The impact of technology on therapeutic alliance and engagement in psychotherapy: The therapist's perspective.

Abstract

Objective: In this paper, we investigate therapist views on their experiences using a technological adjunct (goACT) to traditional, face-to-face psychotherapy. goACT is a web-based mobile interactive software application that facilitates an interactive platform, allowing therapists to connect with their clients between face-to-face psychotherapy sessions. Method: Participants were six provisional psychologists and seven patients. Data was collected at two post-therapy focus groups in order to qualitatively understand therapist experience of goACT as a therapy adjunct. Data was analysed utilising thematic analysis.

Results: Four main themes emerged: (1) 'discretional use of goACT' linked to therapist preferences and client suitability, (2) 'therapist concerns' linked to boundaries, workload, technological glitches and therapeutic risks, (3) 'goACT expands the parameters of therapy' through increased opportunities to provide care and connection with patients and increased access to the process of therapy, and (4) 'goACT enhances therapy' through reciprocal responsibility and guided empowerment. Therapists in this study were more open to the use of technology in therapy than has been reported in previous research and did not find that it impacted on their workload.

Conclusion: Therapists indicated that when aligned to the specific needs of individual patients, an advanced mobile and web-based interactive software application (goACT) has the potential to enhance engagement, rapport and patient empowerment in face-to-face psychotherapy.

Keywords: therapist experience, engagement, therapeutic relationship, e-mental health, adjunct technology, online therapy.

Key Points:

1. A significant body of research supports the effectiveness and acceptability of online and technology-based treatments as an alternative to traditional face-to-face treatments, but relatively few investigations have explored the potential of technology as an adjunct to traditional psychotherapy.
2. Therapists who incorporated an advanced mobile and web-based technological system (goACT) as a therapeutic adjunct indicated that when individualised and matched to patient needs, it enhanced personalisation of therapy without dehumanizing the experience.
3. goACT 'expands the parameters of therapy' through providing additional opportunities for client care, strengthening therapeutic alliance and providing access to the process of therapy.

Introduction

The use of technology in psychotherapy[1] has become ubiquitous. A range of online, telephone and videoconferencing-based treatments are now commonly used alongside or in place of face-to-face therapy (Arnberg, Linton, Hultcrantz, Heintz & Jonsson, 2014; Backhaus et al., 2012 ; Gainsbury, 2011; Loucas et al., 2014; NCCMH, 2014; Postel, de Haan, de Jong, 2008). Advancing technology has largely been utilized as an alternative to traditional face-to-face treatments, with relatively few investigations into technology as an adjunct to traditional psychotherapy. Recent studies have also suggested that technology-based applications may be beneficial as a means to enhance

[1] The terms 'psychotherapy' and 'therapy' are used here to refer to psychological therapies (of various theoretical orientations) in general.

self-monitoring, clinical outcomes and therapeutic alliance in traditional treatment settings (Castelnuovo, Mauri, Simpson, Colantonio & Goss, 2015; Castelnuovo et al., 2015; Foley & Neill, 2009; Free et al., 2010; Geraghty, Glynn, Amin & Kinsella, 2008; Krishna, Boren, & Balas, 2009; Wiederhold, 2012). In this paper, we investigate the capacity of technological adjuncts to improve traditional, face-to-face psychotherapy, from the therapist's perspective.

In spite of the evidence base that suggests roughly equivalent clinical outcomes for computer-based online and face-to-face psychotherapy (e.g., Barak, Hen, Boniel-Nissim, & Shapira, 2008; Barak, Klein & Proudfoot, 2009; Carlbring & Andersson, 2006; Ekeland, Bowes, & Flottorp, 2010; Griffiths & Christensen, 2007; Newman, Szkodny, Llera, & Przeworski, 2011; Richards & Richardson, 2012), technologically-advanced therapies continue to attract number of criticisms, including (a) rapidly changing technology that is difficult to accept, develop, and maintain (Barrett & Gershkovich, 2013); and (b) concerns about ethical practice and risk management via distance (e.g. Barak, Klein & Proudfoot, 2009; Goss & Anthony, 2009; Mallen, Vogel, Rochlen, & Day, 2005; Perle, Langsam, & Nierenberg, 2011). However, one of the most powerful concerns of online therapy in the research literature is whether the technology detracts from the therapeutic alliance (Lovejoy et al., 2009; Perle, Langsam, & Nierenberg, 2011) a concept that is traditionally at the heart of all psychotherapeutic change (Lambert, 1992; Norcross, 2002).

Therapist reactions to technology in therapy have been polarized, with dismissive skepticism at one end, to overt enthusiasm at the other (Goss & Anthony, 2009). Traditional psychotherapists were critical of technologically advanced therapies arguing that technology *dehumanises* therapy, leading to distance in the therapeutic

relationship (Lovejoy et al., 2009; Goss & Anthony, 2009; Mora, Nevid & Chaplin, 2008). Others have argued that technology does not adversely affect the therapeutic alliance (Bickmore, Gruber, & Picard, 2005; Carlbring & Andersson, 2006; Cook & Doyle, 2002) and can increase alliance and 'emotional safety' and willingness to self-disclose due to an increased sense of anonymity, and in their own therapeutic 'space' (known as the *Online Disinhibition Effect*; Fenichel et al., 2002; Suler, 2004a).

In implementing a new goal for integrating advancing technologies with therapeutic practice—the enhancement of traditional therapy with technology—a new research focus has been borne: How can we use technology to supplement and *improve* traditional face-to-face psychotherapy? In a previous paper, we described the patient experience and clinical outcomes of an exploratory pilot study that utilized 'goACT', a mobile and web-based interactive software application (Richards & Simpson, 2015). goACT was designed to be used as an adjunct rather than a replacement of face-to-face therapy, by providing a forum through which patient and therapist could connect and communicate between therapy sessions. Functions of the goACT software include appointment reminders, two-way pre-scheduled messaging (secure SMS, online, email), self-monitoring, secure journaling, online homework records and online psychometric assessments. We were specifically interested in whether the use of technology would enhance patient ratings of therapeutic engagement and alliance in the context of face-to-face therapy.

The Current Study

To our knowledge, this was the first study to explore therapist attitudes towards *adjunct* technologies. As such, the purpose of this study was to act as an exploratory pilot study: the basis upon which larger-scale, more methodologically robust research could be

conducted in the future. First, we explored therapist views of the implementation of, goACT, an advanced and comprehensive mobile and web-based interactive software application designed to be used as an adjunct to face-to-face therapy. Specifically, we investigated the factors identified by therapists that can influence the way in which an advanced and comprehensive mobile and web-based technological system, used as a therapeutic adjunct, can enhance or detract from therapeutic alliance and engagement. Second, our research aimed to familiarise therapists with practical uses of technological systems, and help dispel therapist fear of technology as the unknown. Lastly, this paper was aimed at facilitating further academic and practical discussion into how technology can be used to *enhance* traditional therapy.

Method

This study forms part of a larger study which employed a mixed-methods design in order to evaluate user experience and outcomes with goACT as an adjunct to face-to-face therapy. The qualitative component of this study focused on identifying micro-processes that may reveal ways in which the use of technology as a therapeutic adjunct may impact on user experience.

Study design

Participants were six therapists who provided psychological therapy for six patients. Inclusion criteria for therapists were: enrolment in the Masters of Psychology (Clinical) program at the University of South Australia, and provisional or full registration with the Australian Health Practitioner Regulation Agency (AHPRA). All participants were undertaking internships within the University Clinic at the time of data collection. Patients were required to have a home computer and internet access, be over 18 years of age. All patients gave their consent to utilise goACT within their initial three therapy sessions.

Demographics

Therapist demographic information is displayed in Table 1.

[Insert Table 1 about here]

Procedure

Ethics approval was granted by the Human Research Ethics Committee of the University of South Australia.

Therapists were initially trained to utilize the goACT system. Upon introduction of goACT to the therapeutic process, therapists spent an additional 30 minutes (following

the standard 50-minute therapy session), orientating patients to the goACT system and providing individualized training. During the goACT phase of treatment, therapists used various features of goACT at their discretion to supplement treatment as usual (TAU) with their patients. Therapists used goACT with their patients at various levels of intensity (e.g. daily use to weekly use) for the duration of the study (20 weeks).

Focus groups (therapists) and individual interviews (patients) were used to qualitatively measure user (therapist and patient) experiences of goACT. The results of the patient interviews have been published previously (Richards & Simpson, 2015).

Focus groups

Two focus groups were conducted: the first contained four therapists, and the second (ran three days later) consisted of two therapists. Both focus groups ran with a semi-structured format and were conducted by the primary researcher. Open questions were the predominant method of questioning. Typical open-ended questions were: ‘how do you think communication with your clients between sessions might affect [your therapy/you/your client]?,’ ‘what might be the disadvantages of using goACT?’ and one closed question was included: ‘do you have any concerns about data security?’ The length of the first focus group was 112 minutes, and the second focus group ran for 66 minutes. Both focus groups were video recorded. Extensive notes were taken during the focus group to facilitate appropriate tracking and guidance of new topics and themes that arose within the discussion and interview process.

The semi-structured interview was designed to elicit information from therapists surrounding the following topics: therapist preferred ways of using goACT in therapy; general perceived advantages and disadvantages of goACT; and the influence of using goACT on the overall therapy experience, therapeutic engagement, therapeutic alliance,

therapist and patient experience.

Analysis

Full details of the thematic analysis have been described in Richards and Simpson (2015), and are summarized briefly below.

Following the focus groups, data was analysed utilizing thematic analysis (Miles & Huberman, 1994).Three main processes were required: reducing data, data display, followed by identifying and verifying conclusions. All focus group video data was literally transcribed by the primary researcher into transcripts. Transcripts were read and checked four times in order to identify errors, reduce and scrutinise the data, and begin the process of distinguishing themes (Creswell, 1998; Miles & Huberman, 1994; Schilling, 2006). A circular process was then performed by the primary researcher (Schilling, 2006) by returning to the verbatim transcripts to identify examples of quotes taken from the focus group, which were then transferred to a Microsoft Excel Spread sheet. The original transcripts were then reviewed by two additional independent raters (a clinical and a provisional psychologist), who identified then crosschecked and validated themes independently. Consensus on emerging themes was obtained following discussion between the primary and secondary raters regarding any inter-rater variations. Lastly, two randomly identified statements from each theme, were coded against the theme description by an independent researcher. Once each statement was examined in context, full agreement was reached on thematic coding.

Results

Thematic Analysis: Focus Groups

Thematic analysis revealed 11 subthemes, which were conceptualised within four overarching themes: (1) *discretional use of goACT*; (2) *therapist concerns regarding goACT use*; (3) *goACT expands the parameters of therapy*; and (4) *goACT enhances therapy.* The main themes and subthemes are summarised in Table 2, and described below using selected quotes from therapists, and extracts of sequences detailing interactions between focus group members.

[Insert Table 2 about here]

1. Discretional use of goACT

Therapists indicated that goACT must be used flexibly, individualised, and adapted according to client needs. This was conceptualised into two subcategories: (1.1.) *Therapist preferences;* and (1.2.) *client suitability.*

1.1. Therapist preferences. Therapists used varied features of goACT depending on their personal preferences, therapeutic orientation, and level of comfort with communication between sessions.

> "… it really depends on the therapist's structure of work and attitude, in combination with the client's [attitude]" (Therapist 3).

> "… After a while I probably would have naturally tried to have email contacts with these people [clients] anyway, as part of the therapy approach that I like to use, plus SMS reminders and stuff. So it's just useful having a platform to use to do that …" (Therapist 2)

1.2. Client suitability. Therapists strongly asserted the necessity and importance of individualising the ways in which goACT was used (or not used) with each client, in order to suit his or her specific therapeutic needs or preferences. There was concern that if the application of goACT to therapy was not personalised, it had the potential to interfere with—rather than supplement—therapy. Effective use of goACT is thus dependent on clinical judgment, whereby the therapist

must collaborate with clients to identify the most suitable methods to meet their needs.

> "…[goACT has these] advantages so long as they're with therapeutic judgment and intent. A disadvantage would be if you are not doing it in that way, and you are just trying to use [goACT] across the board and use that approach with everyone, then I just think that would become a problem. You're not personalising it." (Therapist 2)

> "You set it up and you can refine or change it in terms of your patient. 'What are their needs for goACT?' That's how I would do it, rather than 'what are my needs?' … 'What are their needs for goACT, what will be most efficient for them?'" (Therapist 6)

2. Therapist concerns

Therapists concerns about using goACT were summarized within four subthemes: (2.1.) *boundaries (work-life, and therapeutic);* (2.2.) *workload;* (2.3.) *technological issues;* and (2.4.) *potential therapeutic risks.*

2.1. Boundaries:

Work-Life ('switching off'). One of the significant concerns surrounding the use of goACT was the potential impact on work-life boundaries, and the therapist's ability to 'switch off' after work. Three participants across both focus groups discussed difficulties 'switching off' as a result of using goACT for communication with clients between sessions. For instance:

> "…I think that even by having that online contact they are still more present. It is not necessarily the time that you spend but the time that they occupy your mental space by having that added contact." (Therapist 3)

> "I still feel comfortable using [goACT]. But it's still at the back of the mind that "oh, I need to check this' then I think 'oh, I shouldn't check this on the weekend, but I need to check it before they come in…' and you know, it's like always there…" (Therapist 1)

Collaboratively, participants in focus group one agreed that awareness of one's own boundaries and limits is the most important factor when negotiating

appropriate communication boundaries, rather than the negotiated boundary itself.,

Therapeutic. Therapists reflected that by using goACT the therapeutic process became more accessible, and some therapists thus held concerns that the therapeutic boundary between therapist and client may become blurred. Although no therapist reported any experience of clients actually violating therapeutic boundaries, the concern was raised repeatedly throughout both focus group discussions. The therapists raised several issues under the banner of the 'therapeutic boundary' theme, such as (a) concern that the client may contact the therapist too frequently via goACT; (b) concerns about crisis management via goACT given its asynchronous nature; and (c) concern that the therapist appears 'too available' to the client (see section 3.2. in this section for counter-argument). For example:

"I suppose I have just said to clients that I only check it 9 – 5 and that it is not a crisis service. And that's just me personally, I don't have time…—I've just said 'it's not a crisis service'… So I have just provided subsequent agencies and stuff like that... So I've just said that so they know I'm not going to reply at 10 pm at night." (Therapist 6)

2.2. Workload. goACT holds the potential to increase therapist workload. This theme was identified within the first focus group as being dependent on the ways in which the therapist used goACT with their clients. The following extract details the differences in experiences using goACT between Therapist 1 and Therapist 2 as it relates to the impact on their workload.

Therapist 1: But I mean, [goACT creates] useful work. Yeah because I have to do the notes with her—I had to check her notes and she had written a lot… Or like the activity scheduling, I have to look at it and work it out….it's useful. But it's still more work.

Therapist 2: I found after a little while it wasn't [more work] for me. Only because after a while I probably would have naturally tried to have email contacts with these people anyway, as part of the therapy approach that I like to use, plus SMS reminders and stuff. So it's just useful having a platform to use to do that, rather than having to try and do it via the clinic email and everything. Um… so initially it was kind of adjusting—like OK how am I going to make this work for me? But once I had gotten past that, then it didn't feel like it was much more effort at all. And, the fact that, it probably—well… it probably depends on what the client's using it for. That is probably the difference.

2.3. Technological issues. Four of six therapists discussed concerns about the potential for technological issues (glitches, timeouts, difficulty logging in, etc.) to impact on therapy or the therapeutic alliance. Therapist attitudes differed towards the way technological errors impacted on the therapeutic process or alliance, and the ways in which this could be managed. For instance:

Therapist 5: I suppose it is an opportunity to be human. And be real and fallible, and kind of say 'oh, this isn't working out for me but that's OK we'll deal with it.' I think that that's a good opportunity to model resiliency and problem-solving behaviour… umm… but I think it can be just frustrating… umm… and you can feel like a bit of a pest. Like if something has gone wrong with goACT and they haven't been able to fill out an assessment, and you're like 'oh I'm sorry can you please fill out that assessment that goACT stuffed up?'…

Interviewer: Fair enough. OK. How do you feel—do you want to add anything Therapist 6?

Therapist 6: No not really. Because I'm not using it overly extensively it hasn't really interfered at all. The people I am not using it with, I haven't ever used it with because they just can't, and the people I have used it with… because maybe I haven't been using it as much, nothing has really gone wrong.

2.4. Potential therapeutic risks. Therapists raised potential therapeutic risks of using goACT in both focus groups, giving consideration to whether such risks were attributable to goACT, or rather a therapeutic issue. Two major clinical disadvantages were identified as (a) fostering dependence,

> "There are some clients for which you run a real risk of fostering a dependence. And that you definitely have to be really aware of how you use this with them." (Therapist 5)

and (b) annoying the client. In this extract, therapists identify the *potential* for the therapist to be perceived by the client as annoying or intrusive, but is attributed to the way in which therapists manage the software..

> *Therapist 1:* "... You know you need to make sure that the client doesn't get annoyed, by asking them "would it be okay if I send them?" And checking out "did you feel annoyed when I sent you a text message?" like in the first week after the first assessment session. It's all about how the therapist handles it.
> *Interviewer:* So it's back to your comment on therapeutic judgment.
> *Therapist 2:* But it is also the therapist's job to sell any tool that you are wanting to use. And your client, I mean, any client is not going to stick to something if you're not selling it as able to help. So I think you would have to do the same with goACT so they walk out and think "oh, OK, that sounds good…"

3. goACT expands the parameters of therapy

goACT seemingly functioned to expand the parameters of therapy via two distinct processes: (3.1.) *increased opportunity to provide client care and build therapeutic alliance*; and (3.2.) *increased access to the process of therapy.*

3.1. Increased opportunity to provide client care and build therapeutic alliance.

goACT provided therapists with an increased opportunity to demonstrate care to their clients outside the limits of their therapy sessions, which had a positive impact on alliance. This was considered a major therapeutic benefit. By extending the ways in which therapists could provide empathy, compassion, and care for their clients, they felt a stronger therapeutic bond. Further, communicating with clients outside of therapy sessions provided therapists with the capacity to demonstrate that their care was genuine, and not simply an artificial product manufactured by the therapist. For instance:

> "I think it also gives you an opportunity to express that you do think about them outside of the time that you are restricted to. It's that extra avenue for empathy and compassion…" (Therapist 6)

> "I think it's made a huge difference with the alliance. And with them being committed to what we are doing in session because they know that there is another form of contact." (Therapist 2)

3.2. Increased access to the process of therapy. goACT expanded the parameters of the therapy session. Because the patient is provided with an additional avenue through which therapy can take place at any time, therapy becomes more present in the patient's mind. Irrespective of therapist responsiveness, goACT provided clients with immediate and convenient access to the therapeutic process, which fostered their increased therapeutic involvement. In addition, goACT seemingly creates the sense that the therapist is more available, even if they are not regularly active and available on the system.

> "I think [goACT] keeps [therapy] more present in their mind. Like [Therapist 6] said, 'oh yeah I had that session and, yeah, I've gotta do that homework.' Rather than them just coming to the appointment and then avoiding for the rest of the week until they have to come back in… And saying 'oh, I forgot' or 'oh, I was busy.'" (Therapist 5)

> "… like it's not so much feeling held in mind by the therapist but that the therapeutic process is available, absolutely. Because [my client] also used it when she had a panic attack: processing through her thoughts leading up to that panic attack, so she could make sense of it. She could do that at 11 pm at night rather than having to wait until we had therapy again… [it helped] just putting it into practice… getting a different coping strategy in place…" (Therapist 2)

4. goACT enhances therapy

Therapists described a sense that goACT enhanced the *quality* and depth of therapy, via increasing the meaning behind therapeutic tasks, reinforcement of knowledge and learning, overcoming barriers, and increasing client adherence to the therapeutic process. These were conceptualized into three subthemes: (4.1.) *Reciprocity*; and (4.2.) *Guided empowerment*.

4.1. Reciprocity. Therapists described clients' motivation toward completing homework tasks to have increased as a result of using goACT. goACT seems to facilitate a demonstration of reciprocity and 'sharing' within the client-therapist relationship, which appears to be the mechanism underpinning increased client accountability. Further to this, therapists sensed that clients may be more committed to completing therapeutic tasks as they are intrinsically motivated by a sense of perceived reciprocal obligation toward the therapist, which is facilitated by between-session communication:

"I think that it would help them to be more accountable because it's that reminder that 'I've given you something to do/try/ review. And I will be asking about it. And here it is in writing. And I haven't forgotten, so hopefully you haven't and you do it.'" (Therapist 6)

4.2. Guided empowerment. Via goACT, therapists guided clients toward improved self-efficacy and independence. goACT acted as a half-way point between dependence on the therapist and therapy, and independence. Therapists were able to be more hands-on with their clients outside of session hours, which enabled them to more quickly internalise the 'voice of therapy' (Therapist 5). Therapist felt able to foster client independence and empowerment via gentle encouragement and reinforcement. goACT catalysed the transfer of the 'voice of therapy' to the client's everyday life outside of therapy, allowing the client to access this voice when needed, smoothing the transfer toward complete independence.

"I think that maybe as you're finishing up therapy and you might be starting to space out the sessions, it could be really useful for encouraging independence and promoting their own self-efficacy as they are leaving therapy. I can see that working. And probably during [therapy] as well…" (Therapist 5)

"I absolutely think [goACT] would help refresh with content, I also think that something that we have in the back of our minds is that the voice of therapy is

> going to stay with the client and that they will become their own therapist. So if they are hearing that voice more often, then that's going to help them take it on, and take it into the future." (Therapist 5).

In summary, thematic analysis of focus group interviews revealed 11 subthemes: therapist preferences, patient suitability, boundaries, workload, technological issues, potential therapeutic risks, increased opportunity to provide patient care and build therapeutic alliance, increased access to the process of therapy, overcoming connection barriers, reciprocity, and guided empowerment. Themes described both positive and negative therapist experiences of using goACT as an adjunct to traditional therapy.

Discussion

This study investigated therapist experience of the implementation of an advanced and comprehensive mobile and web-based technological system as a therapeutic adjunct in the context of face-to-face therapy. This qualitative study formed part of a larger mixed-methods study, that investigated whether the introduction of online text-based adjunct technology (goACT) to the therapeutic process would enhance the therapy experience. Specifically, in this study we explored the therapist experience of ways in which goACT influenced therapeutic alliance and engagement.

Key findings

Four overarching themes emerged from the focus group data, representing therapist experience of goACT as a therapeutic adjunct. The first of these was the 'discretional use of goACT'. Therapists identified that the degree to which they utilized goACT was significantly influenced by both patients' individual needs and therapist preferences. Indeed, this is consistent with previous findings that the inherent flexibility and ability to individualise the level and type of communication via technological devices can, in

fact, enhance personalisation of therapeutic services without dehumanizing the experience (Leibert et al., 2006; Lovejoy et al., 2009; Perle, Langsam, & Nierenberg, 2011; van der Vaart, et al., 2014).

The second theme to emerge was 'therapist concerns'. Therapists concerns were limited in comparison to those presented in previous research (Goss & Anthony, 2009; Mora, Nevid & Chaplin, 2008), but just as varied. In general, therapists in our study were more open to the use of technology in therapy than has been reported in previous research. Therapists took a stance of *cautious optimism* (Goss & Anthony, 2009) towards using goACT. This may have been associated with the fact that goACT is a supplement technology, and not a full replacement for face-to-face sessions. In this study, therapist concerns focused on the potential for increased workload, and the violation of therapeutic boundaries. It is notable, however, that these concerns were *not* consistently held across all therapists in our study. In fact, some outright disagreed with the proposal that goACT caused more work for therapists or violated therapeutic boundaries. Interestingly, the one therapist who held primary workload concerns did not use goACT for communication with her patients. Therapists who did use goACT for communication did not report concerns with increased workload. Hence, this concern is likely to reflect individual differences in therapist attitude toward intersession communication, skills in time management, and ability to 'switch off' after work, rather than any overt objective impact on workload. Nevertheless, therapists agreed that these issues (workload, boundaries) were distinct therapeutic issues that were to be managed by the therapist when using goACT. That is, goACT did not automatically lead to increased workload and boundary violations if an appropriate contract was initially set

up between patient and therapist. An important practical implication of this is that goACT use requires careful consideration by therapists in setting up appropriate limits and boundaries both within the patient-therapist contract and for therapist work-life balance. Indeed, prior research has highlighted the potential role of inter-session contact via technology to increase therapeutic efficiency and reduce overall time demands on the therapist (Ly et al., 2014). Conversely, it is conceivable that goACT adds a layer of complexity for the practitioner to consider when establishing personal and therapeutic boundaries.

The third theme to emerge was that goACT 'expands the parameters of therapy' through providing additional opportunities for client care, strengthening therapeutic alliance and providing access to the process of therapy. Therapists' capacity to connect with their patients in a personal way between sessions gave them the opportunity to demonstrate that their care was authentic, rather than simply a 'duty of care'. Therapists noticed that through using goACT, the therapeutic work became more 'present' in their patients' minds which led to greater involvement in the therapy process. This finding is consistent with previous research which suggests that availability and frequency of interactive intersession experiences (i.e. time spent recreating the therapeutic dialogue between sessions) is associated with enhanced treatment outcomes (e.g. Hartmann, Orlinsky & Zeeck, 2011; Shingleton, Richards, Thompson-Brenner, 2013). Further, our findings provide support for previous reports suggesting that the 'always on' nature of the technology facilitates increases access to the therapeutic service between sessions and allows for ecological momentary disclosures that may not otherwise be captured by the intermittent nature of face-to-face sessions (cf. Suler, 2004).

The final theme to emerge from the data was that goACT ‘enhances therapy’. This occurred through a sense in which both therapist and client were equally responsible for carrying out the therapeutic work, increasing accountability and motivation to engage in inter/intra therapeutic interactions. It has been suggested that the asynchronicity of online communications such as this, may in fact enhance perceptions of patient control over their therapeutic environment, thereby facilitating a sense of ownership and engagement in therapeutic tasks (Carlbring & Andersson, 2006; Fenichel, 2004; Leibert, Archer, Munson, & York, 2006; Simpson, Bell, Knox & Mitchell, 2005; Suler, 2004a, 2004b). This supports previous findings that technology-based therapy adjuncts can increase patient adherence to both in- and between-session tasks, including homework and practice of skills essential to recovery (Clough & Casey, 2015). In addition, therapists reported that goACT led to increased internalization of therapeutic messages through increased exposure to these messages. This may be particularly beneficial in the context of more complex clinical problems and personality disorders where there is often a need for longer and more frequent therapeutic contact (Young, Klosko & Weishaar, 2003; Comtois et al., 2007; Zeeck, Hartmann & Orlinsky, 2006).

Strengths, Limitations and Future Directions

Some methodological limitations were identified. All therapists were undertaking their Masters training in clinical psychology with various levels of clinical experience. Therapists used goACT in a variety of ways according to personal preference, and one therapist chose not to use it at all to communicate with their clients (except as a mechanism for collecting questionnaire data). This is likely to have influenced responses and perceptions of goACT. In addition, the small sample size of both therapists and patients limits the generalizability of findings. Nevertheless, this study

represents a truly naturalistic investigation which has facilitated exploration of the diverse possibilities available to therapists and patients. This is consistent with the purpose of this exploratory pilot study: the basis upon which larger-scale, more methodologically robust research can be conducted in the future.

In being the first study of its kind in a rapidly evolving area, there are many future directions for research that can be produced from these findings. Given this study focused on the experiences of trainee clinical psychologists, future research may investigate the experiences of more experienced therapists, and the influence of years of therapy experiences on use of technology in therapy. In addition, future studies could also investigate change in therapist attitudes to the use of technology by conducting focus groups both at pre and post therapy. This would allow exploration of both initial attitudes and concerns, and how these might change with experience. It may also be of interest to explore whether therapist pre-treatment experience and attitudes to the technology influences their willingness to try new technologies, and uptake and clinical outcomes with their patients. Given the risk-averse nature of clinical psychology in an increasingly litigious society, it may also be worthwhile for future research to explore risk mitigation when using technology in therapy. Lastly, the impact of organizational and systemic processes on the use of technology in therapy is another area which remains unexplored.

Conclusion

This qualitative study investigated the therapist experience of using goACT as an adjunct to face-to-face therapy. Therapists reported that goACT facilitated therapeutic engagement and alliance through several processes. Therapists noted that goACT appeared to expand the parameters of therapy, allowing more opportunities for building

rapport and giving patients more responsibility within therapy. In particular, therapists observed that goACT catalyses the internalisation of the ‘voice of therapy’, empowering patients to practice new healthy ways of thinking and coping between sessions. Therapists concluded that the use of goACT should be individually tailored, according to patient need and therapist preferences. Therapists’ primary concerns were limited and unique in comparison to those identified previous research. This research adds to our understanding of therapist experiences of technology, and ways in which it can enhance the therapeutic process. This study highlights the potential benefits of utilizing adjunct technologies in public and private health settings, through enhanced patient adherence, commitment and investment in the therapeutic process.

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Table 1.

Therapist demographic details

Therapist	Therapeutic orientation	Experience in Mental Health (years)	Experience as a Psychologist (years)	Computer use* (min 1; max 5)		Mobile phone use* (min 1; max 5)		Smartphone/iPad use* (min 1; max 5)		Weekly computer & internet use
				Comfort	Confidence	Comfort	Confidence	Comfort	Confidence	
1	CBT	Less than 1	Less than 1	5	5	5	4	3	3	More than once per day
2	Open	5 – 10	Less than 1	5	5	5	4	4	3	More than once per day
3	Psychodynamic, psychoanalytic	2 – 3	2 - 3	5	4	5	4	5	4	More than once per day
4	Open	3 – 4	Less than 1	5	5	5	5	5	5	More than once per day
5	Open	2 – 3	Less than 1	5	5	4	4	4	4	More than once per day
6	CBT, Schema Therapy	1 - 2	Less than 1	5	4	5	5	4	4	Once per day

*Comfort and confidence were rated on a five point Likert scale, from 1 (very uncomfortable) to 5 (very comfortable), with 3 being neutral

*Open therapeutic orientation denotes a blend of CBT with other approaches.

Table 2.
Focus group themes.

Major theme	Subthemes	Therapist contributions*
Discretional use of goACT *goACT must be used discretionally based on clinical judgement of client suitability, therapeutic goals and therapist's personal skills and comfort levels.*	1. Therapist communication preferences and preferred ways to use goACT.	T1, T2, T3, T4, T5, T6
	2. Providing personalised therapeutic use of goACT depending on client needs and client suitability.	T1, T2, T3, T4, T5, T6
Therapist concerns regarding goACT use *Concerns associated with the therapeutic use of goACT from the therapists' perspective.*	3. Concern about therapeutic boundaries (technology influenced work-life boundaries and client-therapist boundaries).	T1, T2, T3, T5, T6
	4. Concern about workload management.	T1, T3, T4
	5. Potential therapeutic risks: annoying the client, fostering dependence, disappointing the client.	T1, T2, T5
	6. Concern that technological issues impact negatively on, or interfere with, therapy.	T1, T2, T4, T5
goACT expands the parameters of therapy *goACT increases the quantity of therapy, providing client and therapist with increased therapeutic space and breadth beyond the hour session, within which therapeutic change can occur.*	7. Provides therapists with an increased opportunity to provide care for client outside of session, and demonstrate positive therapist qualities.	T1, T2, T3, T5, T6
	8. *Therapeutic process is available, absolutely:* Provides clients with increased convenient and immediate access to the process of therapy, and increases the perception of therapist availability.	T1, T2, T3, T5, T6
goACT enhances therapy *goACT enhances the quality and depth of therapy via increasing the meaning behind therapeutic tasks, reinforcement of knowledge and l earning, and increasing client adherence to the therapeutic process.*	9. *Overcoming a barrier to connection:* goACT assists to overcome a barrier to connection when working via videotherapy.	T2, T3, T5, T6
	10. *Reciprocity*: clients become more accountable, increasing adherence to therapy.	T1, T2, T3, T5, T6
	11. *Guided empowerment:* Increases client independence; self-efficacy, and increases skill-building	T1, T2, T5, T6

*T denotes Therapist