

ORIGINAL ARTICLE

Telepsychology in a University Psychology Clinic Setting: A Pilot Project

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Objective: The focus of the present study was to investigate levels of psychological distress and therapeutic alliance rated by clients attending psychological therapy sessions via video therapy or in person at a university psychology-training clinic.

Method: Participants were 23 clients who had completed at least five therapy sessions with a provisional psychologist on placement in a university psychology clinic. Six of these attended sessions via videoconferencing in Port Augusta and 17 were local clients who attended traditional in-person sessions. Both qualitative and quantitative methods were utilised in order to identify perceptions of and reactions to video therapy as described by participants.

Results: Reported levels of psychological distress across sessions were within the clinical range and similar across both video therapy and in-person settings, with no statistical differences between the groups. Equally high levels of therapeutic alliance were established across both settings. Participants' experiences of video therapy were further explored under five main themes identified through content analysis: Initial Reactions and Adjustments, Factors Affecting Communication, Perceived Effectiveness, Therapeutic Alliance, and Practical Factors.

Conclusions: Findings suggest video therapy provided by provisional psychologists represents a feasible and acceptable means by which rural residents can access psychological treatments in the Australian context.

Key words: psychotherapy; telemental health; telepsychology; university; videoconferencing.

What is already known on this topic

- 1 Preliminary studies suggest treatment outcomes are roughly equivalent in psychotherapy by videoconferencing and in-person settings.
- 2 Research to date strongly supports the notion that therapeutic alliance can be developed in video therapy with bond and presence rated by clients as at least equivalent to that within in-person settings across a range of diagnostic groups.
- 3 Whereas videoconferencing has become commonplace in psychiatry in Australia, psychology has been slow to embrace this as a mode of treatment delivery.

What this paper adds

- 1 By developing partnerships between university-based clinical psychology clinics and country health service settings, provisional psychologists on placement are provided with the opportunity to develop competencies in conducting psychotherapy via videoconferencing in rural settings, with clients reporting similar levels of psychological distress to those seen in person.
- 2 Clients who attend psychotherapy via videoconferencing with a provisional psychologist rated high levels of therapeutic alliance, similar to those reported by clients attending therapy in person.
- 3 Findings suggest video therapy provided by provisional psychologists represents a feasible and acceptable means by which rural residents can access psychological treatments in the Australian context.

The evidence base for the provision of psychological treatments via videoconferencing has grown exponentially in recent years (e.g., Day & Schneider, 2002; De Las Cuevas, Arredondo, Cabrera, Sulzenbacher, & Meise, 2006; Dunstan & Tooth, 2012;

Frueh et al., 2007; Grubaugh, Cain, Elhai, Patrick, & Frueh, 2008; Kennedy & Yellowlees, 2003; O'Reilly et al., 2007; Porcari et al., 2009; Simpson, Bell, Knox, & Mitchell, 2005), with clinical outcomes and therapeutic alliance roughly equivalent in videoconferencing and in-person settings (Richardson, Frueh, Grubaugh, Egede, & Elhai, 2009; Simpson & Reid, 2014). Indeed, it appears that videoconferenced psychotherapy may offer additional benefits to clients over and above in-person therapy, with some studies indicating that it can enhance the experience of client empowerment and personal control (e.g., Simpson et al., 2005; Simpson & Slowey, 2011). Moreover,

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Accepted for publication 7 April 2015

doi:10.1111/ap.12131

tele-psychotherapies often provide a solution to those with psychological difficulties who live in rural and remote areas (Cowain, 2001). A range of other groups may also benefit such as those in forensic settings, those with disabilities, and older adults who may be disadvantaged due to isolation, low mobility, and transport problems (Lazzari, Egan, & Rees, 2011; Simpson, 2009). Videoconferencing is an attractive solution, as it allows synchronous conversation in a multisensory output (i.e., video and audio), a significant advantage if compared with other solutions that offer narrower ranges of sensory modalities (Richardson et al., 2009).

The University of South Australia (UniSA) has recently introduced (as part of its Masters in Clinical Psychology programme) a videoconferencing psychotherapy (video therapy) service in partnership with Country Health SA (Simpson, Rochford, Livingstone, English, & Austin, 2014). Video therapy clients are referred by the local Community Mental Health Team based in Port Augusta and Roxby Downs, which operates within the South Australian Government (Department of Health and Aging), to the UniSA Psychology Clinic, over 300 km away. The present study builds on previous university-based pilot studies (e.g., Dunstan & Tooth, 2012; Richardson, 2011; Stubbings, Rees, Roberts, & Kane, 2013) in order to evaluate the feasibility of video therapy delivered by clinical psychology trainees (provisional psychologists), within the context of a pre-existing rural multidisciplinary mental health team. This study investigates the feasibility and acceptability of video therapy and provides a qualitative perspective on participant experience of video therapy delivered by provisional psychologists as part of a service offered by a university psychology clinic. In addition, it explores the types of participant demographics, presenting problems, levels of distress, and therapeutic alliance reported by rural participants seen in this setting. This is the first study of its kind to our knowledge that has specifically explored outcomes utilising this service delivery model, with provisional clinical psychologists working in the context of a rural multidisciplinary mental health team to provide a service via videoconferencing.

This study aimed to compare preliminary data from in-person and videoconferencing-based (video-therapy) psychotherapy sessions and to explore:

- (1) Levels of psychological distress rated by video-therapy and in-person participants;
- (2) Levels of therapeutic alliance rated by video-therapy and in-person participants; and
- (3) Perceptions of and reaction to video therapy as described by participants.

Method

Procedures

The research was approved by the UniSA Human Research Ethics Committee. A specific participant consent form was developed and approved by the UniSA Human Research Ethics Committee.

Provisional psychologists at the UniSA Psychology Clinic offer evidence-based treatments to clients with mild to severe mental health problems, excluding people experiencing current acute psychosis, acute suicide risk requiring immediate hospitalisation, and high level of substance misuse. The psychological assessment

and therapy sessions are provided remotely within the context of the integrated multidisciplinary team of mental health professionals based in Port Augusta, thus facilitating the provision of a seamless mental health service. The main forms of psychotherapy conducted via videoconferencing are cognitive behavioural therapy (CBT) and schema therapy. This service is currently offered free of charge to clients, who normally attend between 15 and 20 weekly sessions. Provisional psychologists are provided with hands-on training and ongoing weekly supervision with clinical psychologists based at the clinic. Provisional psychologists are instructed in the use of videoconferencing for psychotherapy via weekly supervision and two 2.5-hr group training sessions (with assigned reading) that cover a range of topics including videoconferencing etiquette, conducting an assessment via videoconferencing, gaining informed consent, observing ethical practice, adapting clinical competencies to the video therapy setting, managing risk, and communicating with multidisciplinary teams (for further details see Simpson et al., 2014). Sessions are audio-recorded and reviewed weekly by supervisors.

In this study, clients were assessed by provisional psychologists prior to treatment. Presenting problems and diagnoses were determined through comprehensive clinical interviews based on the Diagnostic and Statistical Manual of mental disorders 4th ed. (*DSM-IV*) diagnostic system (American Psychiatric Association, 2000). Formal diagnostic interviews were not used consistently. Assessment data collected by clinical interview was cross-checked by clinical supervisors and compared with data gathered through standardised questionnaires. Although most clients had multiple diagnoses, none of those included in this study met full criteria for personality disorder. Treatment was based on comprehensive idiographic case formulations that incorporated both primary diagnoses and co-morbidity. Primary treatment targets were identified collaboratively with client participants by questionnaire and at interview. The CORE-10 (Barkham et al., 2013) was completed by participants prior to every therapy session, and the CORE-ARM (Cahill et al., 2012) was completed at the end of every therapy session.

Participants

Each provisional psychologist attended an average of 12 videoconferencing sessions (range of 5–20 sessions) with each of their remote clients (between January and September 2013). Only five of these sessions with each client were captured during this study. Participants were 23 clients, all of whom had completed at least five therapy sessions with the provisional psychologists at the UniSA Psychology Clinic. Six of these clients were video-therapy clients and 17 were local clients who attended in-person sessions. Each of the six provisional psychologists (master's-level trainees) included in the study provided therapy for one remote client and two or three local clients. In this way, we compared the results of two groups of participants (i.e., in-person group and videoconferencing group), who received treatment from the same pool of provisional psychologists over the same period of time. As much as possible, in-person participants were selected for this study on the basis of matching age, gender, and presenting problems with video-therapy clients.

Measures and Equipment

Equipment

Videoconferencing equipment at the remote site was a Cisco C20 endpoint (Cisco Systems, Inc., San Jose, CA, USA) with a 50" plasma display and that at the university site was a Lifesize Express 220 unit (Lifesize, Austin, TX, USA) with 40" LCD display. Both sites are set up so that all calls are encrypted, ensuring high levels of security.

Measures

The CORE-10 is a short 10-item version of the CORE-OM 34 (Barkham et al., 2013) that measures psychological distress, which covers depression (two items), anxiety (two items), functioning (three items), trauma (one item), physical (one item), and risk (one item). A score of 11 denotes the lower boundary of the *mild* clinical range, with 15 as the *moderate* level, 20 as the *moderate to severe* level, and 25 or over as the *severe* level. This scale has demonstrated adequate internal consistency (Cronbach's alpha .91) and a correlation of .77 with the Clinical Interview Schedule-Revised (Connell et al., 2007). The five-item CORE-ARM (scored on a scale of 0–7) is an abbreviated version of the Agnew Relationship Measure (Agnew-Davies, Stiles, Hardy, Barkham, & Shapiro, 1998) and assesses the strength of the therapeutic alliance. In this study, the client version was utilised. This scale has acceptable psychometric properties and converges with the full 28-item scale (Cahill et al., 2012).

Design

Due to the preliminary nature of this pilot study and the absence of large controlled studies in this setting, the present study has adopted a non-experimental mixed design in order to inform the development of a randomised controlled trial.

Design: Quantitative

An independent samples *t*-test was used to calculate differences between the video-therapy and in-person groups for mean levels of distress (CORE-10) and therapeutic alliance (CORE-ARM).

Design: Qualitative

Participants at the remote site were interviewed about their direct experience with video therapy. Semi-structured interviews of 30–45 min were conducted by videoconferencing and were audiotaped and later transcribed. Interviewers were master's-level provisional psychologists and an honours-level student (with no history of therapeutic contact with the patients). All interviews were conducted without technical problems and/or interruptions.

A content analysis was performed on data reported by participants, reducing and grouping the content of their responses into categories and subcategories. The following are the questions used during the interviews: (a) When you were first informed that you would be offered video therapy, what were your initial thoughts? (b) Would you have preferred in-person therapy at that time, and why (or why not)? (c) If you had the choice now of video therapy and in-person therapy, which

would you choose, and why? (d) Have you changed your mind about video therapy? (e) Do you feel that you have established a good rapport with the master's student? (f) Overall, do you think that this type of therapy has been beneficial to you? (g) Anything else you would like to say?

Results

Quantitative Study

The mean age of video therapy participants was 34, compared with a mean age of 31.75 for in-person clients. Whereas there were an equal number of males and females in the video-therapy group, the ratio of males to females in the in-person group was 5:12. The list of the de-identified video-therapy participants with their ages and their presenting problems is presented in Table 1.

A single mean and standard deviation score was calculated for each group across all sessions between January and September 2013 for the CORE-10 and CORE-ARM, and the scores are presented in Table 2. Levels of distress and therapeutic alliance reported by the two groups across treatment were very similar and fell within the moderate range of clinical severity (Barkham et al., 2013). Regarding the CORE-10, an independent sample *t*-test revealed that there were no significant differences between the video-therapy and in-person groups, $t(1.23)$, $p = .219$ (two-tailed), Cohen's $d = 0.19$. Mean CORE-ARM scores indicated high levels of alliance (i.e., above 6). An independent *t*-test

Table 1 Demographic Details of Video-Therapy Participants

No.	Sex	Age	Problems	Video sessions
1	Male	20	Social anxiety, major depressive disorder	7
2	Male	30	Depression, social anxiety	20
3	Male	43	Alcohol abuse, depression, anxiety	10
4	Female	22	Health anxiety, depression, panic attacks	14
5	Female	32	Depression	5
6	Female	58	Depression, social phobia	17

Table 2 CORE-10 and CORE-ARM Mean Scores for Video-Therapy and Face-to-Face Sessions

CORE-10	N Participants (datapoints)	Mean	SD
Face-to-face	17 (189)	14.39	7.41
Videoconferencing	6 (59)	15.69	6.06
CORE-ARM	N Participants (datapoints)	Mean	SD
Face-to-face	17 (180)	6.60	0.86
Videoconferencing	6 (71)	6.72	0.32

Note. SD, standard deviation.

revealed that there was no significant difference on the CORE-ARM between the video-therapy and in-person groups, $t(1.62)$, $p = .105$ (two-tailed), Cohen's $d = 0.18$.

Results

Qualitative Analysis

The qualitative analysis was conducted using conventional content analysis, in which categories and subcategories were identified and labelled during the process of analysis. There was close agreement on the basic themes, but each analyst "packaged" the themes slightly differently. After discussing the content of interviews, the researchers reached agreement on the relevant categories and subcategories. Categories were not based on any preconceived theories or ideas but flowed from the collected data during the process of analysis and discussion between the researchers. The analysis was summarised in a matrix containing the categories and subcategories matched with the response of the de-identified participants (Table 3).

Initial reactions and adjustments associated with video therapy

Video therapy was a novelty for all six remote participants. Only one participant reported having any prior experience in the use of a PC with a web camera. Some participants had experienced previous in-person sessions with a psychologist or a psychiatrist (for psychotherapy or for assessment). Initially, the lack of familiarity with communicating via videoconferencing generated a little consternation for some, which disappeared after the first

two to three sessions. All six participants adapted to communicating via the videoconferencing screen over time. As they became more familiar with the experience of psychotherapy via videoconference, an adequate level of confidence and even enthusiasm in some cases replaced the initial anxiety. Participants did not express any concerns about videoconferencing for the delivery of therapeutic services. Participants indicated that the videoconferencing technology was sufficiently reliable and suitable; indeed, only one participant reported some minor issues concerning the quality of the transmission, which was insufficient to allow a clear reading of what the therapist had written on the whiteboard. Also, the participant said that sometimes the audio quality was compromised.

However, in spite of this, he indicated high levels of satisfaction with video therapy as a mode of accessing treatment and commented that the quality of the alliance with the therapist surmounted any difficulties associated with the technology. Indeed, the participant had experienced previous in-person therapy sessions with a psychologist but had not achieved the desired outcome.

Factors affecting communication

Participants also indicated an increased sense of ease and control over their video-therapy sessions after just a few sessions, with some reporting comparatively more comfort with video therapy than previous in-person sessions. One participant commented that video therapy allowed him to feel more secure and in control compared with in-person sessions; for example, they have the option to interrupt the session by using the remote control and even to leave the room whenever they please (if they so choose).

Table 3 Qualitative Interview Themes: Categories and Subcategories

Categories	Subcategories	Participants					
		1	2	3	4	5	6
Initial reactions and adjustments	Initial concerns/anxiety about videoconferencing	•	•	•	•	•	•
	Elimination of concerns/anxiety after a few sessions	•	•	•	•	•	•
	Technical issues (video and audio quality)	—	—	—	—	—	•
Factors affecting communication	Feeling in control/at ease	•	•	•	•	•	•
	Feeling more comfortable than face-to-face	•	—	•	•	—	—
	It is a positive "barrier"	—	—	•	—	—	—
	Is not less personal, it is just remote	—	—	—	—	•	—
	Videoconferencing is a good way to start psychotherapy	—	—	•	—	—	—
Perceived effectiveness	It is better than talking with a person in the room	—	—	—	•	—	—
	This therapy has been beneficial to me	•	•	•	•	•	•
	Before, I never relaxed, now I feel more relaxed	—	—	—	—	•	—
	It is better than nothing	—	—	—	—	•	—
	The therapist make the difference, not the tool	—	—	—	—	—	•
Therapeutic alliance	I can talk more freely than face-to-face	—	—	—	•	—	—
	Establishment of good therapeutic alliance	•	•	•	•	•	•
Practical factors affecting therapy	I have a good relationship with my therapist	•	•	•	•	•	•
	Convenience (it is not required to travel)	•	•	•	•	•	—
	You do not have to spend time/expense flying to access therapy	—	—	—	—	•	—
	Avoids the necessity for long distance travel, which contributes to my negative thoughts	—	•	—	—	—	—
	You do not have the worry that you might bump into the therapist outside sessions (which could be embarrassing)	—	—	—	•	—	—

As one participant described, *"I guess it is less confronting, I feel I am in more control, I can stop it."* Another commented that video therapy facilitates *"talking more freely"* compared with in-person sessions. For one participant a remote conversation via video link *"is better than talking with a person in the room"*; another participant used the expression *"it is a positive barrier."* One participant said that compared with her previous experience of in-person therapy, *"I am more comfortable and open [in video therapy]."* One participant reported that videoconferencing actually eased her transition into therapy and facilitated communication, suggesting that it could be beneficial as a predecessor to in-person sessions if both options are available.

Perceived effectiveness of video therapy

All six video-therapy participants reported positive changes regarding their mental health problems. They definitively and unanimously perceived the service to be beneficial, with no expression of dissatisfaction or the intention to drop out of treatment. Also, one participant stressed the importance of working consistently with the same therapist, thus avoiding the need to *"repeat the same story over and over again."* Another participant reported that the treatment was *"better than nothing"* (i.e., no previous psychological services had previously been available to them) and *"[In the past] I never relaxed; now I feel more relaxed."* Clients reported that it was the qualities of the therapist that ensured a positive experience in video therapy—and that this was far more significant than the technology itself.

Therapeutic alliance

All clients indicated that there was a strong therapeutic relationship and that they were satisfied with their therapist. In the words of one participant, *"I have a good relationship with my therapist."* Another participant mentioned, *"I am comfortable with [my therapist], I am enjoying these sessions with her."* It appeared that once a rapport had developed between therapist and client, the modality of treatment delivery was of less consequence, and participants were less likely to express a preference for one over another.

Practical factors

All five participants spontaneously (without any prompting from interviewers) indicated that video therapy was a convenient way of accessing therapy, as otherwise they would be required to travel for circa 5 hrs to receive mental health assistance in the nearest city (Adelaide). The financial cost and the inconvenience of travelling for hundreds of kilometres were reported as a relevant and a potentially negative factor that would have interfered with their ability to access psychological help. In particular, one of the participants reported that travelling for hours exacerbated his *"negative thoughts."* Also, one participant raised the benefits of increased anonymity associated with video therapy; *"you never meet the therapist outside sessions."*

Discussion

This study aimed to compare preliminary data from in-person and video-therapy clients within a university setting. Findings

from this study suggest that levels of psychological distress were within the clinical range and were similar across both video-therapy and in-person settings, with no statistical differences between the groups. However, there may have been insufficient power to detect an effect due to the small sample size. In addition, ratings by patients indicated that equally high levels of therapeutic alliance were also established across both settings. These findings are consistent with a recent review of the literature (Simpson & Reid, 2014) that reported equivalent therapeutic alliance across video-therapy and in-person settings.

These results were supported by qualitative interviews, in which all six clients reported that a positive rapport was established with their provisional psychologist. Therefore, the findings of the present study suggest that video therapy (even when practised by provisional psychologists with no previous experience in this area) does not appear to impair the therapeutic alliance in any way. Indeed, all six participants expressed favourable opinions towards their therapists and were motivated to continue treatment. This is significant, given the fact that the main concerns expressed by psychologists regarding video therapy is in relation to the potential impairment of the therapeutic alliance (Rees & Stone, 2005).

Overall, five main themes were identified by the content analysis. The first theme, "Initial Reactions and Adjustments," referred to comments made by participants that any initial anxiety regarding video therapy appeared to reduce over the first few sessions and for some was in fact replaced with confidence and enthusiasm. This is consistent with the findings of Germain, Marchand, Bouchard, Guay, and Drouin (2010) that even when clients initially hold negative expectations or are anxious at the start of video therapy, this does not interfere with the development of a positive rapport. Participants reported that the technology did not interfere with the quality of transmission or cause any negative effects on sessions. Indeed, the recent transition from low-bandwidth Integrated Services Digital Network to high-quality IP-based videoconferencing (i.e., videoconferencing that takes place via the Internet) has led to greater reliability and audio/visual quality. Within the second theme, "Factors Affecting Communication," participants indicated that they experienced an increased sense of ease and control over their video-therapy sessions after just a few sessions, with some reporting comparatively more comfort with video therapy than previous in-person sessions. This is consistent with literature that suggests that video therapy can facilitate communication and reduce the level of feelings of intimidation and self-consciousness (Day & Schneider, 2002; Simpson et al., 2005). It is noteworthy that three of the six clients had social anxiety or social phobia listed as problem areas yet all clients adapted quickly and positively to video therapy. Given that video use is regarded as an essential feature of enhanced CBT for social anxiety and is often utilised in behavioural experiments (e.g., Rodebaugh, Heimberg, Schultz, & Blackmore, 2010), video therapy may be a useful first step for many clients within this diagnostic category, especially if it is explicitly utilised as tool for challenging negative expectations and carrying out behavioural experiments.

As shown by the third theme, "Perceived Effectiveness," participants also expressed a sense that the therapy was beneficial to them, with the qualities and technique of the therapist identified

as more important than the technology in bringing about therapeutic change. The fourth theme, "Therapeutic Alliance," identified consistent reports from participants regarding a strong therapeutic relationship and high levels of satisfaction with their therapist. Finally, the fifth theme, "Practical Factors Affecting Video Therapy," contained statements that indicated that video therapy was reported as significantly more convenient and less costly (in terms of travel, time, and loss of working hours) than travelling to Adelaide. Some also indicated that they valued the anonymity of seeing a therapist who was not present in the local area, which is consistent with previous studies in this area (Richardson, 2011; Simpson, 2001; Simpson, Deans, & Brebner, 2001).

There are several limitations to this study. First, the quantitative results analysed in this part of the present research were obtained from clients already allocated in pre-existing groups (i.e., local clients in the metropolitan area and remote clients in the rural areas). Thus, it was not feasible to conduct a full-experimental study, as a random allocation of the participants between the two conditions (i.e., videoconferencing and in person) was not practicable. An additional flaw was that clients were not consistently formally assessed using diagnostic interviews, thus limiting the reliability of diagnoses and the replicability of our study. In addition, pre- and post-therapy comparisons were not possible due to the fact that this study was only conducted over five sessions with some missing data over that period. Data were missed due to occasional logistical problems with obtaining data from the remote site, particularly when administrative staff were absent. The inclusion of multiple therapists adds another aspect of "noise" into the data and may have confounded results. There is likely to be some variation in outcomes among therapists, and it may be useful for future studies to incorporate an investigation of this into any analyses. Larger-scaled multisite studies utilising non-inferiority methodology are needed in order to investigate whether treatment modalities produce equivalent results (Greene, Morland, Durkalski, & Frueh, 2008). Future studies within a university setting could also compare in-person and video therapy by including an in-person client comparison subgroup referred by a metropolitan mental health team. In addition, local clients could be allocated randomly to in-person or video therapy to differentiate the effects of video therapy from practical issues associated with remoteness, as demonstrated in a recent trial (Stubbings et al., 2013).

In addition, the possible contribution of any ongoing involvement with the rural mental health team during the period of video therapy could also be an important area to further understand. Future studies could also examine the perceived usefulness of the service by the referring rural mental health team. As the focus of this study was on the client experience of video therapy, therapist perspectives were not investigated. A preliminary investigation into the confidence and competence of provisional psychologists was described in another article (Simpson et al., 2014), but further exploration of this area would be worthwhile.

At the current time, UniSA is the only university in Australia (that we are aware of) that has developed systematic training in videoconferencing within a university psychology clinic. The results from this preliminary study are encouraging and provide

initial evidence that partnerships between university-based psychology programmes and government-based rural mental health services may provide a valuable model whereby provisional psychologists gain valuable experience through working with rural clients and multidisciplinary teams while providing rural clients with a feasible means of accessing psychological treatments. Hence, we speculate that in future years the development of specific competencies in video therapy will become a standard component of the psychology masters and doctoral programmes, thereby facilitating more opportunities for research in this growing field.

References

- Agnew-Davies, R., Stiles, W. B., Hardy, G. E., Barkham, M., & Shapiro, D. A. (1998). Alliance structure assessed by the Agnew Relationship Measure (ARM). *British Journal of Clinical Psychology, 37*, 155–172. doi:10.1111/j.2044-8260.1998.tb01291.x
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author. Text rev.
- Barkham, M., Bewick, B., Mullin, T., Gilbody, S., Connell, J., Cahill, J., . . . Evans, C. (2013). The CORE-10: A short measure of psychological distress for routine use in the psychological therapies. *Counselling and Psychotherapy Research, 13*(1), 3–13. doi:10.1080/14733145.2012.729069
- Cahill, J., Stiles, W. B., Barkham, M., Hardy, G. E., Stone, G., Agnew-Davies, R., & Unsworth, G. (2012). Two short forms of the Agnew Relationship Measure: The ARM-5 and ARM-12. *Psychotherapy Research, 22*(3), 241–255. doi:10.1080/10503307.2011.643253
- Connell, J., Barkham, M., Stiles, W., Twigg, E., Singleton, N., Evans, O., & Miles, J. (2007). Distribution of CORE-OM scores in a general population, clinical cut-off points, and comparison with the CIS-R. *British Journal of Psychiatry, 190*, 69–74. doi:10.1192/bjp.bp.105.017657
- Cowain, T. (2001). Cognitive-behavioral therapy via video-conferencing to a rural area. *Australian and New Zealand Journal of Psychiatry, 35*(1), 62–64. doi:10.1046/j.1440-1614.2001.00853.x
- Day, S., & Schneider, P. (2002). Psychotherapy using distance technology: A comparison of face-to-face, video, and audio treatment. *Journal of Counseling Psychology, 49*, 499–503. doi:10.1037/0022-0167.49.4.499
- De Las Cuevas, C., Arredondo, M., Cabrera, M., Sulzenbacher, H., & Meise, U. (2006). Randomized clinical trial of telepsychiatry through videoconference versus face-to-face conventional psychiatric treatment. *Telemedicine and e-Health, 12*, 341–350. doi:10.1089/tmj.2006.12.341
- Dunstan, D. A., & Tooth, S. M. (2012). Treatment via videoconferencing: A pilot study of delivery by clinical psychology trainees. *The Australian Journal of Rural Health, 20*, 88–94. doi:10.1111/j.1440-1584.2012.01260.x
- Frueh, B. C., Monnier, J., Yim, E., Grubaugh, A. L., Hamner, M. B., & Knapp, R. G. (2007). A randomized trial of telepsychiatry for post-traumatic stress disorder. *Journal of Telemedicine and Telecare, 13*, 142–147. doi:10.1258/135763307780677604
- Germain, V., Marchand, A., Bouchard, S., Guay, S., & Drouin, M. (2010). Assessment of the therapeutic alliance in face-to-face or videoconferencing treatment for posttraumatic stress disorder. *Cyberpsychology, Behavior, and Social Networking, 13*(1), 29–35. doi:10.1089/cyber.2009.0139
- Greene, C. J., Morland, L. A., Durkalski, V. L., & Frueh, B. C. (2008). Noninferiority and equivalence designs: Issues and implications for mental health research. *Journal of Traumatic Stress, 21*, 433–439. doi:10.1002/jts.20367

- Grubaugh, A., Cain, G. D., Elhai, J. D., Patrick, S. L., & Frueh, B. C. (2008). Attitudes toward medical and mental health care delivered via telehealth applications among rural and urban primary care patients. *Journal of Nervous and Mental Disease, 196*, 166–170. doi:10.1097/NMD.0b013e318162aa2d
- Kennedy, C., & Yellowlees, P. (2003). The effectiveness of telepsychiatry measured using the Health of the Nation Outcome Scale and the Mental Health Inventory. *Journal of Telemedicine and Telecare, 9*, 12–16. doi:10.1258/135763303321159639
- Lazzari, C., Egan, S. J., & Rees, C. S. (2011). Behavioral activation treatment for depression in older adults delivered via videoconferencing: A pilot study. *Cognitive and Behavioral Practice, 18*, 555–565. doi:10.1016/j.cbpra.2010.11.00
- O'Reilly, R., Bishop, J., Maddox, K., Hutchinson, L., Fisman, M., & Takhar, J. (2007). Is telepsychiatry equivalent to face-to-face psychiatry? Results from a randomized controlled equivalence trial. *Psychiatric Services, 58*, 836–843. doi:10.1176/appi.ps.58.6.836
- Porcari, C. E., Amdur, R. L., Koch, E. I., Richard, D. C., Favorite, T., Martis, B., & Liberzon, I. (2009). Assessment of post-traumatic stress disorder in veterans by videoconferencing and by face-to-face methods. *Journal of Telemedicine and Telecare, 15*(2), 89–94. doi:10.1258/jtt.2008.080612
- Rees, C. S., & Stone, S. (2005). Therapeutic alliance in face-to-face versus videoconferenced psychotherapy. *Professional Psychology: Research and Practice, 36*(6), 649–653. doi: 10.1037/0735-7028.36.6.649
- Richardson, L. (2011). "Can you see what I am saying?": An action-research, mixed methods evaluation of telepsychology in rural Western Australia. PhD thesis, Murdoch University.
- Richardson, L. K., Frueh, B. C., Grubaugh, A. L., Egede, L., & Elhai, J. D. (2009). Current directions in videoconferencing tele-mental health research. *Clinical Psychology: Science and Practice, 16*, 323–338. doi:10.1111/j.1468-2850.2009.01170.x
- Rodebaugh, T. L., Heimberg, R. G., Schultz, L. T., & Blackmore, M. (2010). The moderated effects of video feedback for social anxiety disorder. *Journal of Anxiety Disorders, 24*(7), 663–671. doi:10.1016/j.janxdis.2010.04.007
- Simpson, S. (2001). The provision of a telepsychology service to Shetland: Client and therapist satisfaction and the ability to develop a therapeutic alliance. *Journal of Telemedicine & Telecare, 7*(Suppl. 1), 34–36. doi:10.1258/1357633011936633
- Simpson, S. (2009). Psychotherapy via videoconferencing: A review. *British Journal of Guidance and Counselling, 37*(3), 271–286. doi:10.1080/03069880902957007
- Simpson, S., Bell, L., Knox, J., & Mitchell, D. (2005). Therapy via video-conferencing: A route to client empowerment? *Clinical Psychology and Psychotherapy, 12*, 156–165. doi:10.1002/cpp.436
- Simpson, S., Deans, G., & Brebner, E. (2001). The delivery of a tele-psychology service to Shetland. *Clinical Psychology & Psychotherapy, 8*(2), 130–135. doi:10.1002/cpp.279
- Simpson, S. G., & Slowey, L. (2011). Video therapy for atypical eating disorder and obesity: A case study. *Clinical Practice and Epidemiology in Mental Health, 7*, 38–43. doi:10.2174/1745017901107010038
- Simpson, S., & Reid, C. (2014). Therapeutic alliance in videoconferencing psychotherapy: A review. *Australian Journal of Rural Health, 22*(6), 280–299. doi:10.1111/ajr.12149
- Simpson, S., Rochford, S., Livingstone, A., English, S., & Austin, C. (2014). Tele-web psychology in rural south Australia: The logistics of setting up a remote university clinic staffed by clinical psychologists in training. *Australian Psychologist, 49*(4), 193–199. doi:10.1111/ap.12049
- Stubbings, D. R., Rees, C. R., Roberts, L. D., & Kane, R. T. (2013). Comparing in-person to videoconference-based cognitive behavioral therapy for mood and anxiety disorders: Randomized controlled trial. *Journal of Medical Internet Research, 15*(11), 1–16. doi:10.2196/jmir.2564