

Appendix: Summary of Articles in the Systematic Literature Review (continued)

Citation	Intervention Used	Sample	Sample Size	Effectiveness v. Face-to-Face	Efficiency	Obstacles
Morland et al. (2010)	CBT: group anger management therapy	Veterans with PTSD	125	Outcomes for VC patients as good as F2F. The same treatment delivered F2F can be effectively delivered over VC.	Very few technical difficulties with no treatments postponed or canceled due to technical issues. VC reduces geographic disparities to treatment access.	F2F meetings needed to address situational distress.
Morland et al. (2013)	CBT	Veterans with PTSD	74	For VC users, much better outcomes relative to F2F delivery. Average cost for VC users vastly less expensive than F2F.	More efficient for patients in rural areas.	Providing tele-medicine requires additional training, administrative support, and expenses for technology.
Morland et al. (2015)	CBT: cognitive processing therapy	Veteran and civilian women with PTSD	126	Outcomes for VC users comparable to F2F treatment.	No canceled sessions due to technical difficulties.	VC participants reported lower ratings on feeling respected for their opinion when compared to the F2F group.
Parikh et al. (2011)	Continuous positive airway pressure (CPAP)	Patients with obstructive sleep apnea prescribed CPAP	90	Patient satisfaction and treatment adherence no different F2F versus VC.	Positive correlation between the ease of technology and implementation. VC is beneficial to increase patient access in rural areas. Assists practices with a limited number of physicians.	Physicians in urban areas less willing to dedicate time to learn how to use telemedicine equipment.
Postel et al. (2010)	CBT and motivational interviewing	Problem drinkers	156	E-therapy group shows a greater decrease in alcohol consumption than those receiving no-reply email messages. E-therapy showed greater improvement in general health and depression symptoms.	Attracts participants unlikely to use F2F treatments. E-therapy reaches more women, higher education, and employed people. A perceived advantage of anonymity in e-therapy, given shame, stigmatization, or other barriers to seeking professional help. E-therapy is more accessible and convenient.	Some participants prefer real-life contact with the therapist. Higher dropout with online intervention. Dissatisfaction with form or content of e-therapy reason for dropout.
Preschl, Maercker, and Wagner (2011)	CBT	Adults with depression	53	F2F and VC therapy outcomes did not differ significantly.	VC more time-efficient for therapists and patients. Highly standardized interventions achieve excellent clinical outcomes.	Higher dropout for online group, reasons given include lack of time, improvement, and/or motivation. Avoidance behavior and discontinuity associated with online relationships.
Richardson, Reid, and Dziurawiec (2015)	Tele-psychology	Tele-psychology patients	8	While technology is not perfect, participants found value and positive outcomes with the online experience. Participants become accustomed to VC over time.	Participants minimally impact by sound and picture clarity. Positive benefits from low physical proximity for anxiety and depression.	Blurriness or pixilation of video stream responsible for low satisfaction. Technical problems. Discomfort for the therapist who cannot adapt to client technology limitations.
Smolenski et al. (2017)	CBT: behavioral activation	U.S. Army active duty officers and enlisted soldiers, and military veterans	121	No statistically significant differences between F2F and VC groups.	VC is viable for those with less severe symptoms, particularly when located in rural or underserved areas.	For lonely participants, F2F experience an improved treatment response.

Acronyms used: CBT (cognitive-behavioral therapy); PTSD (post-traumatic stress disorder); VC (virtual conference); F2F (face-to-face); CPAP (continuous positive airway pressure)