The Effectiveness of EMDR Therapy delivered via an e-Health platform in the treatment of complex sexual abuse utilising the 'Abate Abuse' Protocol

Kerry Howard, BSC (Psych) Hons

Psychologist and EMDR Therapist, Mindfully Well, Australia

Purpose

To review the effectiveness of EMDR Therapy delivered online in the treatment of sexual abuse utilising the Abate Abuse Protocol. EMDR Therapy is administered via the internet utilising a remotely controlled software program, REMDR, which operates from the HIPAA compliant secure e-Health video conferencing platform 'PsychNEXUS'.

Introduction

In 1959, at the University of Nebraska, telehealth began via closed caption television (Nickelson, 1998). By the 1990s, telehealth, also called e-Health, advanced to be internet based. Telehealth has increased significantly access to care and, across various services, has resulted in high levels of satisfaction for clients and providers (Hilty et al, 2004 and Jaconis et al, 2017).

In studies of depression, substance use, developmental disabilities and PTSD, Hilty and colleagues (2013) found videoconferencing equally effective as in-person care for most parameters, including therapeutic outcome, age, feasibility and satisfaction for both single use and ongoing regular consultation.

Multiple studies have noted that with some populations (eg. children and adolescents), telemental health may actually be more effective than in-person services for a number of reasons including novelty and technology uptake (Morland et al, 2009). Reports have also identified multiple benefits including reduced symptoms and enhanced effectiveness of therapy outcomes delivered online (Hilty et al, 2013).

Access to therapy has been greatly increased, patients may have less travel, absence from work and waiting times, whilst experiencing more clinical choice and better outcomes (Hilty, et al., 2004). It is quite rare that a client reports a less satisfactory interaction by videoconferencing than in-person (Hilty et al, 2013).

Telehealth is simply a tool that, with appropriate accommodations and limitations, makes it easier to practice already established professional skills across distance. This allows us to serve individuals and organisations that may not, but for e-Health, have access to such services (Nickelson, 1998).

EMDR Therapy is an evidence-based psychotherapy for PTSD and other mental health problems. The model on which EMDR Therapy is based, the Adaptive Information Processing (AIP) model, posits that much of psychopathology is due to the encoding of traumatic or disturbing adverse life experiences. During EMDR Therapy, specific procedural steps are used to access and reprocess information that incorporates alternating bilateral visual, auditory, or tactile stimulation (Shapiro, 2001).

Complex childhood trauma (CT) encompasses severe traumatic events that are likely to be chronic, disrupt personality development and lead to less trust in fundamental relationships (Kliethermes, Schacht, & Drewry, 2014), as well as impacting upon neurological development (Ford & Courtois, 2009). In addition, we understand that the impact of Adverse Childhood Events in predicting adverse health outcomes over the life course is well documented.

The Adverse Childhood Experiences (ACE) Scale has become a very popular tool among researchers and advocates concerned about long-term effects of childhood trauma. The ACE scale, which assesses early experiences like physical abuse, neglect and sexual abuse, has been found to predict negative physical health and mental health outcomes (Finkelhor, Turner, Shattuck, & Hamby., 2015).

EMDR Therapy is an effective therapeutic process to resolve issues of PTSD symptoms that result from abuse and is very effective for treating sexual abuse. EMDR Therapy utilises an eight-phase, three-pronged, approach to treatment that optimises client stabilisation before, during, and after the reprocessing of distressing and traumatic memories and associated stimuli and facilitates information reprocessing (Shapiro, 2001).

Traditionally, EMDR Therapy is delivered by an EMDR therapist, face to face in a 60 or 90 minute session. The bilateral stimulation, or EMDR behaviour, occurs as part of Phase Four (Desensitization), Phase Five (Installation) and Phase Six (Body Scan) components of the eight-phase EMDR Therapy process. EMDR behaviour is facilitated and controlled by the EMDR therapist and may include eye movements, taps, or tones. The type and length of these behaviours is different for each client, and as such, the role of the trained therapist is critical in determining the most effective application of EMDR behaviours throughout the process.

Due to the nature of the administration, traditional schools of thought would consider that it would not be possible to deliver EMDR Therapy from a remote location as the role of the therapist, in effectively monitoring and managing the outcomes of the process, are critical to achieving effective outcomes.

As an effective EMDR therapist and psychologist, with an interest in emerging technologies, the author sought to find a solution to this perceived barrier to effective therapeutic delivery via an e-Health platform. The author set about creating an appropriate software program to achieve the desired outcome, and REMDR was born.

The current study aims to build on existing literature in the telehealth space and initiate research into the effectiveness of remote delivery of EMDR Therapy, in particular for treating one of the most complex and impactful trauma areas – Childhood Complex Trauma focused on Sexual Abuse. The author sought to build on her earlier research presented at the EMDRIA Conference in the USA in August 2017.

In the original research undertaken to ascertain the effectiveness of EMDR Therapy delivered online, the case study referenced was of CT, in the form of complex sexual abuse (CTSA). The author sought to compare the effectiveness of the first case with a case of CTSA that was treated entirely online. In order to examine if the effectiveness of REMDR delivered entirely in an online environment would produce similar outcomes to the results obtained with a mixed mode of treatment.

Abate Abuse Protocol

In order to effectively treat clients with significant traumatic history involving high levels of early CTSA, the author developed the 'Abate Abuse Protocol'.

It is well known that trauma therapists can be subjected to high levels of traumatic information and this can result in vicarious traumatisation (VT) or secondary traumatic stress (STS) for the therapist and may even result in the development of PTSD (Hensel, Ruiz, Finney, & Dewa, 2015).

The author is a skilled trauma specialist who treats a high percentage of clients with significant abuse histories. In her early career, the author identified that there were significant issues for clients in discussing the details of their abuse histories, especially in relation to sexual abuse. The levels of shame are extremely high in this cohort and the author sought to improve the outcomes from EMDR Therapy with these clients by minimising the active shame and increasing the engagement with disturbing material, in order to facilitate more effective processing of the disturbing material.

By providing clients with an outline of what the process should look like, the author has been able to engage clients in more active engagement with their traumatic material whilst delivering EMDR Therapy and this has resulted in an improved result, in terms of the reported effectiveness of the therapy. In addition, this has been able to be delivered effectively for the client, whilst preserving the therapists level of exposure to the detail of the traumatic material, thereby reducing the impact on the therapist. This approach has allowed the therapist to increase the number of complex cases she is able to effectively treat at any given time.

Case Presentation 1 - Combined Modality

The client 'Vee' is a 35 year-old single female who has experienced depression and anxiety on multiple occasions across the life course. Vee was originally treated in 2014, when she was referred for assistance with managing her weight and support for multiple sexual assaults. The client had previously engaged in counselling briefly, however there had been little impact on her mood or behaviour.

When Vee presented, she qualified as morbidly obese with a Body Mass Index (BMI) = 44.8 (162cm:128kg). Vee had become more aware that her weight had significantly increased over the previous two years, following the latest sexual assault, and she was interested in addressing the psychological issues to assist her to resolve her concerns with her weight.

On referral, the doctor had administered a K10 = 21 – high end of Moderate. On 29.05.14 Vee completed a DASS-21 = D-10 Mild, A-4 = Normal, S-4 = Normal. It is important to recognise that the client entered therapy at a time in which she was quite stable in terms of her mood and, as such, the results of the DASS do not reflect the extent of her mood fluctuations over her life course. Vee also completed a DES = Normal, and a Schema. The schema results indicate that Vee had significant issues with 'Mistrust/Abuse', 'Self-Sacrifice', 'Unrelenting Standards/Hypercriticalness', 'Defectiveness/Shame', 'Emotional Deprivation' and 'Abandonment'.

The client initially had 16 sessions of EMDR Therapy over a six-month period. At the end of this therapeutic process, the client had made substantial improvements in overall outcomes. The author did not see or treat the client for nine months. Vee lost a total of 68kg between February 2015 and February 2016; her weight had gone down to 60kg. Her goal weight was 56kg.

The client returned briefly in August 2015 as she had lost a significant amount of weight and was having issues in relation to the intrusions from the last rape (28 years). Vee had recommenced actively seeking a relationship and had commenced online dating. We completed three EMDR sessions. Vee formed a new relationship in November 2015 that lasted 18 months, she had engaged in 11 therapy sessions over this time. The relationship broke down due to infidelity and her safety was at risk, so she relocated over 1000km away.

Vee then re-presented in June 2017, with a newly disclosed issue with her sister in relation to reported sexual abuse from the maternal uncle. There was some awareness that the client believed that she had also been sexually abused by the same uncle. As it transpired, this man had also sexually assaulted their mother (his sister) and it appears that the maternal grandmother had some knowledge of the abuse and facilitated access to both the girls.

Vee's relationship of 2016 had dissolved and she had relocated, she was visiting family and wanted to continue therapy with the author, due to the previous therapeutic relationship and the nature of the issues. Vee was very concerned about issues of trust in trying to develop a relationship with a new therapist and also concerned about the extent of the abuse. Vee's weight had ballooned once again and was continuing to increase.

The author had just developed REMDR and offered it to the client as an option to enable therapy to continue via a teleconferencing platform - PsychNEXUS. The therapeutic relationship was strong and the

REMDR
The new frontier in EMDR Therapy

clients' need to access EMDR Therapy regularly was important, however her geographic proximity posed a significant barrier to treatment.

The abuse from the maternal uncle appears to have begun around Age 4 and continued periodically until about Age 8. The abuse was at times very violent and was facilitated by the maternal grandmother. Vee engaged with the author in multiple sessions via PsychNEXUS over the past 12 months, but spent much of late 2017 seeking to 'avoid' processing the abuse, due to the disturbing nature of the recalled memories.

Of interest is the clients' multiple references and focus on her younger sister, something that has been present from Vee's initial presentation in 2014, where her needs had always been noted to be in deference to her sister – we will call 'Bee'. As it turned out, Vee had complied with the perpetrator to avoid harm to her younger sister. Vee has spent much of her life in 'protector' mode around Bee.

Case Presentation 2 - Entirely Online

The client 'Jay' is an 18 year-old single male who has PTSD with comorbid depression and anxiety. Jay was subjected to multiple episodes of sexual abuse in his early childhood, beginning at Age 9. Initially, Jay was involved in an incident involving his mother and brother, during which he observed his mother being raped and was also raped himself (male-to-male). Due to the involvement of a variety of differing systems, Jay was later placed into foster care during which time he was regularly molested by carers. In several situations, the perpetrators had threatened his brother (we will call Cee) harm if Jay did not comply, so his perspective on the abuse was confused as it was also perceived as 'protective'.

Jay has previously engaged in counselling from a number of sources over many years and although there had been some improvement in mood, Jay still experienced symptoms of PTSD including flashbacks and hypervigilance.

On 17.05.18 Jay completed a DASS-21 = D-14 Moderate, A-10 = Moderate, S-14 = Normal. It is important to recognise that the client entered therapy at a time in which he was quite stable in terms of his mood and, as such, the results of the DASS do not reflect the extent of his mood fluctuations over the life course. Jay also completed a DES = Normal, and a Schema. The schema results indicate that Jay had significant issues with 'Emotional Deprivation' (50%), 'Abandonment' (58%), 'Mistrust/Abuse' (44%), 'Social Isolation' (67%), 'Defectiveness/Shame' (47%), 'Failure' (65%), 'Vulnerability to Harm' (68%), 'Subjugation' (53%), 'Self-Sacrifice' (45%), 'Unrelenting Standards/Hypercriticalness' (53%), 'Approval Seeking' (45%), 'Negativity/Pessimism' (42%) and 'Punitiveness' (33%).

Jay has never engaged in EMDR Therapy and was not a client of the author. It was important for the case validity that the relationship be built entirely online. Jay engaged with the author via PsychNEXUS on five occasions - one session to outline the research process and four EMDR Therapy sessions. These five sessions were completed over a six week period from Early May 2018.

The complexity of these cases has been increased by the fact that both clients were coerced using the threat of abuse to a younger sibling if the client did not comply. The fact that compliance did not prevent the sibling from later abuse has resulted in added complexity that can not be ignored.

Treatment provided in the study

Case Presentation 1 - Combined Modality

The Case Conceptualisation was designed to incorporate use of e-Health to deliver EMDR Therapy, as Vee's current geographic location and need for ongoing treatment meant that use of REMDR in an online environment may be the only way the client could have obtained effective treatment in a timely manner. It was anticipated that the client would receive a combination of telehealth and face-to-face sessions, depending on her availability.

Initially, treatment was intensive face-to-face, due to the need to stabilise the client. Client has engaged in eleven sessions – initially four sessions face-to-face and then six sessions online utilising REMDR, then one face-to-face. The client continues therapy and is happy to continue utilising this mixed-mode of therapy until these issues are resolved.

Case Presentation 2 - Entirely Online

Due to the nature of the client's trauma and the associated shame and stigma associated with sexual abuse, in particular male-to-male abuse, the author chose to engage the client in a streamlined protocol of EMDR Therapy that she developed called the 'Abate Abuse' protocol, for working with clients who have experienced significant abuse, especially sexual abuse.

The Case Conceptualisation was designed to incorporate use of e-Health to deliver EMDR Therapy entirely online. The unique nature of this case meant that the author chose to compress Phase One and Two of the AIP Model and spent more time in Phase Three, explaining the 'processing' experience and the purpose of the process to the client and outlining 'how' the processing would occur, before moving onto Phases 4-8.

As part of the author's model, she specifically sought to avoid engaging the client in a significant dialogue of the key events surrounding the abuse. In the author's therapeutic experience, the re-telling of the events surrounding a traumatic event is not necessary to facilitating the processing of those events utilising EMDR Therapy.

Intervention and Outcome Measures

The software has been designed to allow the EMDR therapist to administer the EMDR behaviour to a client in the same way as they would if a client is in their office.

In a similar way to how a light bar operates, REMDR has been designed to create a light movement, a moving coloured ball, that can easily be followed by a client on their computer screen, however the control of the speed and the start/stop of the behaviour is facilitated by the therapist – so the therapist maintains control of the processing. The software has nine colour options; two presentation options (solid or gradient) and 30 different speed options (including the option of observing the Hz rate of each level). In addition, the therapist can share auditory processing tools with the client, as well as eye movements. An integration that will facilitate the addition of tactile stimulation is in development.

The clients were treated in the same way as they would have been treated in a face-to-face session. The full EMDR Therapy eight-phase process was utilised for Vee and a compressed version for Jay, as per the 'AA Protocol'. The REMDR software is used during phases two, four, five and six. All other phases are delivered via discussion over the e-Health platform, as they would be face-to-face. As a therapist, the author utilises 'Biolateral' music as auditory input in addition to visual and tactile bilateral stimulation in her face-to-face work. In the e-Health platform, we can deliver the visual and auditory stimulation simultaneously.

Each telehealth session had a specific 'target' to be desensitised during the session. The memory was activated, we established the Negative Cognition and preferred Positive Cognition. We identified the emotion and body sensation and assessed the SUDS and VOC before commencing bilateral stimulation using the REMDR software. I monitored the clients eye movements, which is very easy to do in this format as it is possible to see the client directly face on, without any risk of transference, as the video feed of the therapist can be minimised whilst processing takes place. The outcome measures are outlined in the table. below:

REMDR Session	Negative Cognition	Positive Cognition	Validity of Cognition		Subjective Units of Distress	
			Start	*End*	*Start*	*End*
V1 - 12.06.2017	I'm not safe - powerless	I can keep myself safe	1	5	10+	5
V3 - 03.07.2017	I always alone – deserved to be	I can connect to people	1	5	9	4
V5 - 13.07.2017	I'm not worth it	I'm okay as I am	1	3	8	4
J2 – 28.05.2018	I'm not safe	I can be safe	2	6	7	0
J3 – 07.06.2018	I'm powerless	I can be strong	1	5	8	2
J4 – 11.06.2018	I'm not good enough	I'm okay as I am	1	6	9	1

Table 1 – Outcome Measures by Session

For Case 2, the author added the additional assessment of the PTSD Checklist (PCL) - Evidence for the PCL for *DSM-IV* suggests that a 5-10 point change represents reliable change and a 10-20 point change represents clinically significant change.

Results

Case One - Therapy is continuing for Vee, however the results indicate that there is no significant difference between the outcomes obtained from each EMDR Therapy session between an online delivery or face-to-face mode of delivery. We see a significant reduction in the SUDS level and a substantive increase in the VOC as a result of therapy delivered in this mode. These changes correlate to the expected shifts that would have been achieved if we had processed the same target face-to-face.

The client was asked several questions in relation to her experiences of her recent therapy (full responses can be obtained from the author). The clients' experience of the effectiveness of the process indicates that the quality of outcome from the therapeutic processing is equal between both modalities.

Case Two - Therapy is essentially compete for Jay as his involvement in therapy was purely for the research and there is no intention for ongoing treatment. It is important to note that Jay experienced a significant reduction in his reported symptoms and almost a full resolution of his negative beliefs as they related to the specific incidents identified for processing.

Jay's experience supports the hypothesis that his reported subjective units of distress produced a more significant reduction than that of Vee. The client was asked several questions in relation to his experiences of EMDR Therapy (full responses can be obtained from the author). The clients' experience of the effectiveness of the process indicates that the quality of outcome from the therapeutic processing is extremely effective online. In this case, Jay reported that he believes this therapy was far more effective for him than any other form of therapy that he has ever engaged in, and he has been having therapy around these issues for more than half of his life.

Results indicate that Jay experienced a significant reduction in his SUDS and an increase in his VOC as a direct result of these interventions. What is of most significance to the author is the shift in his Schema. Every reported result in the Big 5 – Disconnection and Rejection had lowered to within the normal range and many other negative scores also reduced to within the normal range.

In addition, Jay's reported experience of his traumatic events utilising a PCL indicates a significant reduction in the impact of these traumatic events post treatment.

Schema	Pre-Scores	Post-Scores
Emotional Deprivation	50	19
Abandonment	58	10
Mistrust/Abuse	44	18
Social Isolation	67	7
Defectiveness/Shame	47	6
Failure	65	0
Vulnerability to Harm	68	40
Subjugation	53	17
Self-Sacrifice	45	46
Unrelenting Standards/Hypercriticalness	53	42
Approval Seeking	45	56
Negativity/Pessimism	42	27
Punitiveness	33	30
PCL Scores	44	26

Table 2 – Schema and PTSD Checklist Results Pre- and Post-Intervention

Discussion

It is clear from the reported experience in each case that there is effectiveness from the online therapy in terms of the outcome from each session. In both cases, the online mode of delivery is as effective as the outcomes from a face-to-face session. This supports earlier research by Hilty et al (2013) that shows that the effectiveness of telehealth delivery of therapeutic interventions is as effective as face-to-face interventions.

However, there are some key concerns that need to be addressed with the client to ensure this effectiveness. Preparing the client to be aware of what they need to consider in engaging in online therapy is very important. Being in a quiet location, without distractions, with the screen at eye level and all things that may be required being close-by (tissues, water, etc).

What is of interest is that in the case of Jay, he believes that part of the enhanced benefit for him was engaging in therapy in a place that he felt safe and comfortable - his own home. In this case he reports that he felt that he was able to engage with more 'difficult' material because he was in a place of calm, security and safety for him (his bedroom).

Although not reported here, the author has engaged with a number of other clients using REMDR in the online environment. Consistently, those clients who try and engage with online therapy from an environment that is not conducive to enhancing focus, such as when they are at work or have young children around, find that their outcomes from that session are not as effective. In addition, after reviewing the information provided by Jay in relation to his therapeutic experience from being at home, in his own safe and secure place and the impact that appears to have had in enhancing processing effectiveness, the author conducted a brief review of her other clients' experience. The impact of the environment on therapeutic effectiveness appears to be something that is replicated in the authors sessions with other clients. This environmental enhancement on therapeutic processing was quite unexpected and needs further research to understand the catalyst for such an experience.

When working with clients in an online environment, the preparation for the client is important and some awareness of the client's ability to stabilise themselves is also important – as sometimes technology is not as 'effective' as we would hope. On occasion, the call may drop or freeze, and the client has to be aware enough to be able to stabilise until the call can reconnect. In working with Jay, I had to give him added

details about what he need to do and how to re-engage with me should something happen with the technology during session.

This is why 'Phase Two – Preparation' for EMDR Therapy is critical. The clients' ability to either continue processing or to stabilise themselves, with the surety that the connection will reconnect 'momentarily', is very important. As our culture has become much more aware of technology and embracing it, more people are aware of the need to be able to manage technological glitches as a 'normal' part of the process, and our lives.

It is important to note that Vee believes that her well established relationship with the therapist has been essential to her ability to engage well with the therapeutic process online. However, the client has been able to engage effectively with online dating platforms and formed strong emotional bonds utilising online communication tools – forming the emotional connection prior to meeting face-to-face. Yet, she feels unable to effectively engage with a therapist in an effective manner without first having met the therapist face-to-face.

Yet, Jay notes that he believes his therapeutic relationship with the therapist was more effective because he built it entirely online. Jay stated that he felt more comfortable 'faster' than he ever has with any therapist and he engaged in processing material that he stated that he usually has to 'actively' suppress most of the time. He was a bit worried about this therapy making it harder to suppress, but has been surprised, yet extremely grateful, that not only was that not the case, but he has been able to really put some of these very shameful experiences behind him.

As Finkel and colleagues (2012) highlight, an online interaction may lack the experiential richness of a face-to-face encounter and most people will want to meet face-to-face to integrate their impressions into a coherent, whole before pursuing a relationship. So it may be with a therapeutic relationship. This is certainly what Vee has stated she believes. However, there appears to be some form of perception bias. The emotional bonding components required may be dissimilar, due to the difference in the basis for the relationship, however theory would expect that over time, this expectation of the necessity of this face-to-face meeting will reduce with uptake, as it has with online dating platforms.

Popoola & Adebowale (2012) highlight that the well documented disinhibiting effect of online communications actually results in a more open form of communication that encourages therapeutic expression and self-reflection. In turn, allowing clients to be more honest about their feelings with a reduction in shame, allowing the therapist to get to the source of concerns more readily, reducing time and energy for both parties. This is what Jay reported he experienced and his results in both the direct processing within each session and the major changes to his overall Schema would indicate that disinhibition of the online platform could really enhance the effectiveness of EMDR Therapy.

Online delivery of EMDR Therapy may facilitate such a significant enhancement to the therapeutic effectiveness that it's clinical implications are unparallelled.

It is important to consider that this has been a case study of a few clients experience of the process and although it provides confirmation of the effectiveness of the process, it was not without it's limitations. Of significant interest is the effectiveness in treating cases of CTSA in an online environment, this is an area that has had little focus, even within the field of telehealth research. There appears to be some perception that CT is almost 'too' complex to be effectively treated online – yet the observation of research from multiple areas would indicate that synergising various elements into a comprehensive review should be the priority of future research in this area.

The risk averse theorists will worry that they are not holding enough 'control' of the process when the client is not 'in their rooms'. It is essential that we remember that our clients are human beings; usually adults and they can be rational. It is unreasonable to feel the need to treat our clients like children, assuming that they would be unable to tolerate technological glitches that is fast becoming a 'normal' part of their day-to-day existence.

However, the real question needs to be about the ability to be able to consider delivering 'effective' treatment to populations in geographical locations that may be otherwise prevented from accessing therapy, either due to financial or environmental barriers – perhaps even in areas of major disaster or war. Areas that it would be otherwise 'impossible' to service the clients' needs.

Surely it is better to provide some form of effective treatment via distance than no treatment at all – especially within the first three weeks following the traumatic event. The potential positive impacts and effectiveness of HAPP programs that may have an electronic delivery component to them cannot be underestimated, especially in the ability to 'mobilise' greater numbers of available therapists to deliver interventions when they can do it from their own home or office, not to mention to reduced cost of delivering such services.

The results in this case are extremely compelling in validating the results of delivering therapy in a completely online environment.

The future is now.

The potential ineffectiveness of technology should not be a reason to turn our back on technology in our future therapeutic delivery. It is an unfortunate fact that technology is advancing so rapidly that we are less than ten years away from full artificial intelligence and, as therapists, we cannot afford to be complacent in our uptake of technological solutions, or we risk being completely left behind as a therapeutic intervention.

There are many predictions about the future of work and the reality is that if you are not in a working role that requires you to physically 'touch' another human being; it is possible for your role to become completely superseded. We only have to consider the advances in technology that surround us, self check-out registers, automated refrigerators that know what products you use regularly and create a shopping list from your voice memo, then order products for you online and have them delivered to your door. We are close to having driver-less cars and our CCTV cameras in our homes can read our emotions from our facial expressions. We are ever expanding the ability to voice command our lives, from our cars to our homes.

If we seek to continue to be effective, we need to embrace technology on our own terms and see how it can improve our therapeutic delivery, rather than see it as a detraction from it. To ignore it results in minimising our effectiveness in the longer term.

There are other implications from the development of this product; it means that the ability to deliver therapy across borders is here. The implication for licencing and regulating the industry is something that has to be considered. We will not be able to continue to 'restrict' the ability for therapists in other countries from providing services in our country and they may be able to do it at a fraction of the cost. We have a continuously advancing global community and we do not have global regulation or ethical obligations that are consistent.

Rather than seeing the negative in such a movement, we need to embrace the technology and see how we can enhance lives by opening up our ability to provide effective therapeutic delivery across a variety of modalities.

Future research is needed to confirm the effectiveness of this modality for use in a range of environments, and across varying populations. It would be most effective to undertake a Randomised Controlled Trial of the use of REMDR in an online environment and compare the outcomes with the effectiveness of REMDR delivered in the same room, just utilising the technology as a delivery platform in face-to-face service delivery. It would be helpful to compare those two modalities to face-to-face delivery and consider the full spectrum of EMDR behaviours – visual, auditory and tactile.

Limitations of the Case Report

There are significant limitations to this study, not the least of which may be the bias that has to be attributed to the effective therapeutic relationship that is well established between the author and the client Vee. However, the experience of Jay in building a therapeutic relationship entirely online can assist us in minimising the perception of bias.

However, outcome results are favourable and indicate that the use of REMDR via an e-Health platform appears to be just as effective as it is face-to-face.

The author has also utilised this 'mixed-mode' of therapy with several other clients for the same reasons – the clients geographic location in relation to the author may otherwise have resulted in reduced access to treatment. The outcomes for those clients also reflect the effectiveness of the REMDR software in facilitating EMDR Therapy utilising the eight-phase AIP model. The research undertaken with Jay to establish the effectiveness with an entirely 'online' therapeutic process was a single case study and requires more research with a robust recruitment and intervention methodology.

Without doubt, the Internet is here to stay and technological advancements continue at an ever-increasing rate. As effective therapists, we need to step into technology with confidence and see the opportunities that are created, by broadening our horizons and enhancing our skill sets.

Works Cited

Finkel, E. J., Eastwick, P. W., Karney, B. R., Reis, H. T., & Sprecher, S. (2012). Online Dating: A Critical Analysis from the Perspective of Psychological Science. *Psychological Science in the Public Interest, 13*(1) 3–66.

Finkelhor, D., Turner, H. A., Shattuck, A., & Hamby., S. L. (2015). Prevalence of Childhood Exposure to Violence, Crime, and Abuse. *JAMA Peadiatrics, 169(8)*, 746-754. doi:10.1001/jamapediatrics.2015.0676

Ford, J. D., & Courtois, C. A. (2009). *"Defining and understanding complex trauma and complex traumatic stress disorders," in Treating Complex Traumatic Stress Disorders: An Evidence-Based Guide.* New York, NY: Guilford.

Hensel, J. M., Ruiz, C., Finney, C., & Dewa, C. S. (2015, April). Meta-Analysis of Risk Factors for Secondary Traumatic Stress in Therapeutic Work With Trauma Victims. *Journal of Traumatic Stress*(28), 83-91.

Hilty, D. M., Ferrer, D. C., Parish, M. B., Johnston, B., Callahan, E. J., & Yellowlees, P. M. (2013, June). The Effectiveness of Telemental Health: A 2013 Review. *Telemedicine and e-Health*, 444-454.

Hilty, D. M., Marks, S. L., Urness, D., Yellowlees, P. M., & Nesbitt, T. S. (2004). Clinical and Educational Telepsychiatry Applications: A Review. *The Canadian Journal of Psychiatry, 49* (1), 12-23.

Jaconis, M., Santa Ana, E. J., Killeen, T. K., Badour, C. L., & Back, S. E. (2017). Case-Series: Concurrent Treatment of PTSD and Alcohol Use Disorder via Telehealth in a Female Iraq Veteran. *The American Journal on Addictions*, *26*, 112-114.

Kliethermes, M., Schacht, M., & Drewry, K. (2014). Complex trauma. *Child and adolescent psychiatric clinics of North America*,*23(2)*, 339–361. doi.org/10.1016/j.chc.2013.12.009

Morland, L. A., Greene, C. J., Rosen, C., Mauldin, P. D., & Frueh, B. (2009). Issues in the design of a randomized noninferiority clinical trial of telemental health psychotherapy for rural combat veterans with PTSD. *Contemporary Clinical Trials*, *30* (6), 513-522.

Nickelson, D. W. (1998). Telehealth and the Evolving Health Care System: Strategic Opportunities for Professional Psychology. *Professional Psychology: Research and Practice*, *29* (6), 527-535.

Popoola, B. I. & Adebowale, O. F. (2012). *Online Guidance and Counseling: Toward Effectively Applying Technology*, Pennsylvania: IGI Global.

Shapiro, F. *Eye Movement Desensitization and Reprocessing* (2nd Edition ed.). New York: The Guilford Press.

Conflict of Interest

REMDR is an EMDR Software program that was developed by Ms Kerry Ann Howard, BSC (Psych) Hons, EMDR Therapist and author of this paper. The funding for the development of this software and the preparation of this research was wholly funded by the author.