



Comparing Presence and Absence of Initial In-Person Contact and Written Feedback in RE&CBT E-Supervision

Ensad Miljkovic¹

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Abstract

This pilot study aims to analyze the effects of the presence and absence of initial in-person contact and written feedback in RE&CBT e-supervision, comparing it on the Supervisory Working Alliance Inventory, the Supervisor Satisfaction Questionnaire, and the Trainee Disclosure Scale. During a period of six months, five supervisees performed ten e-supervision divided into two groups, a control group that did only the initial meetings in-person and an experimental group in which two supervisees completed whole process online. Additionally, in the first five e-supervision, the supervisor reviewed an entire session with written feedback with an additional meeting for each group. In the last five e-supervision, the supervisor only partially reviewed client sessions during supervision. After ten e-supervision, an individual post-interview was conducted with each participant. This study's primary statistical method for calculating and combining effect sizes was Tarlow Baseline Corrected Tau and Open Meta Analyst software. Both groups scored above average on the first two scales, but the disclosure scale had highly irregular and inconsistent patterns. The combined qualitative and quantitative results suggest that novice therapists generally prefer to have their entire sessions reviewed with written feedback and that a single in-person contact is unlikely to influence e-supervision satisfaction and working alliance. Given that there are no adequately validated e-supervision models, this pilot study used a pilot model named Supported Model of Electronic Supervision (SMeS). This model showed potential, but it needs further testing on a larger sample with more clearly operationalized steps. This study experimentally supports the effectiveness of RE&CBT supervision for the first time.

Keywords Supervision · Telesupervision · Videoconferencing supervision · Electronic supervision · RE&CBT · Psychotherapy

✉ Ensad Miljkovic
ensad.elis@gmail.com

¹ Bosnia and Herzegovina Association for Cognitive and Behavioral Therapy, Velika Kladusa, Bosnia and Herzegovina

Comparing Presence and Absence of Initial In-Person Contact

And Written Feedback in RE&CBT E-Supervision

Electronic clinical supervision may not be just an option, but a necessity in the psychotherapy community, and especially during the COVID-19 pandemic, it has proven its essence and worth (Watters & Northey, 2020). During training for a specific psychotherapeutic approach, supervisees learn about theoretical knowledge, and in supervision, they learn how to apply the learned skills (Pilling & Roth, 2014). Supervision is an integral and inseparable part of the professional development of a future psychotherapist (Bernard & Goodyear, 2004). Milne (2007) defines supervision as: “Formal provision, by approved supervisors, of a relationship-based education and training that is work-focused and in which manages, supports, develops and evaluates the work of colleagues” (p. 439). Chipchase et al. (2016) defines telesupervision or e-supervision as: “...a process of providing supervision with the educator at a distance using electronic information and/or communication technologies” (p. 41). Stokes (2018) suggested that to prepare novice therapists for the modern working environment, both in-person and online supervision modes should be utilized, particularly if the supervisee is also working with clients in both modalities. This study will focus on videoconferencing supervision and call it e-supervision.

Advantages and Disadvantages of e-supervision

The main advantages of e-supervision is access to experts who may not be easily accessible otherwise (Abbass et al., 2011; Bacigalupe, 2010; Bender & Dykeman, 2016; Cameron et al., 2015; Chipchase et al., 2016; Conn et al., 2009; Marrow et al., 2002; McAdams & Wyatt, 2010; Perry, 2012; Reese et al., 2009; Inman et al., 2018; Jordan & Shearer, 2019; Wood et al., 2005), and the speed and efficiency that saves valuable time and money for supervisors and supervisees (Deane et al., 2015; Inman et al., 2019; Martin et al., 2018). E-supervision often involve working across borders, which may have some early learning curve setbacks due to potential cultural differences (Powell, 2011; Powell & Migdole, 2012), but also, in the long term, can offer an opportunity for multicultural awareness and growth for all involved parties in the process (Duan et al., 2019; Inman et al., 2018). E-supervision can connect more and less developed countries and bring them closer to each other (Augusterfer et al., 2020).

In addition to the lack of personal contact, the most frequently reported potential disadvantage of e-supervision is the lack of non-verbal signals (Bohannon et al., 2013; Cameron et al., 2015; Duan et al., 2019; Gammon et al., 1998; Rosenfeld, 2012; Rousmaniere, 2014; Rousmaniere et al., 2014; Vaccaro & Lambie, 2007; Wood et al., 2005), as well as data protection (Benefield et al., 2006; Rousmaniere & Renfro-Michel, 2016; Stokes, 2018). In some past meta-studies of e-supervision (Deane et al., 2015; Inman et al., 2019; Martin et al., 2018), internet connections and technology dependence were also mentioned as common potential barriers. Every year, the strength of the internet connection increases and more alternatives are available in case of potential problems, like smartphones and mobile internet. It seems super-

visees today might be more likely to get stuck in traffic on the way to the supervisor than to have issues with the technology. Even common image freezing or distortion has become a regular part of electronic communication (Deane et al., 2015), and our brains end up just filling in the potential gaps to create a fluid and wholesome experience (Merabet & Pascual-Leone, 2010). Although e-supervision has some problems, the advantages still seem to outweigh the disadvantages (Inman et al., 2019).

In-person Contact Prior to e-supervision

Martin et al. (2018) conducted a systematic review of the factors that influence the quality and effectiveness of e-supervision for health professionals, examining eight different themes. One of the themes explored was the impact of prior face-to-face contact on the quality and effectiveness of e-supervision. Based on a limited number of studies (Driscoll et al., 2006; Gammon et al., 1998; Robson & Whelan, 2006; Wright & Griffiths, 2010), the authors concluded that prior face-to-face contact is more than desirable for successful e-supervision. It is essential to highlight that among the studies referenced in this theme, only one outdated study (Gammon et al., 1998) employed videoconferencing for supervision. Consequently, the conclusions drawn by Martin et al. (2018) regarding the necessity of prior face-to-face interaction in e-supervision may be misleading.

Multiple past studies (Chamberlain & Smith, 2018; Conn et al., 2009; Kanz, 2001; Rousmaniere et al., 2014; Webber & Deroche, 2016) have recommended establishing in-person relationships before engaging in e-supervision. However, none of these studies actually conducted valid experiments to confirm the necessity or contribution of in-person contacts. They based their opinions on insufficient and outdated information without a modern context and perspective. These results should be replicated in a new context after the COVID-19 pandemic, as the circumstances have forced even the most stubborn skeptics to adapt to the new virtual reality.

We do not find studies focusing primarily on the presence or absence of in-person contact in e-supervision. However, in some recent studies (Bernhard & Camins, 2020; Brandoff & Lombardi, 2012; Duan et al., 2019; Fishkin et al., 2011; Jordan & Shearer, 2019), supervisors and supervisees had no in-person contact but still had productive e-supervision. Multiple studies (Bernhard & Camins, 2020; Chamberlain & Smith, 2018; Inman et al., 2019; Jordan & Shearer, 2019; Phillips et al., 2021; Tarlow et al., 2020) recognized the importance of this subject and the need for proper research to answer the question: *Do we actually need in-person pre-established relationship or contact for effective e-supervision?*

Modern Context

The literature on e-supervision is growing every year. In times of the global COVID-19 pandemic, we witnessed an expansion of studies in this area as the therapeutic community (as well as many other fields) has been forced to rapidly adapt and transform when it comes to psychotherapy and clinical supervision (Augusterfer et al., 2020; Hames et al., 2020; Hausman et al., 2021; Inchausti et al., 2020; Miller, 2020; Patel et al., 2021; Perrin et al., 2020a; Phillips et al., 2021; Simms et al., 2020; Sher-

bersky et al., 2021; Tarlow et al., 2020; Watters & Northey, 2020) Bell et al. (2020) argue that due to the circumstances of COVID-19, the practice of e-supervision and research will flourish in the future. A recent study (Inman et al., 2019) analyzed 35 empirical studies from 25 peer-reviewed journals and one book chapter published on remote supervision between 1990 and 2016. The main results of these studies concluded that remote e-supervision is usually considered to be as effective as in-person supervision, especially when supervisors use real-time videoconferencing supervision (Inman et al., 2019).

Different clinical and therapeutic organizations have specific rules when it comes to online psychotherapy and supervision work. Before COVID-19, the APA (2015) Commission on Accreditation allowed 50% of supervision requirements to be done via some kind of distance supervision mode. Organizations, states, and countries reserve the right to create private rules within their training programs. Limiting the number of hours that can be completed online implies that in-person supervision is superior and that e-supervision is less adequate (Lowe & Speer, 2019), even though studies have overwhelmingly shown that there is no difference in these modes of work (Bender & Dykeman, 2016; Chapman et al., 2011; Coker et al., 2002; Coker & Schooley, 2012; Nelson et al., 2010; Reese et al., 2009; Tarlow et al., 2020).

The COVID-19 pandemic has revolutionized the use of telepsychology and telemedicine in clinical practice (Perrin et al., 2020a). As the COVID-19 has become a part of daily lives, psychological practice, and supervision have adapted and mostly moved online (Perrin et al., 2020b). Many psychology organizations worldwide have eased their rules and regulations to adapt to the new pandemic contexts (Pierce et al., 2021). It can be inferred that some trainees who underwent e-supervision during the COVID-19 pandemic were unable to have an in-person meeting with their supervisors prior to their online collaboration.

Supervisory Working Alliance

Supervisory working alliance involves a mutual understanding of the objectives and responsibilities of supervision, as well as establishing a strong emotional connection (Efstation et al., 1990). It is crucial to emphasize that the concept of a working alliance in supervision encompasses not only the emotional connection that is commonly associated with the term, but also includes an emphasis on establishing shared goals and specific tasks (Bordin, 1983). Research has concluded that a working alliance can also be maintained during e-supervision via videoconferencing (Reese et al., 2009; Tarlow et al., 2020). Other studies have also concluded that effective and empathic relationships can be created and maintained online (Cook & Doyle, 2002; Lahey, 2008; Clingerman & Bernard, 2004), especially when video is also available (Cook & Doyle, 2002). An appropriate videoconferencing supervision structure helps create a strong working alliance (Marrow et al., 2002).

According to Patton and Kivlighan (1997), during the initial stages of supervision, the supervisor's primary responsibility is to establish a robust working relationship with their supervisee. Later on, studies also emphasize the importance of establishing vigorous working alliances early in supervision (Conn et al., 2009; Kanz, 2001). The relationship between supervisor and supervisee is not just the most researched

subject within supervision, but also one of the most critical factor in the effectiveness of psychotherapy supervision (Kilminster & Jolly, 2001; Watkins, 2014).

Chamberlain and Smith (2018) conducted a comprehensive review of the literature that compared the efficacy of remote supervision and face-to-face supervision with regard to the working alliance. Their findings suggest that neither modality should supplant the other, but instead they should be integrated to optimize the quality of service to supervisees and, most importantly, clients. The researchers also observed a divergence between the outcomes of qualitative and quantitative analyses. While the quantitative analysis indicated no statistically significant differences, the qualitative analysis provided ambiguous results that imply the potential presence of intervening variables that were not accounted for.

In general, the studies indicated no difference in working alliance comparing in-person and e-supervision (Bender & Dykeman, 2016; Carlisle, 2015; Conn et al., 2009; Dickens, 2009; Lenz et al., 2011; Reese et al., 2009; Tarlow et al., 2020). These studies have mainly focused on a hybrid model of supervision or surveys, and future research should examine the supervisory working alliance primarily through experimental online work (Inman et al., 2019). Rousmaniere & Ellis (2013) emphasized that supervisors should pay even more attention to the working alliance during online work. A supervisor who is engaged, knowledgeable, and tech-savvy can foster a strong working alliance in videoconferencing supervision (Abbass et al., 2011). Lampropoulos (2003) pointed out that flexibility and creating a safe space for self-exploration are the cornerstones of a strong working alliance, something an online setting could also provide.

Self-disclosure in Supervision

Li et al. (2020) define supervisee disclosure in supervision as: “supervisees’ voluntary expressions of relevant information regarding their counseling and supervision experiences (e.g., past and present experiences, thoughts, opinions, feelings, and behaviors)” (p. 145). Timely self-disclosure in supervision can be a powerful approach and open new topics worthy of research (Ladany & Walker, 2003). It can also relate to the quality of supervision (Spence et al., 2014), and potentially the outcome of supervision (Li et al., 2020).

In international group supervision two-year study (Duan et al., 2019), the authors concluded that physical distance might also mean emotional distance. Even though participants showed mostly satisfaction with international group supervision, due to the lack of visual cues and cultural differences, the authors believe that self-disclosure might be diminished. In group settings, it may be more difficult for supervisors to identify the concealed needs of their supervisees. Both supervisors and supervisees reported that the rapport from one session did not necessarily transfer to the next supervision session. International group supervision might need more time to build rapport and strong alliances between the parties involved (Duan et al., 2019). In one study (Reese et al., 2009) that included nine counseling psychology students in a hybrid model of supervision, face-to-face, and e-supervision, during the final interview, participants reported less willingness to self-disclose in the electronic part of supervision.

In addition to improving the effectiveness of supervisees through e-supervision, remote work also might level the playing field by reducing hierarchical issues that may arise during supervision by encouraging and creating a safe space for communication where both parties can openly disclose the topics of supervision and therapy (Miller, 2002). In a pioneering videoconference study (Sørli et al., 1999), some participants had an increase in self-disclosure because the distance from the supervisor created a safer space for communication. Following Suler's (2004b) online disinhibition effect, supervisors and supervisees might be able to express themselves more honestly and openly and create stronger connections when they engage in mild dissociation during supervision. Participants in one study (Jordan & Shearer, 2019) claimed in a post-study interview that there is no difference in self-disclosure between e-supervision and face-to-face supervision. E-supervision can often be international, and sometimes, due to cultural differences and social context, self-disclosure can be delayed. Not many papers focus on self-disclosure in e-supervision, and even the current literature is inconclusive. Future studies should attempt to answer the question of whether online environments create a safe place for self-disclosure (Deane et al., 2015). Some research has highlighted the relationship between the use of e-mail in supervision and the self-disclosure of the supervisee's (Coker et al., 2002; Conn et al., 2009; Cummings, 2002).

Feedback in Supervision

Email supervision is the most used mode of communication between supervisors and supervisees (Luke & Gordon, 2012; Twist et al., 2016), and even though the literature is limited, it is growing (Luke & Gordon, 2016). Typically, even when supervision is conducted in-person, it often commences with a short consultation via email. Cox and Araoz (2009) concluded that the supervisees in their study preferred supervision with verbal and written feedback. Written feedback can be especially useful for novice therapists; less experienced trainees may need more supervision (Vannucci et al., 2017). At the senior stage of supervisees' training, too much control and information might be unnecessary or perhaps even detrimental to their self-esteem and creativity.

Regarding individual supervision, some supervisors listen to the entire sessions and provide only written feedback, while others arrange for additional face-to-face or videoconference e-supervision, or only listen and review parts of the sessions discussed after or during the supervision. Probably the least effective is supervision without recording the sessions, and relying only on the supervisor's verbal comments, which can create the chance for misunderstandings (Reinders et al., 2013; Suler, 2008). Full-session supervision may make less room for supervisees to hide clinical errors than partially supervised sessions chosen by supervisees.

In the studies where emails were used, supervisees claim that asynchronous communication allowed them to reflect and think before answering to the supervisor (Clingerman & Bernard, 2004; Stebnicki and Glover (2001; Wright and Griffiths (2010) Suler (2004a) calls this a reflection zone. Email communications might also strengthen the working alliance and increase self-disclosure (Stebnicki & Glover, 2001). Regular and frequent supervision is also fundamental for building rapport,

trust, and a strong relationship with the supervisor in the early stages of supervision (Augusterfer et al., 2020).

Written communication is also not without its shortcomings. This form of communication leaves more room for misunderstanding if the language is imprecise (Dickens, 2009; Reinders et al., 2013; Suler, 2008). Combining text correspondence and visual-verbal communication in one form or another can potentially fill in any missing gaps (Nasiri & Mafakheri, 2015) and potentially offer the best chance for supervisees' growth. E-mail in supervision can have a positive effect on professional belonging (Woodside et al., 2009) and the improvement of conceptualization skills (Butler & Constantine, 2006). The exact feedback styles, but also the models used in psychotherapy, are rarely stated in the study methodology (Inman et al., 2019). Bengtson & Jensen (2015) concluded in their study that too much focus is placed on the difference between e-supervision and face-to-face supervision, instead of concentrating on more important factors such as pedagogical agenda and feedback styles. We found no studies comparing partial session reviews without written feedback and full session reviews with written feedback in e-supervision settings.

E-supervision Models

The main therapeutic approach that will be used in this study is Rational Emotive Behavioral Therapy (DiGiuseppe et al., 2014; Ellis, 1955). Even though REBT is an evidence-based therapeutic approach with strong research background (DiGiuseppe et al., 2014; Ellis, 1955), when it comes to supervision besides few theoretical works and recommendations (Dryden & Thorne, 1991; Dryden & Fetham, 1994; Woods & Ellis, 1996; DiGiuseppe, 2011), we don't find experimental REBT studies in the field of e-supervision or face-to-face supervision. The most prolific Cognitive Behavioral Therapy (CBT) Supervision researcher and supervision advocate is Derek Milne and his Evidence-Based Clinical Supervision model (Milne, 2009; Milne & James, 2005a, b). This model of supervision does not focus too much on the supervisory alliance (Milne, 2009), something that could be particularly significant in e-supervision, as some authors state (Chamberlain & Smith, 2018; Rousmaniere & Ellis, 2013), especially because supervisees sometimes claim that something is missing in e-supervision, but they are not sure what exactly it is or how to operationalize it (Inman et al., 2019; Martin et al., 2018). With a stronger focus on strengthening the supervisory alliance and taking full advantage and flexibility of electronic work, this supportive e-supervision approach could help overcome potential barriers. Some research in the field of humility (Watkins et al., 2018; Watkins, 2020) and self-compassion (Coaston, 2018) in supervision offers some interesting recommendations for creating a more effective supervision environment, which could be exactly what e-supervision has been missing.

E-supervision lack clearly defined and evidence-based models, not just in REBT or CBT, but generally in other therapeutic approaches as well. Stokes (2018) summarized the research in the field of e-supervision and presented recommendations that several theoretical e-supervision models offered (CARER: Collins 2018; FORUM: Mosson 2018; CLEAR: O'Brien, 2018). Weitz (2019) expanded on the well-known Inskipp and Proctor (2001) supervision model and recommended a six-dimensional

e-supervision model. Rousmaniere and Renfro-Michel (2016) also offered extensive guidance regarding the use of technology to improve clinical supervision, but these authors and others failed to prove their claims in an experimental setting. There is no consensus on whether the current long-standing classical supervision models (e.g., Hawkins & Shohet 2000; Inskipp & Proctor, 2001; Stoltenberg & Delworth, 1987) are sufficient and perfectly applicable to e-supervision (Stokes, 2018). Some authors (Baltrinic et al., 2016; Chapman et al., 2011) claim there is no need for specific e-supervision models, and that current models are sufficient. Stokes (2018) encourages practitioners to research, develop and evaluate new models of e-supervision.

Research Questions

The author of this study found no research that primarily focuses on the presence or absence of in-person pre-established contact and written feedback in e-supervision, specifically in videoconference supervision, and its effects on supervisor alliance, e-supervision satisfaction, and e-supervision self-disclosure. Several studies have pointed out the importance of investigating these issues and offered their opinions and recommendations for future research. Apart from a few studies that have indirectly incorporated the key questions of this study into their methodology, the extensive literature and experimental research are inconsistent and largely absent.

The pilot study aims to assess whether the in-person contact or the form of e-supervision is a condition for a strong working alliance, self-disclosure, and successful, rewarding, and fulfilling e-supervision. Because there is a lack of adequately validated clinical e-supervision models, this research will examine a pilot model, the Supportive Model of Electronic Supervision (SMeS), which draws on elements from the models previously mentioned. As we are witnessing an expansion and renaissance of e-supervision and other forms of e-therapy, offering some answers to these questions or at least concrete updated guidelines is of the utmost importance for future research and e-practice, especially for cross-regional collaborations in clinical e-supervision. The results of this pilot study will also offer guidance for research with a larger sample. The present study aimed to investigate the following research questions:

- 1) What is the effect of the presence or absence of in-person contact in e-supervision on the supervisory alliance, satisfaction of e-supervision and self-disclosure?
- 2) What is the effect of the type of e-supervision and presence or absence of written feedback in e-supervision on the supervisory alliance, satisfaction of e-supervision and self-disclosure?
- 3) What is the attitude and opinion of supervisees regarding pilot model, Supportive Model of Electronic Supervision (SMeS)?

Method

Participants

A total of five supervisees, four females and one male, aged 25 to 27, participated in this study. Another participant was supposed to take part in this study, but due to scheduling issues, he was unable to start. The results with and without the male participant are consistent and show no difference in statistical analysis. All participants were psychologists currently in the third year of specialized psychotherapy educational training at the REBT Affiliated Training Centre of the Albert Ellis Institute, located in Belgrade, Serbia. This program is part of the Association for Cognitive and Behavioral Therapy of Serbia and is accredited by the European Association for Behavioral and Cognitive Therapies (EABCT). In this training program, trainees are trained not only in REBT but also in other CBT approaches. In this study, participants mostly discussed sessions with predominantly REBT themes, but other CBT interventions from different CBT approaches were also properly discussed, which is why the term used for the therapeutic model is RE&CBT. In this program, the third year is the time when training attendees start applying therapeutic skills and counseling with clients. During this time, training attendees begin their regular individual and group supervision. Until then, trainees learn theoretical and practical psychotherapy skills in peer counseling supervision settings under RE&CBT-approved supervisor guidelines. The supervisor and researcher of this study is the same person. The supervisor is an associate fellow and approved supervisor from the REBT Albert Ellis Institute in New York. At the time of starting this study, the supervisor was in Bosnia and Herzegovina, with 4 years of experience in supervising RE&CBT and had never before made contact or communicated with the supervisees of this study.

Procedure¹

In November 2021, the study began by conducting a personal interview with each participant. Thereafter, each participant underwent a series of ten e-supervision held approximately every two to three weeks. The study culminated with a final individual wrap-up session for each participant in June 2022, resulting in a total of twelve meetings spanning from November 2021 to June 2022.

The study randomly assigned participants into two groups, all with similar prior therapeutic knowledge. The first group, designated as the experimental group, included two female participants, while the second group, designated as the control group, consisted of two female and one male participant. The experimental group underwent all twelve meetings in an online setting, whereas the control group had their first initial meeting in-person and all other sessions online, as recommended in the literature as a minimum standard (Stokes, 2018). The first independent variable had two levels: an initial in-person meeting and an initial online meeting. Participants were advised not to discuss the experiment with each other. Before the true aims of

¹ Ethical Approval. This Study was Approved by an Institutional Review Board at University of Rijeka, Philosophy Faculty, Class Document Number: 640-01/21–01/76, Register Number: 2170 24-02-21-4

the experiment were revealed during the final session, the participants were asked for their opinions regarding the researchers' actual intentions in conducting the study. None of the participants correctly guessed the study's aims.

During the initial interview, the participants and the supervisor discussed the supervisory contract that outlined the primary obligations and responsibilities of both parties. The participants were given detailed instructions regarding the structure of the e-supervision setting as part of the supervisor's contract. Using a semi-structured interview, the researcher and the participants discussed their current psychotherapy educational needs, current RE&CBT skills, and their zone of proximal development. These themes were occasionally revisited during the ten e-supervision sessions and finally reviewed in the final wrap-up meeting. The only information kept vague was the possibility of the researcher switching from listening to full recordings of sessions with written feedback to some other form of e-supervision after the fifth e-supervision. The researcher attributed this to a potential lack of free time during that period. This deception was necessary to ensure that the participants did not guess the true goal of the study, which they did not, as confirmed by their responses during the final meeting.

During the first five e-supervision, the participants were given written feedback before their e-supervision sessions, which were reviewed by the supervisor during the subsequent e-supervision. To avoid misunderstandings, the supervisor always discussed the written feedback during the e-supervision. For the last five e-supervision, the supervisor only listened to recordings of client sessions without providing written feedback to the supervisees. During these final five sessions, either the supervisor or supervisees occasionally paused the recordings to discuss potential areas of improvement or to highlight particularly effective aspects of the session. This constituted the second independent variable with two levels, full and partial review of sessions. Information sheets containing basic details about the supervised client were sent to the supervisor by participants before each e-supervision. All session recordings and documents were encrypted and password-protected. Written communication was conducted via Google email, and video sessions were held through the Zoom platform.

E-Supervision Model

In the present study, the primary mode of e-supervision employed was the RE&CBT approach, and a total of ten e-supervision sessions were conducted using this modality. Each e-supervision session began with a brief warm-up conversation, followed by a review of the previous tasks agreed upon, and an inquiry into the supervisee's preferred starting point and desired focus for the session. These e-supervision sessions lasted approximately 60 min.

In addition to addressing the primary themes of the RE&CBT approach that emerged from the supervisees' recorded sessions, the supervisor endeavored to embody the key characteristics of the RE&CBT approach, such as being active, directive, knowledgeable, and creating a dynamic setting. The formulation of feedback in a compassionate and fair manner was of particular importance. To facilitate the open and safe expression of thoughts, case conceptualization, and potential self-

disclosure from both parties, the supervisor aimed to foster a supportive environment during the e-supervision sessions. The sessions were scheduled flexibly, offering at least two or three available session slots, while maintaining a clear structure and regular meetings. The supervisor also remained accessible and approachable within the agreed-upon parameters of the supervisor's contract between e-supervision sessions.

Prior to and during the e-supervision sessions, the supervisor provided concise instructions for the sharing and safeguarding of documents and was responsive and empathetic towards any technical difficulties experienced by the supervisees. In an effort to personalize the e-supervision process to the individual needs of the supervisee's, the supervisor inquired whether there were any specific areas that the supervisees wished to address, and endeavored to adapt the e-supervision approach in accordance with the experiment guidelines. The supervisor also made a conscious effort to impart and model ethical practices, as well as demonstrate novel therapeutic techniques that could be implemented in therapy. The supervisees were prompted to incorporate newly acquired techniques while simultaneously devising novel interventions, metaphors, or other creative therapeutic elements. By attentively listening to the supervisees' case conceptualization, the supervisor demonstrated a genuine interest in the client's requirements, as well as in the educational needs of the supervisee's. Following this, the supervisor presented their perspective on the client's issue, which spurred new avenues of conversation and supervision. Furthermore, the supervisor remained mindful of not only the supervisee's educational necessities but also their emotional therapeutic needs, such as uneasiness in working with certain disorders or stress associated with educational requirements. Adhering to the latest guidelines and strengths on humility in supervision (Watkins et al., 2018; Watkins, 2020), the supervisor exemplified and implemented intellectual, interpersonal, and cultural humility during the sessions. The supervisor aimed to reduce hierarchical distance during e-supervision, while maintaining professional boundaries. In addition, the supervisor endeavored to strengthen the working alliance of supervision by adhering to the aforementioned guidelines. Some scholars have suggested that the supervisory working alliance in the online environment necessitates special attention (Chamberlain & Smith, 2018; Rousmaniere & Ellis, 2013).

In each e-supervision, the supervisor provided a brief lecture on a specific topic related to the RE&CBT approach, covering areas such as opening and closing sessions, values and goals, procrastination, working with suicidal clients, meditation, secondary disturbance, metaphors in therapy, compassion exercises, love disturbance in RE&CBT, and summarizing previous work. To evaluate the success of the e-supervision, the supervisees were asked to give verbal feedback at the end of each session and to fill out an online survey that assessed the supervisory alliance, supervision satisfaction, and self-disclosure. These three measures were the dependent variables of the study. The researcher developed a pilot model for e-supervision, named the Supporting Model of Electronic Supervision (SMeS), which incorporated the guidelines and practices described above. The researcher did not examine the survey results until the final session with the last supervisees. After completing final wrap-up interview, the supervisees filled out a final questionnaire assessing their satisfaction with the SMeS model.

Instruments

Supervisory Working Alliance Inventory (SWAI; Efstation et al., 1990) is a two-dimensional seven-point scale, ranked from almost never (1) to almost always (7) with a total of 19 items. The first subscale refers to the *focus on rapport (relationship)* with the supervisor and has 12 items. An example question is: “*I feel comfortable working with my supervisor.*” The second subscale refers to the *focus on the client*, how to improve the relationship with the client, and has 7 items. An example question is: “*My supervisor helps me stay on track during our meetings.*” With the scale license holder’s permission, the scale has been translated and adapted to the Bosnian language. Logan (2014) suggests that scores up to 2.99 count as a low relationship, 3.00 to 5.99 as a moderate relationship, and 6.00 to 7.00 as a high relationship. In the original research, the average for the client focus scale was 5.85, and for the rapport 5.44 (Efstation et al., 1990). The previous internal consistency of this scale has been consistently high across research, with $\alpha=0.97$ for the total scale score, $\alpha=0.88$ for the client focus subscale, and $\alpha=0.97$ for the rapport subscale (Efstation et al., 1990; Patton & Kivlighan, 1997; White & Queener, 2003). In this study, the results of this scale were presented as the average of two subscales, as advised in previous research (Patton & Kivlighan, 1997).

The Supervisory Satisfaction Questionnaire (SSQ; Ladany et al., 1996) is a one-dimensional four-point scale with 8 items, ranked from low (1) to high (4) level of satisfaction with supervision. With the author’s permission, the scale has been translated and adapted to the Bosnian language. Respondents rate different aspects of supervision and the score ranges from 8 to 32. Logan (2014) suggests that scores from 8 to 20 represent low satisfaction, from 21 to 26 medium satisfaction, and from 27 to 32 high satisfaction. The higher scores indicate a higher degree of satisfaction (Ladany et al., 1996). An example of a question is: *How would you rate the quality of the supervision you have received?* The internal consistency of this scale in past research is $\alpha=0.96$ (Ladany et al., 1999) and $\alpha=0.97$ (Ladany et al., 2001).

The Trainee Disclosure Scale (TDS; Walker et al., 2007) is a one-dimensional 13-item self-report scale that is based on previous research on self-disclosure (Ladany et al., 1996). With the author’s permission, the scale has been translated and adapted to the Bosnian language. The scale measures the degree of willingness to self-disclose to the supervisor, where a higher score indicates a greater likelihood of self-disclosure. Respondents indicate on a scale from 1 (not at all likely) to 5 (very likely) how likely they are to talk to their supervisor about various topics such as clinical error, attraction to the client or supervisor, personal problems, etc. The internal consistency of this scale in past research is $\alpha=0.80$ (Ladany et al., 2013) and $\alpha=0.89$ (Walker et al., 2007).

Supportive Model of Electronic Supervision Validation Questions – After the 10th e-supervision, a semi-structured interview session was conducted during the wrap-up meeting to review the main points of the past e-supervision and discuss the 22 themes, competencies, and interventions of SMeS model. This assessment aimed to evaluate the effectiveness of the e-supervision sessions and provide feedback for future improvements. Following the completion of the final wrap-up interview meeting, the supervisees were asked to assess the frequency of 22 described themes,

competencies, and interventions. These included Structure, Flexibility, Continuity, Technology, Personalization, Teaching, Modeling, Curiosity, Formulation, Feedback to the Supervisee, Feedback to the Supervisor, Alliance, Equality, Directivity, Openness, Supportiveness, Ethics, Independence, Applicability, Dynamic, Responsiveness, and Conceptualization. The supervisees were asked to rate the presence of these concepts on a scale of 0 to 6, with 0 indicating the complete absence of the concept or very inadequate application, and 6 indicating excellent presentation or very well expressed despite difficulties. In addition, the supervisees were required to evaluate the significance of the 22 themes, competencies, and interventions outlined in the e-supervision on a scale of 1 to 5, with 1 indicating almost complete irrelevance and 5 indicating high importance. Each of the themes was clearly defined in an online survey.

Quantitative Analysis

When it comes to analyzing the individual case studies, there is no consensus on the best method (Brossart et al., 2018; Campbell, 2004; Parker et al., 2011a, b; Smith, 2012; Tarlow, 2016). In this study, the first step was a visual analysis, to determine whether there was a functional connection between the two methods of e-supervision and between the groups. Visual analysis is further supported by quantitative analysis by estimating effect sizes and comparing participants' means. Finally, in this study, the effect sizes of individual participants were combined, which gave the overall average effect of the control and experimental group intervention (Clearinghouse, 2014; Kratochwill & Levin, 2014). One way to improve the external validity of single-subject designs, which are one of the main drawbacks of this method, is to combine the results of individual participants and create small-n research groups (Shaughnessy et al., 2000), as was done in this study. Due to the very small sample size in this pilot study, the results where the average means of participant's sessions for e-supervision was calculated should be taken with caution and viewed mainly as guidelines for future research. For this reason, the main focus is on comparing individual subjects using the effect sizes shown on the forest plots.

The main statistical method for calculating effect size in this study was Baseline Corrected Tau single-case statistic by using an open-source online Baseline Corrected Tau calculator (Tarlow, 2016, 2017). This method is an improved version of the Tau-U statistic (Parker et al., 2011a; Tarlow, 2016; Tarlow et al., 2020). Effect sizes for each group were analyzed using open-source software for advanced meta-analysis called Open Meta Analyst (Wallace et al., 2012). Graphs were made in Microsoft Office Excel 2010. The first step was to analyze the baseline phase and determine if there was a significant baseline trend (Tarlow et al., 2020). In this study, only one participant had a baseline trend significant on one of the scales which meant that this score needed to be adjusted for baseline trend, by marking the baseline corrected Tau input option (Tarlow, 2017). Two phases were compared to provide effect size, which is Kendall's Tau rank order correlation coefficient (Tarlow, 2017). This coefficient indicates a connection between two compared sets of scores. For comparing phases, a positive and statistically significant Tau coefficient indicates an improvement in the second phase, a negative and statistically significant Tau coefficient means that the

Fig. 1 Comparing control group (CGn=3) and experimental group (EGn=2) on Supervisory Working Alliance Inventory (SWAI)

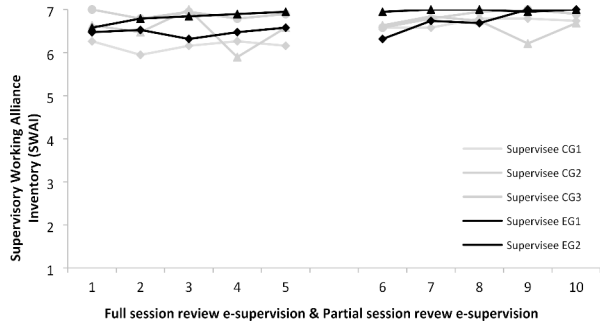
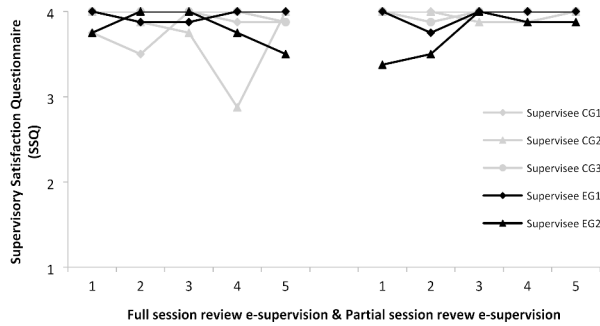


Fig. 2 Comparing control group (CGn=3) and experimental group (EGn=2) on Supervisory Satisfaction Questionnaire (SSQ)



first phase has higher scores, and scores closer to zero indicate no difference between phases (Tarlow, 2017). Additionally, for comparing control and experimental groups, a statistically insignificant Tau score means that there is no difference if initial in-person meetings were present in e-supervision, which also indicates no difference between groups.

Results

E-supervision Outcome Measures

The SWAI scores for each phase and the participants in the groups are presented in Fig. 1. A baseline correction trend was needed for only one participant on one scale. The lowest score on this scale was 5.89 out of 7, during the fourth e-supervision, with most of the grades having above-average scores, which indicates a high relationship. Visual inspection showed a relative matching between the participants and groups, which was further confirmed by statistical analysis.

Supervisee 1, from the control group, was the only participant that had significant improvement in phase two on the SWAI scale when partial session review of e-supervision was present ($\tau=0.781, p=.011^*, SE\tau=0.279$). This might be the result of personal preference or the improvement of the relationship over the course of time because there was a relatively larger discrepancy between the first and second phases ($M^{CG1 \text{ Phase I}}=6.16 / M^{CG1 \text{ Phase II}}=6.69$). Supervisee 2, from the control group, had

Fig. 3 Comparing control group (CGn=3) and experimental group (EGn=2) on Trainee Disclosure Scale (TDS)

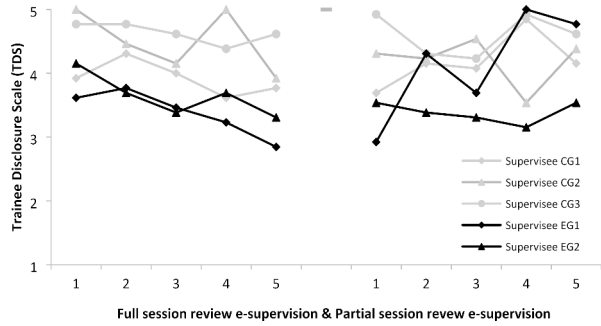


Fig. 4 Random effects model for control group (CGn=3) and experimental group (EGn=2) on Supervisory Working Alliance Inventory (SWAI)
 Note. *p<.05

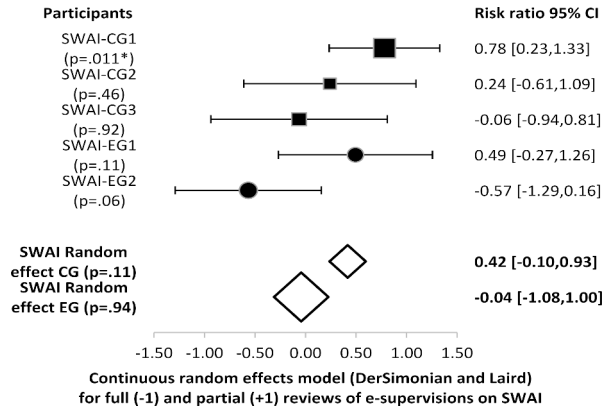
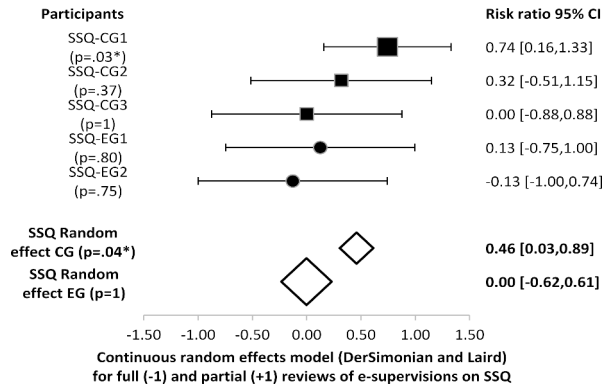


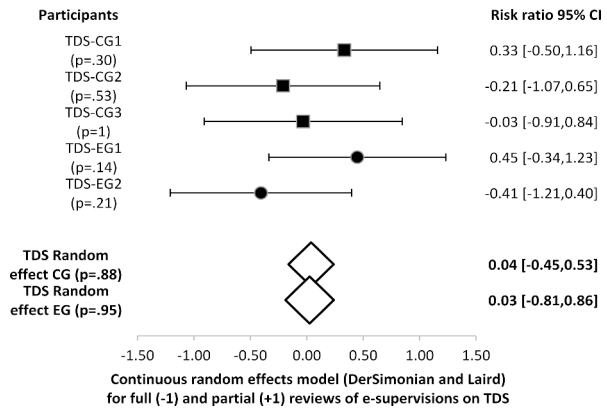
Fig. 5 Random effects model for control group (CGn=3) and experimental group (EGn=2) on Supervisory Satisfaction Questionnaire (SSQ)
 Note. *p<.05



similar scores in both phases ($\tau=0.241, p=.463, SE\tau=0.434$), with a slightly insignificantly higher score in the second phase ($M^{CG2 \text{ Phase I}}=6.52 / M^{CG2 \text{ Phase II}}=6.62$). Supervisee 3, from the control group had also similar scores in both phases ($\tau=-0.064, p=.463, SE\tau=0.446$), with a slightly insignificantly higher score in the first phase ($M^{CG3 \text{ Phase I}}=6.88 / M^{CG3 \text{ Phase II}}=6.84$).

Supervisee 1 from experimental group had similar scores in both phases ($\tau=0.494, p=.114, SE\tau=0.389$), with an insignificantly higher score in the second phase (M^{EG1}

Fig. 6 Random effects model for control group (CGn=3) and experimental group (EGn=2) on Trainee Disclosure Scale (TDS)



Phase I=6.47 / M^{EG1} Phase II=6.75). Supervisee 2, from the experimental group, needed a baseline correction and had also similar scores in both phases ($\tau=-0.566$, $p=.06$, $SE\tau=0.369$), with a slightly insignificantly higher score in the second phase (M^{EG2} Phase I=6.81 / M^{EG2} Phase II=6.98).

In both groups, by comparing the average scores of participants in the groups there was an improvement in the second phase (CG_I=6.51 / CG_{II}=6.72; EG_I=6.64 / EG_{II}=6.86). When the two groups were compared with the average score of each series for each participant from their groups, the tau score indicated no significant difference ($\tau=0.269$, $p=.173$, $SE\tau=0.305$). The average results of the experimental group (M=6.75) were only slightly higher than the control group (M=6.62), which further confirms the similarity between the groups. We can conclude that in this small sample, the supervisory working alliance was relatively stable in two different modes of e-supervision, but also among the groups. According to the results, an initial in-person meeting may not affect the supervisor-supervisee working relationship when they do e-supervision.

The SSQ scores for each phase and the participants in the groups are presented in Fig. 2. A baseline correction trend was not needed on this scale for any of the participants. The lowest score on this scale was 2.87 out of 4, during the fourth e-supervision, with most of the grades having above-average scores, which indicates high satisfaction with e-supervision. Visual inspection showed a relative matching between the participants and groups (besides one session for one participant), which was further confirmed with statistical analysis.

Supervisee 1, from the control group, was once again the only participant that had significant improvement in phase two on the SSQ scale when a partial session review of e-supervision was present ($\tau=0.743$, $p=.025^*$, $SE\tau=0.299$). This was not confirmed in the interviews and might be the result of the perfect scores in the second phase (M^{CG1} Phase I=3.8 / M^{CG1} Phase II=4). Supervisee 2, from the control group, had similar scores in both phases ($\tau=0.318$, $p=.366$, $SE\tau=0.424$), with a slightly insignificantly higher score in the second phase (M^{CG2} Phase I=3.7 / M^{CG2} Phase II=3.95). Supervisee 3, from the control group, had identical scores in both phases ($\tau=0$, $p=1$, $SE\tau=0.447$; M^{CG3} Phase I=3.97 / M^{CG3} Phase II=3.97).

Supervisee 1, from the experimental group, had identical scores in both phases ($\tau=0.125$, $p=.796$, $SE\tau=0.444$; M^{EG1} Phase I=3.95 / M^{EG1} Phase II=3.95). Supervisee

2, had similar scores in both phases ($\tau=-0.128$, $p=.749$, $SE\tau=0.444$), with a slightly insignificantly higher score in the first phase ($M^{EG2 \text{ Phase I}}=3.8 / M^{EG2 \text{ Phase II}}=3.72$).

If we look at the average scores of the groups, in the control group, there was a slight improvement in the second phase ($CG_I=3.82$, $CG_{II}=3.97$), and in the experimental group, there was a small decrease in satisfaction of e-supervision ($EG_I=3.87$, $EG_{II}=3.84$). When the two groups were compared with the average score of each series for each participant from their groups, the tau score indicated no significant difference ($\tau=-0.212$, $p=.303$, $SE\tau=0.309$). The average results of the experimental group ($M=3.86$) had only slightly lower results compared to the control group ($M=3.9$), which additionally confirms the similarity between the groups. According to the results, an initial in-person meeting may not affect supervisor-supervisee satisfaction with e-supervision.

The TDS scores for each phase and the participants in the groups are shown in Fig. 3. A baseline correction trend was not required on this scale for any participant. The lowest score on this scale was 2.85 out of 5, during the fifth e-supervision, with very irregular patterns in both groups and phases. Visual inspection did not show congruence between participants or groups.

Supervisee 1, from the control group, had a slight insignificant improvement in phase two on the TDS scale when a partial session review of e-supervision was present ($\tau=0.332$, $p=.295$, $SE\tau=0.422$; $M^{CG1 \text{ Phase I}}=3.92 / M^{CG1 \text{ Phase II}}=4.18$). Supervisee 2, from the control group, had similar scores in both phases ($\tau=-0.211$, $p=.530$, $SE\tau=0.437$), with a slightly insignificantly higher score in the first phase ($M^{CG2 \text{ Phase I}}=4.51 / M^{CG2 \text{ Phase II}}=4.20$). Supervisee 3, from the control group, had similar scores in both phases ($\tau=-0.032$, $p=1$, $SE\tau=0.447$), with a slightly insignificantly higher score in the first phase ($M^{CG3 \text{ Phase I}}=4.63 / M^{CG3 \text{ Phase II}}=4.60$).

Supervisee 1, from the experimental group, had similar scores in both phases ($\tau=0.447$, $p=.144$, $SE\tau=0.400$), with an insignificantly higher score in the second phase ($M^{EG1 \text{ Phase I}}=3.38 / M^{EG1 \text{ Phase II}}=4.14$). Supervisee 2 had similar scores in both phases ($\tau=-0.406$, $p=.205$, $SE\tau=0.409$), with a slightly insignificantly higher score in the first phase ($M^{EG2 \text{ Phase I}}=3.65 / M^{EG2 \text{ Phase II}}=3.38$).

In the control group, there was a slight decrease in the second phase ($CG_I=4.35$, $CG_{II}=4.33$), and in the experimental group, there was a small improvement in the second phase in the potential self-disclosure of e-supervision ($EG_I=3.52$, $EG_{II}=3.76$). When the two groups were compared, the tau score indicated a significant difference in favor of the control group, as it is visible from the graph ($\tau=-0.711$, $p=.01^{**}$, $SE\tau=0.222$). The average results of the experimental group ($M=3.64$) were significantly lower than the control group ($M=4.34$), which additionally confirms the difference between the groups. According to the results, the initial in-person meeting can influence potential self-disclosure between the supervisor and the supervisee in e-supervision.

Figure 4 shows that although participants from the control group generally had higher scores in the second phase of e-supervision on SWAI, the overall difference was not statistically significant. Participant 1 from the control group was an outlier, and only this score showed a significant preference for the second phase. In the experimental group, two participants showed similar effect sizes in opposite direc-

tions, but when their scores were aggregated, there was no significant difference between the two phases of e-supervision.

As can be seen in Fig. 5, when it comes to satisfaction with e-supervision, we have a similar situation as on the previous scale. Participant 1 from the control group is once again an outlier, with a significant result in favor of the second phase with the partial review, but this time even the pooled random effect for the control group is statistically significant. In the experimental group, again the results are on opposite sides, but quite consistent and closer to each other, with no difference between the types of e-supervision.

As shown in Fig. 6, TDS had irregular patterns on individual scores between sessions, but when phases are compared, the results are a little more consistent. Participant 1, from the control group, once again had higher insignificant scores in the second phase, but aggregate scores are close to zero. The same thing with the experimental group, once again two similar scores, but in opposite directions. Aggregate scores are also close to zero, which indicates no difference between phases, but also shows once again that answers are not consistent and indicate that individual preference in the type of e-supervision might have an important role.

Frequency and Importance of the SMEs Items

As can be seen in Table 1, every participant in the study reported relatively high scores on the frequency but also the importance of items on the SMEs item list. In the control group, the items with the lowest frequency score were teaching and feedback to supervisees, even though these scores were also very high. In the experimental group, feedback to supervisees had the lowest score, 5 out of 6. Regarding importance in the control group, feedback to supervisor and openness were the least important, and in the experimental group, the dynamic working environment was the least important.

Qualitative Analysis

During the final wrap-up sessions, the supervisor and supervisees summarized their work. In a qualitative analysis, six themes will be presented that emerged from the interviews: (a) supervisory working alliance, (b) satisfaction with supervision, (c) self-disclosure, (d) presence and absence of in-person contact, (e) presence or absence of written feedback and the type of e-supervision, and (f) advantages and disadvantages of the presented e-supervision model.

Supervisory Working Alliance

The experimental and control group had almost identical scores of the supervisor's working alliance, with a slight advantage over supervisees who only worked online. The participants claimed that a strong bond was created from the first e-supervision, which could be backed by constant very high grades. One supervisee (EG2) said:

Table 1 Comparing participants (P) in control group (CG) and experimental group (EG) on frequency and importance of items that represent Supportive Model of Electronic Supervision (SMeS)

SMeS Items	Frequency (0–6)						Importance (1–5)							
	CG			EG			CG			EG				
	P1	P2	P3	Σ	M	Σ	P1	P2	P3	Σ	M	P1	P2	Σ
1. Structure	5	6	6	5.67	6	6	6	5	5	4.33	5	4	4	4.5
2. Flexibility	6	6	6	6	6	6	6	6	6	5	5	5	5	5
3. Continuity	6	6	6	6	6	6	6	6	6	4.67	5	5	5	5
4. Technology	6	6	6	6	6	6	6	6	6	4.33	5	3	4	4
5. Personalization	5	6	6	5.67	6	6	5.5	5	4	4.67	5	4	4	4.5
6. Teaching	4	6	6	5.33	6	6	6	5	5	5	4	5	4	4.5
7. Modeling	5	6	6	5.67	6	6	5.5	5	5	5	5	5	5	5
8. Curiosity	5	6	6	5.67	6	6	6	6	5	4.67	5	4	4	4.5
9. Formulation	6	5	6	5.67	6	6	6	6	4	4	5	3	4	4
10. Feedback to Supervisee	4	6	6	5.33	6	6	5	5	5	5	5	4	4	4.5
11. Feedback to Supervisor	6	6	6	6	6	6	6	4	3	3.67	3	5	5	4
12. Alliance	6	6	6	6	6	6	6	6	5	4.67	4	5	5	4.5
13. Equality	6	6	6	6	6	6	6	5	4	4.67	4	5	5	4.5
14. Directiveness	6	6	6	6	6	6	6	4	4	4	5	3	4	4
15. Openness	6	5	6	5.67	6	6	6	5	2	3.67	4	4	4	4
16. Supportiveness	5	6	6	5.67	6	6	6	5	4	4.67	3	5	5	4
17. Ethics	5	4	6	5	6	6	6	5	5	5	4	3	3	3.5
18. Independence	6	6	6	6	6	6	6	4	5	4.67	3	5	5	4
19. Applicability	6	6	6	6	6	6	6	4	5	4.33	4	5	5	4.5
20. Dynamic	6	6	6	6	6	6	6	4	5	4.33	2	4	4	3
21. Responsiveness	5	6	6	5.67	6	6	6	5	5	5	5	5	4	4.5
22. Conceptualization	6	6	6	6	6	6	6	5	5	4.67	5	5	5	5

Note. In survey, each SMeS item were described with few sentences

It was a classic process. There were sessions where we grew a lot, and then, for example, something happened where we went backward, or simply nothing spectacular happened. But it's not because of you or me, it's just a process. But when it's all added up and subtracted at the end of this process...it definitely, incomparably grew.

Satisfaction with Supervision

Once again, there was barely a noticeable difference between the groups, in favor of the control group which did the initial meeting in-person. Supervisees were grateful to have regular individual ongoing e-supervision and mostly were extremely satisfied with the general process, from the structure to the provided information to learned skills. One supervisee (CG3) confirmed this:

It meant a lot to me, it really meant a lot to me, and only now that it's over I can summarize some things. Afterward, when I have a session, I hear myself and then I realize that I learned it during the supervision.

Self-disclosure

Self-disclosure is not consistent among the groups and supervisees, and the scores of this instrument do not follow any specific patterns like the previous two scales. One supervisee believed that this kind of e-supervision was a safe space for disclosure, but her scores also had an irregular pattern. The same thing happened with another participant who stated that she felt freer to talk about different subjects as time went on, but again this statement was not reflected linearly in the scores during the evaluations. It seems that time is not a reliable factor in evaluating self-disclosure in e-supervision. The real reasons still need to be properly examined and defined, possibly with other instruments. One supervisee (CG2) said:

Of course, I want to talk about my mistakes, but for example, my feelings towards the supervisor or do I like the supervisor, not only would I not tell you (the supervisor), but I wouldn't tell anyone, because I think why I would tell!?

Presence and Absence of In-person Contact

Before this research, the supervisees in both groups lacked experience working with a supervisor they had not met in-person. Both groups strongly believed that if e-supervision was conducted the way they were done in this study, especially with some slight improvement with feedback from this study, in-person contact is not necessary, or as one supervisee (EG1) stated: *"It would be interesting, but I don't think it would drastically change the relationship in any way."* Another supervisee (EG2) pointed out that it might be useful, even though not sure in which way: *"It would certainly*

be useful, but not necessary. It would be good, but it was perfectly fine without that". One more supervisee (CG3) emphasized that she honestly respects that the supervisor took the time to meet in-person: *"From my perspective, I don't think it would have changed, but I'm very glad (we meet each other in-person) and it meant a lot to me, and I appreciated your action that you came to my city...and for being flexible."*

Presence and Absence of Written Feedback and Type of e-supervision

Interestingly, another unanimous response from the supervisees is that they preferred the full sessions reviewing prior to the e-supervision meeting, as one participant (EG1) said: *"It is a different impression when you listen to the entire session. So, I think there is a difference."* There was no significant difference between the two types of e-supervision in either of the groups, even though the second phase had slightly higher scores, which could have been a product of practice effect. This mode of e-supervision also seems more structured, *"When you listened to everything in order and everything, then it was more structured"*, one of the supervisee's (CG1) stated. Full session reviewing might be a useful and preferred mode for novice therapists and it is a chance to acquire more knowledge, at least in the beginning, later on, it might be counterproductive, as one supervisee (CG1) said:

The written comments meant a lot to me because I had a concise "analysis" of the session in one place that I could go back and read again. It also meant a lot to me when the whole session was listened to because I had the impression that then the conclusions were drawn more reliably. However, I'm fine that it was only at the beginning because as I gained confidence in my and your assessments, I didn't need that kind of "certainty" that everything was analyzed in detail.

The supervisees emphasized that written feedback probably does not make a significant difference to the overall outcome of the e-supervision, which can be confirmed with the reported scores of the two phases of e-supervision in this study, but still, it is more than welcomed as a bonus. Written feedback offers a chance to supervisees to better prepare for the upcoming e-supervision, or as one supervisee (CG2) said:

They can also be a good reason to talk about a topic during the supervision itself, or to think about these topics before the supervision and come up with additional questions, which I might not have if I heard them live for the first time during the supervision.

Advantages and Disadvantages of Presented e-supervision Model

Besides structure, one of the main advantages of the presented mode of supervising that participants emphasized was paying additional attention to the professional emotional needs of supervisees, as one supervisee (EG1) pointed out: *"...especially this moment about addressing some of my personal feelings...but generally very little*

attention is paid to it. I think it is very important to be aware of this because it significantly affects the work." All supervisees unanimously agreed that professional boundaries were not crossed during this process or any other during e-supervision. The way in which e-supervision was conducted provided a safe space for mistakes, "...somehow allowed me to make mistakes, to be able to ask whatever I want without any fear of how I will be judged by you", one supervisee (EG1) said. One of the reasons for this might be that the supervisor of this study was an external supervisor, and there were no potential consequences to their work. This might have created a more relaxed atmosphere but also a safer space for learning.

As a potential disadvantage, some supervisees (CG2) asked for a more authoritative approach, "You did all good...not in the sense that you shouldn't necessarily be critical, but emphasize a mistake and I wouldn't see it as something bad, actually as making a point," said one supervisee (CG2). Another supervisee (EG1) added: "You were directive enough, that's not the point. Rather than being critical." The supervisees also emphasized that they learned a lot, that it probably did not affect other aspects, and that this was mostly due to their previous experiences with supervision and the way they were used to working. Some of the supervisees (such as CG3) preferred using the model from this study: "I always felt that when you corrected me, you were working in a painless way. Because the ultimate goal is for me to learn something." The supervisees have different modes of the preferred style of work, and it might be a good choice to try to adapt to their needs and mode of learning if it is possible.

Discussion

One of the main questions that this study tried to answer is: *Do we actually need in-person pre-established relationships or contact for effective e-supervision?* Most of the results point out that probably in-person contact is not necessary, at least if certain guidelines are followed, from proper structure, a knowledgeable and rewarding experience, to a supportive approach. Some previous authors (Chamberlain & Smith, 2018) mentioned that there can be discrepancies between qualitative and quantitative results in e-supervision; however, this was largely not the case with this study. The participants consistently had above-average scores on supervisory working alliance and satisfaction with supervision, which was further reinforced by interview reports. The first two mentioned scales followed similar patterns and had very high scores. The results are pointing out that at least one in-person meeting is not making a significant difference in alliance and satisfaction with supervision. Participants who met with the supervisor in-person showed appreciation and looked at this as a sign of respect, but again, this did not make a significant difference in the final scores. The results from this study are consistent with some previous studies that concluded that a satisfactory experience can be achieved in e-supervision (Conn et al., 2009; Gammon et al., 1998; Jordan & Shearer, 2019; Reese et al., 2009; Tarlow et al., 2020). Most of the previous studies in e-supervision focused on hybrid models of supervision, but this experiment is one of the pioneering papers that mostly focus on supervision

without any in-person contact, as some recent meta-studies highly advised to be done (Inman et al., 2019).

The final scale, the self-disclosure, doesn't match these previously mentioned results. The scores on TDS had very irregular patterns from session to session. The results and rapport from one session were not positively transferred to the next session, the same as one previous cross-cultural study (Duan et al., 2019) reported. During the wrap-up interviews, participants reported that they felt more connected and open toward the supervisor as time and e-supervision went on, but also some supervisees emphasized that they were not always sure how to use this scale because the items were mostly hypothetical and some items were very direct, and there was never a chance to talk about some item themes. On this scale, the qualitative and quantitative reports did not completely match. Some participants said that no matter how long they would work with a supervisor, they would never discuss certain subjects, which was also reflected in the results. Even though the control group had significantly higher scores, maybe even suspiciously surpassing scores, it is hard to generalize these results and scores need to be taken with a lot of reserves. One supervisee from the experimental group, during the wrap-up interview, admitted that now when she thinks about the results she reported, they probably do not reflect her true experience, and the results should have been higher. A new scale with detailed instructions for filling in forms is more than desirable. Some authors (Li et al., 2020) had similar issues with this scale and recommended another instrument for self-disclosure in supervision.

As with every proper experiment, this study had a strong structure and a pre-defined set of rules that were strictly followed. Participants reported in the wrap-up interview that structure was one of the main advantages of this study, especially in the first phase during the full session review. These reports align with some previous studies that also emphasized the importance of structure in e-supervision (Cox & Araoz, 2009; Kumar et al., 2015). For some participants, quantitative results show slight improvement over time. This doesn't necessarily mean a partial review of sessions, which was present in the second phase, is the preferred mode of work for the supervisees. More positive results in the second phase could have been regular positive trends as part of ongoing e-supervision. This is further confirmed in the wrap-up interviews where supervisees adamantly confirmed that they prefer full session review, at least in the beginning when they are novice therapists in training. As noted by some participants, written feedback was found to provide them with ample time for introspection and enabled them to better prepare for future supervision. This finding is consistent with previous studies on the topic (Clingerman & Bernard, 2004; Stebnicki & Glover, 2001; Suler, 2004a; Wright & Griffiths, 2010). These results are consistent with some previous studies that reported that novice therapists need more oversight (Vannucci et al., 2017) and that novice supervisees prefer more frequent and longer supervision (Saxby et al., 2015). Taking all results in consideration, participants in this study preferred e-supervision with written feedback, at least now when they are novice therapist. Alliance and e-supervision satisfaction scores were similar across participants and series, while the disclosure scale had some previously discussed issues.

Clearly defined and validated e-supervision models are still absent from the literature. The model that was used in this study is still experimental, but it shows potential when we look at the scores of the first two scales and the interview report. RE&CBT is an eclectic approach and it seems it fits perfectly with this model. If we analyze the testimonies of supervisees from this study, one of the main RE&CBT distinctive features was not present enough. Some supervisees said they would like to have an even more directive approach, even though they are not sure precisely in which segments and claim this did not affect overall experience, just personal preference, partially because of previous experience. There is a possibility that the supervisor in the study was not directive and authoritative enough in some segments of supervision. This might be due to the unintentional need to gain the trust and approval of supervisees, but also overall supervision experience of supervisor. Another reason why some supervisees prefer a more authoritative approach is that their primary training is RE&CBT, which is known for a more directive approach. Past training and supervision experience might play a relevant role when it comes to preferred style of e-supervision. It seems the Supportive Model of Electronic Supervision (SMeS) needs to find the perfect balance between authority, constructive criticism and support. Participants in this study held favorable attitudes and opinions about the used model.

Limitations and Recommendations for Future Research

The main disadvantage of this pilot study is the small sample size, and future research needs to have a larger sample size or at least replicate the results. The supervisor and the supervisees came from different countries with similar cultures. Future studies should investigate more distant cultures. In this study, the researcher did not track the number of clinical hours and the number of clients that the supervisees had during the period of e-supervision. The participants were equalized according to prior experience; however ongoing experiences were not tracked. The supervisees had other group supervision during the study with other supervisors, so personal professional RE&CBT therapeutic skills could not be measured properly and claimed that it is an entire product of e-supervision done in this experiment. More controlled settings or working with only one supervisor for a particular period could give more precise results. This can potentially also be harmful to supervisees because they might miss inputs from other supervisors during the important impressionable period of their professional development. If a study has fewer, but more frequent e-supervision, results might be more reliable. One in-person meeting might not be enough for the difference to show, so more in-person meetings might be something to consider, possibly with multiple baseline study designs. Working supervisory alliance and supervision satisfaction might not be enough for a successful e-supervision process, and focusing and following on supervisee competence and their professional zone of proximal development might be something that needs to be considered in future studies. In this case, supervisees should work with only one supervisor over a period of time, which was not possible in this study as supervisees had other educational obligations. If specific RE&CBT training is done for supervisees who are learning the therapeutic model for

the first time, with one main supervisor, the results might be more reliable. Gender was not a variable in this study, but future studies should potentially consider it.

In this study, the supervisor and supervisee worked voluntarily, which automatically created a more relaxed working atmosphere and took out the evaluation component with real consequences from the equation. On the other hand, a supervisee who would grade their own regular mandatory supervisor during psychotherapeutic educational training might give socially desirable answers, because of the potential fear of retaliation or just wanting to be a good participant.

Attributes that define e-supervision models need to be operationalized precisely, even though this study describes the model in more details than other e-supervision studies usually do. In general, this is mostly overlooked in previous studies, and supervision researchers rarely describe the models they are using in their study and pay no notice to describe the steps they were using, which makes it harder to replicate the same study. The e-supervision model used in this study is still experimental and requires proper validation and clearly defined steps, preferably from other authors. If the e-supervision model is focusing on support (among other aspects), it needs to precisely define the line between being supportive and potentially focusing too much on the positive without emphasizing the negative, as some supervisees pointed out in this study, which could not be the best option for their development, but also potentially to other aspects of supervisory work.

Even though it could not be seen through the instrument score, the wrap-up interviews point out that the supervisees in this study adamantly preferred full session review. It would be interesting to compare the results to advanced supervisees, or even independent certified therapists who are working under supervision as part of the ongoing reaccreditation procedures. Future studies should determine when and if supervisees stop preferring one mode of work over another, possibly also with multiple baseline designs for single case studies. Previous supervision experience and personal preference for supervision styles might also be significant factors. The supervision feedback styles and forms are something that should be explored in future e-supervision studies.

Future studies should try to test other scales, especially for self-disclosure, which had strange and irregular patterns in this study. During the wrap-up interviews, the participants also reported that they were not always sure how to score this scale because most of the item questions never organically showed up in e-supervision, and there was no chance to discuss these hypothetical themes. This might have created inconsistency with the supervisees' scoring patterns, even though in the last e-supervision session, the groups had very similar final scores. At the time this study's draft was created, no other supervision self-disclosure scales that were potentially more reliable had been identified. In multiple samples, a recent study (Li et al., 2020) showed promise for measuring supervisory self-disclosure, and it may be a better scale for future research. A longer period of conducting e-supervision might create more consistent results. Also, on the other hand, the self-disclosure construct may not be adequate for weekly measurement, and perhaps it should be done with a pretest and posttest with longer intervals between measurements. Future studies should continue and focus on e-supervision that is conducted completely remotely, without prior in-person contact.

Conclusion

The combined quantitative and qualitative results of this small study indicate that the initial in-person contact is probably not necessary for productive e-supervision, at least when it comes to supervisory working alliance and supervision satisfaction. Self-disclosure results are inconclusive. There are no valid empirical studies that claim that in-person pre-established contact and a relationship are necessary to have successful, productive, and fulfilling e-supervision, and the results of this study further support this idea.

Even though it cannot be clearly seen through the scores, interview responses from the participants point out that novice supervisees prefer a full session review with written feedback if possible. In addition, qualitative analyses supported the potential usefulness of the examined e-supervision model. Some supervisees in this study pointed out that the e-supervision model presented in this study created a safe space for mistakes, which aided the learning process and experience. The Supportive Model of Electronic Supervision (SMeS) shows potential, but it still needs much work and precise operationalization of the model steps. It should be considered that within research on e-supervision, we do not find studies that clearly describe the model they use. The existing body of research in e-supervision has devoted insufficient attention to the crucial element of defining models, highlighting the imperative for future supervision research to fill this knowledge gap. In addition to clarifying e-supervision models, forthcoming research should investigate the potential repercussions and benefits of entirely remote e-supervision without any in-person interaction before or during the process, as this mode of supervision may gain increased prevalence with technological advancements.

If supervisors are not knowledgeable, none of mentioned, discussed, or described models would assist them too much, but having knowledge about procedures and techniques in specific fields might not be enough for proper (e)supervision. In the same way, being a good psychotherapist might not be enough to be a good supervisor, however, being an effective supervisor in in-person settings also does not necessarily mean that all skills are automatically transferred to e-supervision. Knowledge in supervision is like oxygen in life; without it, there is no progress. But everything in between is what can significantly offer value and meaningfulness. It is not only important what kind of feedback and information the supervisor provides but how it is presented. In-person supervision skills might not be enough for remote work, and a proper online working model with precise guidelines might be easier to master than all the necessary skills that supervisors already possess. This pilot study also represents the first experimental research in the field of RE&CBT Supervision, and other therapeutic approaches should follow and validate their own supervision models.

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The author has no competing interests to declare that are relevant to the content of this article.

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