapy are, in some instances, more comfortable accessing a psychologist over the Internet. Excessive reactions to perceived signs of disapproval or judgement in a face-to-face encounter may be responsible for this experience. It is evident that some clients feel more at ease when these signs of disapproval are limited to text, without eye-contact, facial expressions, body language, and tone of voice. These qualitative findings illustrate real-world cases where Internet chat therapy can be utilised to expand access to psychological support for people who otherwise would not seek help (Griffiths, 2001; Hunt, 2002; Smith, 2002).

Keeping distressing emotions private was the main strategy that both clients and therapists used to handle negative emotions during a session. In the case of therapists, keeping distressing emotional reactions private during an appointment served a positive function in that it provided a way for therapists to more successfully prevent the client from noticing negative reactions they had which might have caused further distress. Therapists also took advantage of the fact that they were invisible to their client, by taking a moment to pause and relax, whenever they experienced negative feelings, reflecting on how to respond to their client before proceeding. But for clients, the non-disclosure of emotional reactions could potentially have left their therapist unable to provide a sensitive response, simply through lack of awareness. There would seem to be few options to address these challenges, given that clients in this study often stated that they chose Internet chat therapy specifically for the purpose of concealing and managing intense moments of emotional distress. That is, the nature of this difficulty for therapists is the main attraction for those clients who prefer consulting with a psychologist over the Internet.

Further to this issue, the clients in this study also described problematic interactions where they made a comment to prompt their therapist to ask more questions, but found that

this was not pursued further. When therapists did not respond to their client's emotionally-charged prompts, this was typically perceived by the client to mean they had been dismissed, leading to feelings of hurt and resulting in withdrawal or resistance. Although this is a standard type of rupture that also occurs in face-to-face psychotherapy (Arkowitz, 2002), in the case of Internet chat therapy there is the added problem that most signs of negative emotion are inaccessible to the therapist. Combined with issues around the misinterpretation of written statements, therapists may experience greater difficulty identifying and managing therapeutic ruptures (Safran & Muran, 2000). Bearing this problem in mind, a strategy that therapists working over the Internet might employ here is to initiate collaboration with their client by stating clearly when they have identified a comment that appears to be outside the scope of the central therapeutic task at the time, and asking if that issue can be set aside momentarily for further attention later (Teyber, 2000). Provided that the therapist is able to identify the appropriate comments and actually returns to them as promised, this strategy could reduce the likelihood of clients becoming alienated and detached from their therapist.

As a broad comparison of the alliance formed over Internet chat to a standard face-to-face psychotherapy relationship, participants found the experience more of a solitary and personal process. For therapists the solitary nature of communicating with a person over the Internet sometimes led to a perception that the psychological work was not as serious as face-to-face work. This factor may explain why Internet chat therapy clients were often perceived as having less severe psychopathology. By comparison, clients found that being on their own prompted reflections of a personal nature, akin to writing in a diary. But without confirmation that their client was on-task, therapists were uncertain and perhaps under-valued how useful this reflective experience was for their clients. It should be noted, that despite the perception of being connected with the other person through a chat window, those who communicate with one another over the Internet are actually on their own. The perception that this was a

more personal experience is consistent with early studies showing that social activities over the Internet often fail to alleviate feelings of loneliness (Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Scherlis, 1998).

The findings also reveal that clients feel more understood by their therapist over time when there are signs of continuity from one session to the next. When a therapist makes it known that they remember the story of their client, it sends a clear message to them that the therapeutic work is important to their psychologist, either professionally or because they care about them as a person. This adds further information about how therapists might show clearer signs of empathy and warmth over the Internet (Barak et al., 2009).

When alliances decreased, it was often the case that the client was looking for directive advice or seeking temporary support with a difficult situation. When a client is seeking temporary support, it naturally follows that they will not invest further in deepening their working relationship with a psychologist once the presenting issue has been resolved. For those expecting prescriptive answers to their questions in this study, Internet chat therapy did not meet their expectations. It may be the case that time limitations created excessive pressure for those clients to resolve their problems quickly, or that the structured written form of communication prompted some people to use a question and answer format. In short, the findings of this study suggest that confusion about what to expect from Internet chat therapy generally results in poorer alliances. Clarifying these expectations prior to the first session may go some way towards resolving problems of this kind.

General Discussion

Overall, the experiences of clients and therapists involved in Internet chat therapy appeared to be favourable. Clients, in particular, offered encouraging reports about how they able to effectively use Internet chat therapy to address the difficulties for which they sought

psychological assistance. There were a number of characteristic features of therapy over the Internet that were distinctive of both the communication medium and the way that people engaged with the system in the context of a psychological consultation. These features are summarised below.

Clients were attracted to the concept of Internet chat therapy because they could access a psychologist without the perceived risk of being judged in a negative way for exhibiting signs of psychological distress. Although this tended to result in a situation where clients minimised the intensity of their psychological distress, it meant that many people who would otherwise not access a psychologist actually made the decision to reach out for help. By itself, this demonstrates the strong appeal of this form of intervention for marginalised sectors of the community who are psychologically distressed (Amstadter et al., 2009).

Although the process of Internet chat therapy did not live up to the expectation of every client, these results show that there is an adjustment period over the first few sessions of interaction where both clients and therapists modify their approach to the medium and to each other. There were a range of ways that therapists and clients made these adjustments, including adapting to the mode of communication and to the idiosyncratic expression style of the other party. The final outcome, however, was that over a short period of adaptation, both therapists and clients found a way to interact with each other that allowed some therapeutic processes to take place.

The quality of the therapeutic alliance that clients formed with therapists over the Internet had a distinctively detached style, wherein clients took advantage of their invisibility and relative anonymity from the therapist to conceal and manage their distressing emotions, whilst engaging in personal reflection about the problems they brought to psychotherapy. This led to some practical problems for therapists, in that they did not have direct access to information about the emotional intensity of comments that clients made. At the same time

however, clients typically did not want their therapists to know the extent to which they were distressed. These findings about the clients perception that it was beneficial not being able to see their therapist, because they felt more able to concentrate with the greater sense of distance over Internet chat therapy, matches the results of a poll conducted by Skinner and Latchford (2006).

Despite the missing information, both clients and therapists automatically generated a sense of the other person that was based on both a mental image and some perceptions about their relative closeness or distance. Although therapists were typically concerned about the perception of distance from their clients, the sense of being distant from a therapist was evaluated by clients as being a positive aspect of the interaction, in that it helped them feel safer and more in control of the process. Closeness in general was associated with 'human' responses including attempts at humour, making mistakes, idiosyncratic language, timely responses, and signs of emotional expression.

The slow speed of typing one's thoughts and feelings allowed for more deliberate expression on the one hand, but also created some ambiguity about periods of silence. In addition to the efforts of clients to conceal the intensity of their distress, the slow pace of interaction seemed to contribute to the therapist's perception that a client's distress was less severe. Reliance on the written word led to a more rational and analytic style of reflection. This allowed for the accurate information about the type of emotion, but not the intensity of that emotion. Broadly speaking, this meant that the style of reflection was emotionally detached; however, that in itself was part of the overall appeal that encouraged some clients to make personal disclosures in the first place. To alleviate frustration and pressure about the slower rate of communication, it may be worthwhile for clients to provide some background to their therapist in an initial email prior to the commencement of the first Internet chat

therapy session. This may assist therapists to achieve greater levels of understanding when they first interact with their client.

Being able to access a psychologist from a setting that suited the needs of the client was an obvious advantage; however, these findings reveal that considerations about the location where services will be accessed should be planned prior to accessing services. For clients, there is a need to balance concerns about comfort in a home setting against the potential for distraction. For therapists, there is an obvious need to invest in comfortable chairs and to screen out as many distractions as possible for session times, when their attention needs to be squarely focused on the client.

Accessing a psychologist over the Internet came with all of the problems of using the Internet in general, magnifying some of these issues due to the sensitive and personal nature of the information that was disclosed. Limitations in the range of psychological techniques that could be applied and frustrations associated with using a computer for work became part of the process. Beyond these limitations, working over the Internet provided some unique opportunities for interaction that would otherwise not be possible. Therapists found innovative ways around many of the hurdles they encountered and noted some of the features of communicating over Internet chat that were actually advantageous over communicating face-to-face with a client.

Drawing these results together, psychological consultations over Internet chat had a more distinctively controlled nature, with clients deciding what to reveal and emphasise to their therapist. Despite feeling more emotionally disconnected, clients were able to make use of reflections about their thoughts, behaviours, and interactions with others, selectively informing their therapist about the feelings they were experiencing in session. This additional level of client-control over emotional exposure during therapy was a key feature that made the process more accessible to some individuals who otherwise would not seek face-to-face

services. On the whole, the findings of this study show that Internet chat therapy was a positive experience for the majority of participants and that beneficial outcomes can be achieved over this modality of treatment. In the next chapter, the quantitative findings are integrated with these qualitative findings to elaborate on the clinical implications of this research.

Chapter Four

Discussion

Overview

This research investigated psychotherapy processes and outcomes over Internet chat using a comparative trial. The rationale was to address critical gaps in the existing research, by directly comparing face-to-face therapy with psychological consultations over Internet chat using the same group of therapists to deliver services over each of these modalities. Processes of change were investigated with the most thorough measures available for the therapeutic alliance and as well as through detailed interviews about the subjective experiences of clients and therapists as they formed a working relationship over Internet chat. Outcome assessment was undertaken with widely known symptom severity measures.

The main finding of this study was that over the first three sessions of therapy in both modes of intervention, the therapeutic alliance increased and symptom severity decreased. The only measurable difference in the comparison of treatment modalities was a higher rating for client-rated alliance in the face-to-face treatment group. Predictions about the superiority of face-to-face therapy on all other measures were not confirmed, which challenges the dominant assumption that Internet chat lacks the necessary channels of communication to allow therapeutic processes to take place. Although clients rated therapeutic alliances significantly higher in face-to-face therapy, strong and positive therapeutic alliances still formed across the first three sessions of Internet chat therapy. This suggests that a similar process of change operates in both of these modalities of interaction between client and therapist.

The unique contribution of this research is that it provides evidence that one of the most widely used forms of Internet communication can be harnessed to expand access to effective psychological treatment. Whereas previous studies have suffered from small sample sizes, or mixing various forms of Internet communication together, this research drew on a larger group of participants receiving services consistently over a single form of communication. Unlike more controlled studies with random assignment to each treatment modality, letting clients self-select into their preferred treatment modality allowed the population that typically accesses services of this kind to contribute to the sample from a comfortable and preferred location. This made it possible for genuine comparisons to be made between these forms of service delivery as they occur in practice.

In addition to the quantitative findings, the experiences that were described by clients and therapists during interviews revealed some unique qualities to Internet chat as a modality for therapy. Descriptive information from interviews provided further details about the similarities and differences in psychotherapy processes between these two modes of therapeutic contact. Drawing together the quantitative and qualitative findings, the distinctive features of Internet chat and the implications of this research are discussed below.

General Effectiveness

Perhaps the strongest finding of this research was that over a short period of time, psychological interventions applied over Internet chat produced an equivalent level of improvement in symptom severity to face-to-face treatment. This finding in itself challenges the assumption held by several critics, that an absence of non-verbal communication causes such a detrimental impact that psychological techniques are rendered ineffective and that positive outcomes cannot be achieved (Kalb, 2001; Robson & Robson, 1998; Sanders & Rosenfield, 1998). One must remember that both self-help, and particularly web-based self-

help, has been shown to produce positive therapeutic outcomes (Cuijpers, 1997; Donker et al., 2009), with greater effects when therapists assist the client in some parts of the process (Barak et al., 2008; Spek et al., 2007). The mode of intervention being researched in this study incorporated self-help materials, web-based interaction, the involvement of a therapist, and the added advantage of real-time interaction. This made it possible for problems to be explored and clarified at a greater level of depth than the other aforementioned approaches.

The fact that clients noted their own improvement, whereas therapists were unable to detect a significant change in symptom severity for either treatment group, appears to indicate that there was not enough information for therapists to feel confident that their clients had improved after just three sessions. This caution from therapists may extend from their knowledge of research that demonstrates that for lasting improvement to occur, clients typically need closer to 20 sessions of treatment (Harnett, O'Donovan, & Lambert, 2010). Similarly, clinical experience with complex cases may result in more cautious judgement about improvement, taking the early signs of change as being more indicative of initial relief rather than improvement in the condition per se. Unfortunately, this research was preliminary in the sense that longer-term and more substantive indicators of change could not be measured to answer the question of whether the reduction in symptom severity experienced by clients was lasting.

These results are, nevertheless, still quite encouraging, given that three sessions of therapy is the median length of treatment in the general community (Hansen et al., 2002) and that interventions over the Internet are often brief in nature (Mallen & Vogel, 2005). The level of improvement in symptom severity, coupled with other similarities in the process of change described by participants, is a challenge to the criticism that Internet consultations with a psychologist are merely about dispensing and receiving advice (Pelling & Renard, 2000). Rather, this research found very few identifiable differences between Internet chat therapy

and face-to-face therapy. With many psychologically distressed individuals accessing services online, either because they are unwilling or are unable to access a psychologist in person, the signs of improvement identified in this research demonstrate that interventions delivered over Internet chat can not only reach under-served sectors of the population, but can also make a positive difference.

Understanding Client Problems

One of the hurdles of using any telecommunication system is that the channels of interaction are restricted to what the communication medium is capable of transmitting. In the case of Internet chat, the typical criticism is that every aspect of interaction relies on the written word. For psychologists using the Internet to connect with clients, this raises the obvious question of whether the information received is sufficiently detailed to understand complex cases.

The most practical aspect of this question is whether psychotherapists are able to understand the basic problem area that a client brings to each session. In broad terms, reduced levels of symptom severity at post-test indicated that at some level, productive work was possible over Internet chat. This slow and controlled mode of communication left much to the imagination, but focused attention on the core points expressed by the client. Reliance on the written word also made it possible for therapists to structure and direct the flow of dialogue around the main issue. Where the problem area is contained and understood well by the client this may not be problematic. However, when a client struggles to identify the source of their own difficulties, this presents some obvious limitations. By comparison, in a face-to-face therapy session, therapists can more easily observe elements of the problem that a client may not be willing or able to acknowledge.

Using a structured system to gather initial details may partially address the overall shortfall of information and the tendency to fixate attention around a single area. Given the slow speed of communication over Internet chat, the use of email or a form-based system over a secure website would allow more time for the client to give considered responses to questions about their presenting difficulties. For example, therapists may seek information regarding potential problems with family, friends, career, recent events, or a range of other more specific areas tailored to the nature of the services to be provided. With relatively brief information obtained prior to therapy, psychologists may be in a better position to make directed inquiries for further details across a broader range of factors that contribute to the client's global level of functioning. It may be wise for psychologists to update these details at regular intervals in cases where a client receives services over an extended period of time. Adopting a structured approach to information gathering and clinical work over the Internet is consistent with the position of various theorists in the field (Chechele & Stofle, 2003; Derrig-Pulumbo, 2010; Murphy & Mitchell, 2009; Nagle & Anthony, 2011; and Suler, 2008).

Even so, a level of shared understanding was still apparent from the results of several sub-scales on the client-rated alliance measure (Table 5, page 78). Specifically, strong and positive ratings were provided by clients for both the 'working strategy consensus' and 'therapist understanding and involvement' sub-scales of the CALPAS-P in the first session. This indicates that clients agreed with their therapist about how to proceed and felt their therapist was able to show an appropriate level of understanding and engagement with their psychological distress. In practical terms, these results indicate that a measurable level of understanding was evident between client and therapist, guiding their collaborative work.

Consistent with the report of therapists who recalled their use of specific cognitive interventions, transcripts for Internet chat therapy sessions show dialogues where self-defeating thoughts were identified and challenged. Therapists stated that they were able to

provide appropriate self-help worksheets, which clients independently verified as being helpful to them. These reports indicate that there was a sufficient level of understanding to allow cognitive problems to be accurately identified and worked through.

Emotional Understanding

Therapists in the Internet chat therapy condition accurately identified the type of emotion being felt by their clients, but tended to misread the intensity and complexity of feelings. These results are consistent with the findings of researchers at Kid's Helpline, who identified a greater sense of emotional distance when support services are provided over Internet chat (Bambling et al., 2008). Such a result presents some obvious therapeutic limitations, particularly in relation to emotions that are being suppressed or avoided. Therapy approaches are also constrained by this factor, particularly for practitioners who employ a humanistic approach to help a client to more fully realise their experiences (Rogers, 1980); or psychoanalytic techniques aimed at exploring the unconscious (Meissner, 1996); or emotion-focused techniques that require the activation and processing of deeply felt emotions in session (Greenberg, 2002); or cognitive interventions that require the precise identification of emotional states (Beck, 1995).

Deficits in awareness and regulation of emotions have long been regarded as core processes that prompt and maintain episodes of psychological distress (Borum & Goldfried, 2007). Maladaptive emotion-regulation strategies (such as suppression, avoidance, and rumination) are associated with psychopathology in the high prevalence disorders (Aldao et al., 2010). The difficulty for psychologists working over the Internet is clear – how is it possible to sensitively handle emotional material during psychotherapy sessions when the typical ways of showing emotion cannot be seen or heard?

Although some theorists have stressed the necessity of activating emotions (Greenberg & Pascual-Leone, 2006), face-to-face therapy may not be the only way to process emotional material. In reviewing the available evidence about various therapeutic methods that affect emotional regulation, Aldao et al (2010) assert that problem-solving has the strongest mitigating effect against psychological distress. They contend that adaptive strategies such as emotional acceptance and re-appraisal have a less significant positive effect on symptom severity. Hence, emotional regulation may be improved using a variety of techniques, provided that constructive problem-solving occurs. The report of clients in this research, describing that they learned new coping strategies, is consistent with that perspective.

It is possible that although clients might not reveal the intensity of their emotions over Internet chat, they may still experience primary emotions during a session, which would allow key mechanisms of emotional change to take place (Greenberg & Pascual-Leone, 2006). In other words, the emotional experience of a client does not depend on a psychologist realising the full extent of emotional processing occurring. It may be enough for the type of clients who select this treatment to privately face their emotions, guided at a distance by the reflections of a therapist. Clients in this research identified that the chief advantage of Internet chat therapy was that they could access a psychologist from a safe and familiar location, where they could privately reflect, without the fear of being excessively scrutinised or being emotionally overwhelmed in an unfamiliar setting. On this basis, it seems possible that activation and deepening of emotion may have occurred, but that clients wished to face emotions on their own terms. On this point it should be noted that even in face-to-face therapy, clients do not always reveal their feelings - and when they do, therapists can miss the cues.

Within the tradition of cognitive therapy, interventions are generally aimed at reducing rather than intensifying emotional experiences during the session (Barum & Goldfried, 2007). Mennin and Farach (2007) argue that re-appraisal is more effective when clients are currently

experiencing the same type of emotional distress they are trying to change. By the same token, intense experiences have been noted to limit the capacity of a client to be emotionally reflective (Greenberg & Pascual-Leone, 2006). Striking the right balance between superficially exploring emotion and activating an overwhelming level of distress appears to be of central importance to clients who seek out a psychologist over the Internet. Cognitive interventions such as exposure to avoided negative thoughts, Socratic testing, re-appraisal of cognitions, and engagement of problem-solving strategies, all have some capacity to elicit and restructure emotional reactions by helping the client to find new ways to interpret and organise their feelings (Leahy, 2007). Participants in this study described each of these activities as being helpful.

Being able to identify the type of emotion being experienced by their client also afforded therapists the opportunity to help their clients reflect about the distinctions between various emotional states. It has been argued that the process of differentiating emotions from one another has developmental significance, contributing to the capacity of a person to modulate their emotional experiences and sensitively attend to both their own needs and the needs of others (Magnavita, 2006). Whilst therapists felt unsure about the intensity of distress being experienced by their clients, their attempts to clarify and understand thoughts and feelings did allow some degree of exploration about distinguishing one emotion from another. This may have assisted clients to organise their own thoughts and feelings.

Aside from working through painful or distressing emotions, one of the important ways that Internet chat therapy may have helped people in this research is by providing a sense of safety to explore sensitive emotions. Positive emotional experiences of interacting with a psychologist over the Internet may have encouraged clients to persist with their own reflections about distressing material that would otherwise be suppressed or avoided (Fredrickson, 2001). Experiencing positive emotions may have also counteracted distressing

memories related to psychotherapy, serving as a 'corrective emotional experience' (Bridges, 2006). Those who chose Internet chat therapy as a result of prior negative experiences with seeing a psychologist in person frequently indicated that they intended to seek face-to-face therapy on completion of the study. This is consistent with the position that positive experiences with Internet chat therapy may have renewed client optimism about what might be achieved through further exploration of their psychological distress.

Despite the barriers to achieving a close sense of emotional understanding over Internet chat, there is evidence that the expression of emotionally charged material through the written word can by itself provide some relief and improved health. Research conducted by Esterling et al. (1994) shows that people engaged in a writing task about stressful personal events use more emotional words than when they are involved in a similar verbal task, and have improved immune system functioning at post-test. Their conclusions were that writing tasks could be used therapeutically, provided that early drop-out rates were not associated with the emotionally intense nature of these activities. This view highlights the importance of establishing and maintaining a working alliance, making Internet chat an ideal way for a therapist to remain present and engaged with clients who are engaged in expressive writing.

Overall Therapeutic Alliance

The identified limitations of emotional communication identified in this research, point to therapeutic relationships over Internet chat having different characteristics to those in face-to-face therapy. With clients having difficulty expressing the intensity of their feelings and therapists having trouble accurately interpreting changes in the tone from a client, the therapeutic relationship took on a more objective focus, bringing a sense of being less emotionally connected to the other person. Although therapists rated the strength of the therapeutic alliance at equivalent levels for both treatment groups, clients rated therapeutic

relationships as being stronger in face-to-face consultations. This matches the subjective report from clients that although most of them felt that they formed a working relationship, they did not regard that relationship to be as close as one they might form in person. In some respects, this is to be expected due to the fact that people who opted for Internet chat therapy were initially looking for a more detached and internal experience of reflection about their problems. Despite this being the case, however, ratings of the alliance were still at reasonably strong levels in the Internet chat therapy group.

These findings are consistent with the work of McKenna et al. (2002), showing that those who interact for the first time over Internet chat make frequent disclosures and form a sense of a relationship with the other person quite rapidly. This may have been further enhanced in this research by the fact that interactions occurred in the context of psychological consultations, where personal information was disclosed over a short space of time and focused attention was concentrated squarely on the client. It is important to note that the results of the present study challenge the position that Internet chat results in a superficial level of depth, and hence, leads to significantly decreased working alliances (Bambling, 2008). It may be the case that this pattern is commonly encountered in single-session models of care. However the findings from this study align with the results of other research, which has indicated that longer periods of therapeutic involvement, with greater smoothness of communication and depth of discussion, is linked to client perceptions of Internet chat being more helpful (Barak & Bloch, 2006). One question posed by these results is whether therapeutic alliances would continue to grow slowly over time as further social information is accumulated (in line with the SIP model of communications research), or if instead, that therapeutic alliances have reached an optimal level after three sessions as suggested by psychotherapy process research (Horvath & Luborsky, 1993).

Emphasis on the Real Relationship

Alliances over Internet chat were typically more controlled and rational in style, where both clients and therapists could conceal any potential signs of expression that might be anticipated to prompt disapproval from the other party. As the therapeutic relationship deepened in the first three sessions, the style of communication became more fluid and natural, leading to greater perceptions of warmth by both clients and therapists. This process where early encounters were carefully managed until a desirable impression was formed by the other party, matches the 'hyper-personal' model proposed by Walther (1996). Further to this point, despite the lack of detail available to form an impression, positive impressions of the other party were formed. Hopeful expectations from clients and their shared involvement with their therapist on the work of therapy facilitated the development of a positive view about the therapeutic process.

The distinctive features of therapeutic relationships formed over Internet chat most closely emphasise the 'real relationship' conceptualised as part of Greenson's 'working alliance' (Meissner, 1996). This component of the therapy relationship emphasises the rational and objective aspects of client-therapist interaction. The more developmentally mature 'real relationship' was distinguished by Greenson from the 'transference template', which is more inclusive of emotional and unconscious factors that come to bear on the alliance. Over Internet chat, there is an inherent sense of disconnection from emotions, a focus on personal reflections, and a practical need to engage in careful expression and interpretation of words to reach understanding. This finding reveals that the majority of relational activity is focused on rational and objective features of the interaction.

Being Distant in the Relationship

Over the Internet, both clients and therapists described a perception of being more distant from one another than in face-to-face interactions. Whereas therapists generally wanted to feel closer, their clients tended to be much more content with this sense of being somewhat removed from close contact. This finding strengthens the observation of Mallen et al. (2011) who found that counsellors rated their sense of closeness with a role-played client as being more distant over Internet chat. The notion of 'therapeutic distance' has traditionally been conceptualised in terms of finding an optimal balance where the therapist tries to reach understanding of a client's transference patterns without being overwhelmed or colluding with the source of dysfunction (Kanzer, 1981). The qualitative data from this research describes a dynamic where clients felt comfortable being more distant from their therapist than would be possible during a face-to-face interaction. That is, the preferred level of therapeutic distance was characteristically further away over Internet chat.

Taken together, the need for more distance, control, emotional separation, and a more solitary experience of therapy, all point to clients having greater needs for autonomy in the therapeutic process. This interpretation is consistent with the conclusions of Day and Schneider (2002) that clients took more personal responsibility in therapy over distance technologies, with the clients in their research rating their level of involvement as being lower in face-to-face therapy. Conceptually speaking, a client's need for detached interpersonal engagement when seeking Internet chat therapy, would appear to sit in the middle range of the 'automated versus interpersonal' dimension proposed by Suler's (2008) 'cybertherapeutic' model. The diverse range of reasons why clients may have greater needs for autonomy, could explain why there were no obvious distinguishing features of clients who opted for Internet chat therapy in the symptom severity measures that were taken at the end of the first session. The population of people who seek a more autonomous experience of psychotherapy over the

Internet might be comprised of traumatised clients in need of control, socially sensitive clients who may find being in a consulting room too confronting, depressed individuals with a need to retain a sense of self-confidence in handling their problems on their own, or otherwise highly functioning clients avoiding the stigma of seeing a psychologist. Exploring these variables in future research would help to accurately identify the reasons why people choose to consult with a psychologist over Internet chat.

Beyond the normal sense of distance that occurs between client and therapist in face-to-face therapy, the communication limitations of Internet chat and the overall sense of being detached from the other person may account for the increased efforts of both parties to constructively work together. Savitsky, Keysar, Epley, Carter, and Swanson (2011) recently showed that there is a natural tendency for people to take extra steps to consider the differences in perspectives between self and other when interacting with unfamiliar people. Further to this point, Henderson (2011) notes that recent studies show that those who perceive themselves to be more spatially distant from each other reach integrative agreements faster as a result of putting increased focus on considering the higher order motives of other people. Participants in the current research described how the limitations of Internet chat prompted them to make extra efforts to be understood. This aligns with the conclusions of Day and Schneider (2002) that clients make more concerted efforts to clarify expressions to therapists when they are using distance technologies to communicate.

The client's active efforts to imagine the perspective of their therapist, could also have contributed to the formation of more detailed impressions of the therapist and the consulting room. Recent researchers have established that preferred settings are perceived as being closer and are imagined in more vivid detail (Alter & Balci, 2011). It is possible that generating a more vivid impression of the therapist and the consulting room, helped clients feel closer to the therapist and more comfortable about the idea of being in a consulting room.

Such a process may help explain the paradox where some people report that they feel closer to someone they chat with over the Internet than when they converse in a face-to-face encounter where they may be averse to negative cues (Hanley & Reynolds, 2009). In a sense, this perceptual process may bring the prospect of face-to-face therapy closer to the client and increase the likelihood that a subsequent face-to-face appointment will be made.

Forming a Mental Image

The most unexpected and consistent pattern identified in this research was that every participant (bar one) formed a mental image of the other person. In the case of that exception, the client explained that the therapist shared the name of a person that brought negative images to mind, hence, every time that client imagined the therapist, the client deliberately chose to think of something else. From this information it would seem that forming a mental image was a natural and automatic process. This begs the question of what could possibly account for that pattern amongst both clients and therapists. A recent review of the research about the psychological role of mental imagery may provide some answers to this question.

Holmes and Mathews (2010) identify a number of factors that link mental images to emotional responses. These reviewers point out that as mental images are constructed, emotional states are activated, with the subsequent emotional experience being dependent upon the associated memories from which those images are derived. They also highlight that where autobiographical memory is involved in the generation of mental images and in cases where words are linked with perceptual imagery, the emotional response is typically more powerful. Clients in this research frequently described the mental images they formed being drawn from memories of people who they considered similar in some way to their therapist/client. Processing autobiographical information with words whilst generating a mental image, may have served to evoke powerful emotional responses during Internet chat

therapy consultations. Considering the sense of emotional disconnection from the other party, this link between mental images and emotions may account for how clients used the therapeutic encounter to activate and process their emotions over Internet chat.

Returning to the earlier point about the potential impact of experiencing positive emotions during Internet chat therapy sessions, it may also be the case that forming a mental image of a therapist plays a role in repairing conflicted feelings about receiving face-to-face therapy. Holmes and Mathews (2010) reviewed research, which demonstrated how mental images that are linked with negative affect reduce the sense of liking that a person has for an image. Therefore, it is also possible that the tendency to imagine the other person as the alliance develops, may serve a role to simulate a positive face-to-face encounter that competes with distressing memories of face-to-face therapy. This is consistent with theories that have been proposed about projection and internalised representations of an ideal therapist over both e-mail counselling (Schultze, 2006) and Internet chat therapy (Suler, 2011).

Another role for the generation of mental images over Internet chat may be to simulate the missing cues that would normally accompany social interaction. Several studies have shown that cues such as perceived eye contact (Senju & Johnson, 2009), and both gaze and head orientation (Nummenmaa & Calder, 2009), activate a widely distributed network of neural structures collectively referred to as 'the social brain'. These regions of the brain are implicated in cognitive functions such as mental state attributions and empathy. When clients and therapists generate imagery about one another, this could simulate parts of the interaction that are missing. In other words, mental imagery is probably used to 'complete the picture' of the therapeutic encounter.

Diagnostic Accuracy

Although the team of therapists in this research were not instructed to diagnose their clients in the Internet chat therapy group, the results of this study reveal factors that come to bear on the issue of diagnosis over Internet chat. Symptom severity measures from this study show that clients who received Internet chat therapy rated their own level of psychopathology as being at an equivalent level to those receiving face-to-face services. This is consistent with other studies showing that people who access services online struggle with similar problems at equivalent levels of symptom severity as their face-to-face counterparts (Murphy et al., 2011). By contrast to client-reported data however, the therapists in this study rated their Internet clients as being significantly less distressed than their face-to-face clients from the outset. This finding is consistent with the interview data, showing a mismatch between the actual distress levels of the client and the therapist perception of their client's distress. One mitigating factor for therapists on this point is that many clients stated that they minimised their own level of distress. They may have done so to appear less distressed, or simply because they did not realise how distressed they were in the first place. It may also be the case that therapists had more detailed information about the psychopathology of those who received face-to-face therapy as a result of undertaking a more structured interview process with those clients. The overall effect however, was that therapist-rated assessment of symptom severity was inaccurate for clients who received Internet chat therapy. These results add to our knowledge from previous research, which has identified concern from therapists about underestimating the severity of client distress (Bambling et al., 2008) and their difficulty with accurately diagnosing co-morbid disorders (Mallen et al., 2011) over Internet chat communication.

Given the points made above regarding the limits of emotional communication, the mismatch between client and therapist judgements of symptom severity could be an outcome

of the difficulty therapists had with detecting emotional intensity. That is, in the absence of any clear sign of emotional activation and intensification when a client is describing a problem, therapists may presume that their client is coping well at the emotional level, despite any problematic cognitive or behavioural patterns that are disclosed. It is also possible that the brief nature of the treatment offered in this research (up to five sessions) did not allow sufficient time over this form of communication to gather the relevant information to make a diagnosis. Similarly, therapists may have focused on using the limited time they had with a client to offer what they could in the form of brief interventions. Regardless of the factors that may account for diagnostic problems, there are a number of therapeutic implications here.

Selecting a treatment approach is going to be more difficult when a therapist is unable to make an accurate diagnosis. Whilst there may be other sources of information for the therapist to construct a case formulation, being able to differentiate between one condition and another would normally inform a practitioner's approach to psychotherapy. In particular, we also know from research that underestimation of the client's level of symptom severity is linked with negative outcomes in psychotherapy (Mohr, 1995). Although some clients will mask their level of distress in general, the underestimation of symptom severity over Internet chat warrants concern. This issue presents clear barriers to working with complex levels of psychopathology and making the process of psychotherapy safe for the client. For those psychologists who work over the Internet, extra measures will be necessary to identify complex cases and gather diagnostically relevant information. In particular, this study highlights the need for a more structured approach to diagnosis when working over Internet chat, factoring in due consideration for the slower speed of this communication medium.

Policy Implications

Delivery of psychological services over Internet chat shows considerable promise amongst the array of Internet-supported psychological interventions available to consumers. This approach sits somewhere between automated self-help with a minimum involvement of a therapist and standard face-to-face consultations with a psychologist. The results of this study confirm the value of therapist involvement for some client groups using distance technologies to access care (Newman et al., 2011a). There were several distinctive features of Internet chat as a mode of psychological service delivery that were identified in this research which come to bear on social policy.

Importantly, this research has demonstrated that Internet chat therapy reaches people who would otherwise not receive psychological services and that their symptoms of distress are at an equivalent level of severity as those who seek face-to-face therapy. Internet chat does not require high speed broadband, and as such, the capacity of this approach to extend psychological care to those who need it in distant locations is promising. These issues are important to consider, given that there are a growing number of practitioners harnessing telecommunications in their work (APA, 2010) and with the majority of practitioners who provide online services offering Internet chat therapy (Finn & Barak, 2010). In some countries there may be challenges offering services over large distances as a result of having separate registration systems between the locations where the client therapist reside. In Australia (where this research was conducted) the need to extend the reach of psychologists to geographically distant regions remains high and the recent implementation of national registration resolves the problem of state-based boundaries of practice.

In the area of mental health care over the Internet, one of the important issues for policy-makers to consider is how technological innovations such as Internet chat can be used to connect people with appropriate service providers to meet their needs. This is not limited to

people in rural, regional, and remote locations, but also to marginalised people in the general community and those who have difficulty locating a practitioner with the expertise in a key area of need (Kazdin & Blase, 2011). Supporting practitioners who offer services online should be a key priority for policy reform in Australia, as is increasingly the case overseas (Horgan et al., 2007).

There are several costs, however, that are associated with this approach. Unlike the automated self-help systems that have become popular in Australia (such as MoodGym and Anxiety Online) which have limited involvement from therapists, this approach requires psychologists to dedicate the time of a full consultation, and therefore the cost of services is likely to remain the same as a face-to-face consultation. Psychotherapists will also need training for this work and may require technical assistance to establish and maintain the communication system to and from their clients. For those willing to access services privately, these costs are not likely to be prohibitive. However, for those who cannot afford to privately access support, this approach is unlikely to be an option. Policy makers may consider funding psychological services that incorporate Internet chat in a similar fashion to the current programs that exist for web-based self-help and other services to the community, such as 'Lifeline' and 'Kids Help Line'.

Therapeutic Implications

This research has revealed that some psychological interventions can be adapted by therapists to suit Internet chat communication. In particular, problem solving and cognitive interventions were noted by therapists and clients as being useful approaches over this modality of treatment. With meta-analytic reviews showing that larger treatment effects are associated with web-based interventions that are supported by the involvement of therapists (Barak et al., 2008; Spek et al., 2007), the present study raises questions about whether

Internet chat could be better utilised. Greater levels of clarification are possible when clients and therapists can interact in real time, as opposed to relying on asynchronous communication like email. Given that the various forms of instant messaging available over the Internet are comparatively non-demanding in terms of bandwidth and technical requirements, this mode of therapist support could be integrated with other existing services. In cases where video and audio communication is not available, therapists may still be able to do some productive work with their clients over Internet chat. In geographic regions where Internet services are poor, Internet chat could be used to match clients with appropriate services that would otherwise not be accessible. Given that clients receiving cognitive interventions over Internet chat experienced equivalent levels of symptom reduction to the face-to-face counterparts, one of the obvious policy implications is that public access to psychologists could be expanded to include consultations over Internet chat, through services covered by Medicare Australia.

The identified limitations on the expression and comprehension of emotional intensity over Internet chat, highlights the need for additional steps to be taken by psychologists to better understand their clients. Scaling techniques such as those used in solution-focused brief therapy (Jones, 2008) or client ratings of emotional intensity in CBT tasks (Beck, 1995), could provide a simple estimate of the magnitude of emotional intensity being experienced. Given that emotional intensity is widely regarded to be a multi-dimensional construct, therapists might also consider gathering additional information about the duration a person has been experiencing the emotion in question, how inclined clients are to act on those emotions, and any associated bodily sensations that may further clarify a clients levels of distress (Sonnemans & Frijda, 1994). Together, these pieces of information may help therapists to construct a more complete impression of their client's emotional experiences.

In a similar way, the findings of this research reveal that diagnostic information should also be gathered from clients who access Internet chat for consultations with a psychologist.

Although therapists were poor at predicting symptom severity in both treatment groups, the potential for therapists to underestimate psychopathology on-line is greater due to there being fewer channels of communication. Brief screening tools, such as the MINI (Mini International Neuropsychiatric Inventory) and the WSQ (Web Screening Questionnaire) could be used to gather information about potential mental health disorders (Donker et al., 2009; Medical Outcome Systems Inc., 2010; Sheehan et al., 1998). Purpose built diagnostic systems could also be used, such as the ePASS web-based screening tool, that identifies suitable treatment modules for the self-guided 'Anxiety Online' system (Swinburne University of Technology, 2011). Gathering brief diagnostic screening information from the outset will allow therapists to ask more directed questions about relevant areas of concern that may be associated with psychopathology. In addition to guiding the approach of the therapist, this type of information will help to inform whether more intensive assessment is needed and may identify cases where face-to-face consultation with a local mental health practitioner is more appropriate than accessing services on-line (Suler et al., 2001; Suler, 2008). Regular use of brief symptom severity measures could help to detect emerging areas of distress and monitor improvement over time.

In many ways, one of the most significant benefits of using Internet chat as a modality for delivering psychological services is that experiencing the benefits of reflecting with a psychologist on-line may help clients identify their need to talk to a psychologist in person. For clients who are unsure about seeing a psychologist or have had a negative experience seeing a psychologist in person, consulting with a psychologist over the Internet could serve to correct misconceptions and renew hope about the possibility for a more positive outcome. Likewise, those who are minimising their difficulties may realise that their distress is more significant and can be changed by consulting with a psychologist. The perception that Internet chat is less confronting than face-to-face therapy allows some clients to reveal enough of their

problems to identify and explore critical areas that are causing impairment or distress. That reflective process in itself may highlight the benefit to a client in making a face-to-face appointment with a psychologist.

Strengths

This research overcame a number of the problems of previous studies. Previous researchers have typically not made direct comparisons of Internet chat with face-to-face therapy, on the basis that each of these modalities of interaction is unique (Anthony, 2000a; Fenichel et al., 2002). The paradox of this reasoning is that therapists working over the Internet employ approaches that were developed specifically for face-to-face interactions. By directly comparing Internet chat and face-to-face consultation with a psychologist, this research has established that there are similar processes of change at work over both of these forms of treatment.

Previous research about Internet chat has also suffered from underpowered analyses and low numbers of participants. The present research drew on a larger sample and achieved statistical power. Having a large number of therapists delivering therapy in both treatment modalities made it unlikely that differences between therapists were responsible for treatment effects. Additionally, the training of therapists in this study was consistent, in that all therapists had undertaken the same level of post-graduate education, were working the same setting, and had received the same preparation and support for using Internet chat for client consultations. Consequently, the findings of this research provide a more accurate account of the processes associated with the modality of treatment than other studies where different therapists provide services in each treatment group.

Another strength of this study is that a comprehensive approach was taken to exploring psychotherapy processes, combining the most thorough measures of the alliance

available with the descriptive experiences of participants forming a therapeutic relationship. This approach allowed for quantitative results to be contextualised with information from the descriptive recollections of clients and therapists involved in the study. In addition to this, by drawing on data from clients, therapists and independent observers, the present study was able to triangulate processes of therapeutic interaction and identify areas where there were differences in the perspective of clients and therapists. This revealed important differences in the expectations and perceptions about the impact of on-line therapy.

Allowing clients to self-select into their preferred modality of treatment was also a distinctive strength of this study, in that factors related to the setting where therapy took place could be explored. Previous studies have either tended to blur together different modalities of treatment (e.g., Cook & Doyle, 2002) or have randomly assigned clients to forms of treatment they may have limited interest in receiving (e.g., Day & Schneider, 2002). The advantage of the present research was that clients were able to select their preferred therapeutic modality. Given that the primary reason that clients in this study offered as the basis for seeking Internet chat therapy was being able to access a psychologist from a comfortable setting, this factor was essential to include in the study.

Limitations

The present research focused on detecting the earliest signs of therapeutic change. It may be argued that despite the brevity that clients tend to access such services, assessing outcomes over three sessions does not provide enough time for the therapeutic relationship to fully develop or for lasting therapeutic outcomes to occur. This issue is magnified by the fact that communication speed is slower over Internet chat by comparison to face-to-face therapy. It could also be argued that over a longer period of treatment, greater differences between these modalities of treatment might have emerged. The promising result from the current

research is that even after a short period of intervention, positive signs of therapeutic change were detected. The question is whether ongoing treatment will result in continued improvement and maintained treatment gains, and also whether the therapeutic alliance continues to develop and change across time.

A limitation of this study is that the length of treatment that was measured only spanned the first three sessions. The rationale for this decision was the view that Internet chat therapy typically lasts for only a brief period of time (Richards, 2009). However, in this study the majority of client participants continued on to receive the full five sessions offered beyond the data collection period. The positive data received about the development of the therapeutic alliance and reduction of symptom severity raised questions about whether further indicators at later stages of Internet chat therapy might reveal important processes of change over this mode of communication. In particular, data collected from later stages of therapy may shed some light on treatment adherence and could indicate whether more clients transition from Internet chat therapy to face-to-face therapy when provided with a longer treatment period. Even so, this study expands our knowledge of Internet chat therapy beyond the commonly adopted single session treatment model (Chardon, Bagraith, & King, 2011; Mallen, Jenkins, Vogel, & Day, 2011).

Interviews and the identification of subjective themes were carried out by the researcher. This was necessary due to the level of time and detailed knowledge of the area required to carry out the task. Although having the same person carry out both of these tasks was a useful way to optimise trust in this sensitive client group and assisted with recall and interpretation of expressions used in each interview, one of the problems with this approach is that it may have led to some degree of bias. This factor was partially mitigated by the independent confirmation of categories by another psychologist who was also trained in the IPA coding approach. Future studies that are better resourced may benefit from the greater

impartiality that would be afforded by having a larger group of separate raters making independent assessments of each transcript.

Strictly speaking, the applied nature of this research meant that Internet chat therapy was the area of focus, rather than balancing all aspects of the investigation. This meant that transcripts were not obtained for face-to-face sessions and that no interviews were undertaken with clients who chose face-to-face therapy. Specific areas that could be directly compared in future research include, personal versus interpersonal processes of change, disclosure of emotional experiences, and the client's experience of being observed in-session. Obtaining this information may reveal more detailed information about the distinctions between these two modes of client contact.

Due to the fact that clients chose private locations to access Internet chat therapy services in this study, therapists were not able to directly monitor client behaviours or other events that took place during the session. Although clients described intense emotional experiences, it is unclear what these might consist of, how intense these episodes of distress are, and the strategies that clients use to manage sensitive emotions. It is essential for researchers to explore in greater detail how clients manage their emotions during Internet chat therapy sessions, in light of the fact that clients seek a more solitary experience, whereas psychologists express concern about how their clients cope alone.

Future Research

Ideally, future research should match observations across all treatment modalities, rather than focusing on Internet chat. The main barrier to achieving this is gaining access to equivalent details that are available during face-to-face consultations. As stated previously, one way to match the information generated by logging the transcript of Internet chat therapy sessions is to transcribe the audio from face-to-face sessions, comparing transcripts across

modalities. Another interesting possibility would be to ask trained psychologist observers to complete therapist-rated measures of symptom severity based on transcripts. This may reveal whether there are any differences between the ratings of observers reading a transcript versus the therapists, whose ratings are based on a direct experience of interacting with the client over Internet chat. Obtaining information across all levels of observation will further clarify the areas of distinction between face-to-face therapy and other modes of treatment.

Although it was beyond the scope of this study, the use of random assignment in future research could be used to explore the perspective of clients who receive Internet chat therapy but are either ambivalent or would prefer face-to-face therapy. This type of research may illuminate missing therapeutic factors that might impede the process for people who are open to seeing a psychologist in person but are located too remotely for that to be a practical option. Given that there are some situations where there are limited opportunities to deliver face-to-face services, it is necessary to know how beneficial it is to rely on alternative modes of service delivery to clients who would otherwise consult with a psychologist in person. It may be the case that the effectiveness of Internet chat therapy is dependent on variables associated with the client's preference.

Future researchers should also consider comparing the treatment outcomes associated with Internet chat consultations over a longer period of time. There are a number of possible factors that may further distinguish face-to-face therapy from other forms of treatment. One possibility is that clients might access Internet chat therapy services over a shorter period of time, limiting the amount of time that a psychologist has to work with a client. Another possibility is that the effectiveness of Internet chat therapy in terms of reduced symptom severity may not be as long-lasting. A mitigating factor is that self-guided web-based approaches with minimal levels of therapist assistance have shown positive clinical outcomes that are maintained at follow-up (Mackinnon, Griffiths, & Christensen, 2008; Ruwaard et al.,

2009; Ruwaard et al., 2010). It stands to reason that these levels of improvement are also likely to result from interventions that have greater levels of therapist involvement, such as those allowing for real time interaction with a psychologist. The next logical step for research about Internet chat is to begin investigating treatment over periods of time that approach standard treatment protocols for CBT, allowing for 15 sessions or longer.

An important question is whether additional efforts to obtain data on symptom severity from clients could improve the diagnostic skills of practitioners working over Internet chat. Controlled studies might compare the accuracy of diagnoses in a clinical setting where clients first complete web-based symptom severity measures, followed by a session where they communicate on-site with a psychologist over a quasi-synchronous system, and then receive a face-to-face psychological assessment with a different psychologist. Although this process would be somewhat exhaustive, it would allow complex diagnostic issues to be explored in a safe manner, with the capacity for various control groups. Research of this kind will provide further information about the appropriate use of Internet chat by psychologists to provide services to clients with various mental health disorders.

Another significant question that is raised by this study is how emotional activation and processing functions therapeutically in Internet chat therapy. Further controlled studies could employ the use of biometric sensors to monitor signs of emotional activation during sessions, to compare face-to-face and Internet chat therapy (Picard, 2010). Relatively non-invasive equipment, such as wrist-watch sensors, may be used to gather data in real time that can be synchronised with transcripts to identify when moments of emotional arousal occurred during each session and how this compared across each approach. Audio-visual data could also be recorded on the client's side of the interaction, and transmitted to the researcher rather than the therapist, to reduce a client's sense of being unduly scrutinised by the therapist. Research of this kind will add further clarification about whether emotional activation occurs

during Internet chat therapy sessions, despite the identified deficits in emotional communication and the associated sense of being emotionally removed from the other party. This form of research would further our understanding of psychological change processes inherent to both Internet therapies and conventional face-to-face approaches.

Closing Words

Since the commencement of this research, the use of Internet chat communication has expanded significantly, with integration in websites and other forms of social media. In parallel, the range of psychology services has also expanded across various forms of telecommunications, including standard Internet services, and more recently, mobile phone applications. As society becomes more comfortable with using instant communication to relate with each other over vast distances, it is likely that there will be greater expectations put on psychology as a profession to share their expertise and develop appropriate services suited to the medium. This study has provided a detailed first glimpse at how real-time written communication between people over the Internet can be utilised effectively in the delivery of psychological services. While psychologists prefer direct interaction with a client in most cases, we may need to consider how to 'go beyond the consulting room' and reach out into these emerging social spaces where people are increasingly interacting with one another. The evidence from this research adds to the information we already have available that there are distressed people in society who need to see a psychologist, but cannot bring themselves to go to a consulting room, or might not be able to access a local psychologist. As further research accumulates showing the various ways that technology can be harnessed for psychotherapy, the greatest challenge will be for psychologists to open their minds to these new possibilities.

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Appendices

Appendix A

Example of Promotional Newspaper Story

Get it off your chest online

PETA RULE

Got something on your mind? Forget the traditional couch at the psychologist's office, the way of the future could be logging on to the internet for a chat session with a professional counsellor.

Curtin University School of Psychology PhD Ben Mullings is looking for 50 people with "genuine problems and issues" to visit a counselling website and have cyber sessions with a counsellor.

"The aim of the study is to look at how effective online counselling or 'cyber' counselling is compared to traditional methods of counselling such as face-to-face sessions with a counsellor or psychologist," Mr Mullings said.

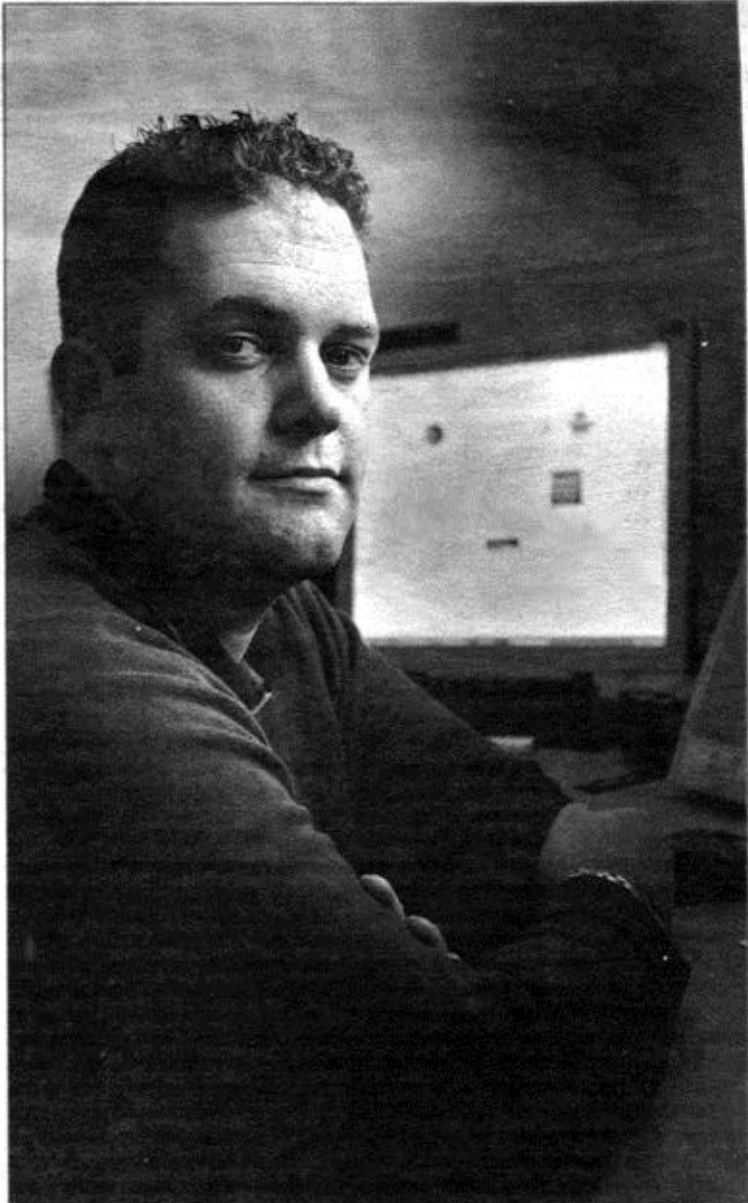
He said cyber counselling was already big business in the US but was relatively unknown in Australia.

"I'm looking for people who wouldn't normally see a counsellor, but are feeling depressed, stressed or having relationship difficulties and might like to take part in my study and try some online counselling."

Mr Mullings said the program included three one-hour online counselling sessions undertaken once a week over a three-week period. The time includes a 15-minute questionnaire at the end of the first and third sessions.

The counselling is done via web-chat and can be done with a basic dial-up internet connection. Typing skills are recommended.

www.cyber-counselling.com.au



Listening ear: Curtin University School of Psychology PhD Ben Mullings is looking for 50 people to test online counselling. Picture: Rob Duncan

Appendix B

Example of Promotional Fliers



The flier features a header with keyboard keys spelling 'G O T A' and 'P R O B L E M ?'. Below this is a dark green bar with the text 'MAYBE WE CAN HELP...'. The main body is light green with a faint circular pattern. It contains a paragraph about the research, a section on counsellors, contact information, and a note. A logo with a yin-yang symbol and the text 'Cyber Counselling' is on the right. The footer is dark green with a small logo, contact info, and a website URL.

G O T A
P R O B L E M ?

MAYBE WE CAN HELP...

IF YOU WOULDN'T NORMALLY SEE A COUNSELLOR, BUT YOU'RE FEELING DEPRESSED, STRESSED OUT, OR HAVING RELATIONSHIP DIFFICULTIES - YOU MIGHT LIKE TO TRY ON-LINE COUNSELLING.

We are looking for 50 people to participate in research, where you can chat with a counsellor over the Internet. To take part all you need is a computer with an Internet connection and a genuine issue that you would like to share with a counsellor.

All counsellors involved in this study are trained and experienced professionals.

If you would like to register please visit our website at www.cyber-counselling.com.au or to find out more about the research, you can contact the researcher (Ben) by telephone on **0431 870 401**, or by email at zenjite@iinet.net.au

NOTE: If you're experiencing psychosis or feeling suicidal, please seek face-to-face services instead. At present it is not known how to overcome the limitations of Internet communication to help with these sorts of difficulties.

Cyber Counselling

PLEASE ASK THE RECEPTIONIST FOR A TAKE-HOME FLIER.
www.cyber-counselling.com.au

Appendix C

Information Sheet: Internet chat therapy Clients

Information Sheet: Counselling Research.

This research examines the type of relationships that people form with their counsellors during counselling. Such research is essential for counsellors to understand the way in which therapy relationships affect counselling outcomes. The present research is being completed as part of a Ph.D. dissertation at Curtin University of Technology, School of Psychology. One of the purposes of this research is to evaluate Centrecare's on-line counselling service.

If you choose to participate, you will be required to complete a written questionnaire assessing your impressions of the relationship with your counsellor and indications of general progress. Questionnaires will be filled out on two occasions – after the first and the third counselling session. It will take 15-30 minutes on each occasion. The researcher will also use a written record of the third session to verify observable aspects of the working relationship independently. If you agree to participate, you are giving permission for the researcher to use both the questionnaires and the written record of the third counselling session. This record will be obtained directly and securely from Centrecare by the researcher. The researcher will be the only person who will read these records.

After counselling has concluded, some participants will also be invited to take part in an interview to share more detailed information about experiences of the working relationship during counselling. You will have the choice whether the interview takes place over the telephone or in person. The interview will take about 45 minutes. You are not required to agree to an interview if you take part in the project.

All information collected is completely confidential. Your involvement in the study is completely voluntary and if you choose not to participate or withdraw, you are free to do so and it will not affect your rights or access to the service. Return of a completed questionnaire to the researcher (by mail) will indicate your agreement to participate in this study.

If you require further details about the study at any time, you may contact Ben Dickson on 9316 0653, or my supervisor Associate Professor Jan Grant on 9266 7231. Alternatively, I may be contacted via e-mail: zenjite@iinet.net.au

This study has been approved by the Curtin University Human Research Ethics Committee. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 92662784.

Thank you for participating in this research.

Appendix E

Example of a short Internet chat dialogue (fictitious)

<Pairoducks> I think sometimes all people need is for someone to acknowledge them as they are, in the place they are in their lives

<Pairoducks> it seems like so often, people see another human being and their experiences and they feel they cannot relate

<Pairoducks> but i think there are a finite number of pure human experiences and that everything we live is a degree of them and if someone can just find that tiny little link, and take hold of it, they are able to see something from that other person's perspective

<inkblot> absolutely

<Pairoducks> it's always so horrible when i talk to someone and they tell me how alone they feel. surrounded by people. knee deep in the river and dying of thirst

<inkblot> it can be enough sometimes to just express something to a person, to stand back, and reflect with them about it.. maybe even see a new way forward from there.

* Pairoducks nods

<Pairoducks> it's as if people are shut up in glass tubes, banging on the walls yelling "please just hear me!"

<inkblot> sometimes it seems so, yes!

<Pairoducks> i know that feeling pretty well myself. like you mentioned earlier, it's like being in the oubliette. gone and forgotten. i am lucky now to have a strong support system

<Pairoducks> one thing i have found very interesting about the mental health system where i am is that they don't want you to keep in touch with people you were in the hospital with

<Pairoducks> which i think is silly because those are exactly the people who understand you

<inkblot> you know...it sounds like you have travelled a long way in your life journey so far, and maybe that comes across to others somehow - probably from your way of expressing yourself in words

<inkblot> This could be why people come to you with their problems maybe?

<Pairoducks> that could be it you know...

<Pairoducks> thinking back on it, i never really knew myself until after my ex died

<inkblot> hmm :(

<Pairoducks> he was quite nasty to me when we were together

<inkblot> I remember you once telling me bits and pieces about this

<Pairoducks> when we split, nobody talked to him.

<Pairoducks> he was alone and it made me sad for him. my sisters thought i should feel satisfied that he was miserable. a couple of years later he was in a car accident.

<Pairoducks> when he died it reminded me that my mom told me that no matter what i did she would still love me, even though she might not understand me doing terrible things.

<inkblot> I see

<Pairoducks> that was like the first drop. it turned into this torrent of trying to understand why people do things and what made me any different from people like him

<Pairoducks> i have to confess i was pretty rotten to my ex. he was pretty abusive to me. but some of the things i did could have really hurt him.

<inkblot> hmm... from what I recall you telling me, some of the rotten things you did were intended to try and stop him from hurting you though, right?

<Pairoducks> he would just lash out if he didn't get his way. i'm not like that.

Appendix F

Semi Structured Interview Questions

First Impressions

Reasons for your decision to try on-line counselling? (clients only)
Early anticipations about on-line counselling prior to starting (positive/negative)?
After the first session, how did the expectations measure up?

Communication

Misunderstandings (using text to communicate) – any examples?
How were misunderstandings handled – any examples?
What was it like to chat with your counsellor over the computer?
Missing non-verbal cues – any examples? How was this handled?

Sense of Self/Other

Sense of presence – did it feel like a real person?
How did the sense of relative closeness-distance compare to a face-to-face interaction?
Did you form any mental images? How detailed were they? What were they comprised of?

Therapeutic Relationship

Was there a sense of collaborative working relationship with the counsellor?
Did this change or develop across time?
Comfort with sharing sensitive/troubling emotional material over Internet chat?
Were there any limitations with expressing your emotions over Internet chat?

Practical Matters

Were there any differences for you being at home/etc rather than at a consulting room?
Interruptions/Privacy/Security issues? How were these managed?
Technical issues or practical difficulties with online chat? How were these handled?
Overall strengths or limitations of online counselling from personal perspective?
Any more information to add? Any further questions?