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Tablet-Assisted Live Supervision: Eye-Bug Supervision

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Abstract

Tablet-based "eye-bug supervision" is an intervention method for live supervision that can be used by counselor education training clinics, skills course simulation exercises, as well as distance supervisors. This live supervision method replaces previous live supervision modalities such as phone-in or bug-in-the-ear. Eye-bug supervision allows for the counselor-in-training to receive supervisor guidance visually, discreetly, and to choose when and how to incorporate the guidance, which builds autonomy. Equipment and technological applications (i.e., "apps") associated with eye-bug supervision, advantages and disadvantages of this supervision intervention modality, comparison with other live supervision intervention modalities, recommendations for its implementation, and areas for future research are examined.

Keywords: live supervision, technology, tablets, counseling, skills training

Counseling and clinical supervision can be conducted and enhanced using technology. The practice of distance counseling, also known as telehealth or technology-

assisted counseling, involves using a Webcam through HIPAA-compliant software to connect a client with a counselor in another location. This counseling modality has been shown to be as effective as in-person counseling in a number of studies examining synchronous videoconferencing, and chat message and text message modalities (Bambling, King, Reid, & Wegner, 2008; Barnett, 2011; Centore & Milacci, 2008; Dowling, Rickwood, & Rickwood, 2015; McAdams & Wyatt, 2010). In-person counseling can also be enhanced using technology by utilizing cell phone applications or "apps" to reinforce concepts and skills introduced in counseling sessions (Rainsberger, Fishel, & Machuca, 2013).

Asynchronous clinical supervision can also be enhanced using technology. Using the same videoconferencing technology as distance counseling, counselors have increased access to supervision and choices in supervisors (Vaccaro & Lambie, 2007; Wolf, 2011). Synchronous or live supervision can also be conducted using videoconferencing, which can expand options for universities and training sites in rural areas or those in online education programs (Conn, Roberts, & Powell, 2009; Rousmaniere & Frederickson, 2013).

Live supervision involves a clinical supervisor observing a counselor-in-training in session and directly intervening to provide guidance. Live supervision is an experiential learning method for counselors-in-training (Bernard & Goodyear, 2014) that provides them the opportunity to "connect personal beliefs and theoretical concepts with practice" (Moody, Kostohryz, & Vereen, 2014, p. 19). This method is used in a variety of settings in student counseling programs, including counseling skills courses, group counseling courses, and practicum and internship courses (Koltz & Feit, 2012; Moody et al., 2014), as well as post-graduate training (Barnett, 2011; Perry, 2012; Power, 2013; J. L. Smith et al., 2012). Research has shown that live supervision is perceived as more helpful for the counselor-in-training than for the client (Bartle-Haring, Silverthorn, Meyer, & Toviessi, 2009); however, this conclusion is drawn from the traditional live supervision methods such as telephone and bug-in-the-ear. Phenomenological studies of the experience of the counselor-in-training receiving live supervision have found that observing sessions and receiving live supervision contributed to students' reported development of a counselor identity (Koltz & Feit, 2012; Moody et al., 2014).

Live supervision has been provided using multiple modalities. Initially, supervisors would view counseling sessions through a one-way mirror, and communication with the counselor-in-training included physically walking to the counseling room, knocking on the door, and speaking to the counselor-in-training face-to-face. Various technological innovations were then utilized in order to reduce intrusion and interruptions to the counseling sessions. First, supervisors used a camera-feed into an adjacent room rather than a one-way mirror and began communicating with the counselor-in-training via telephone. To reduce the intrusion of a ringing telephone, some supervisors began providing guidance through a bug-in-the-ear apparatus, worn by the supervisee (Miklich, 1975). Visual, or text-based supervisor-supervisee communication (bug-in-the-eye) has also been facilitated by technology, such as using a teleprompter, or a desktop computer mounted in the counseling room (Klitzke & Lombardo, 1991; Miller, Miller, & Evans, 2002; Neukrug, 1991; Scherl & Haley, 2000; R. C. Smith, Mead, & Kinsella, 1998).

Each method of live supervision has advantages and disadvantages. Text-based, or visual supervision guidance, seems to be advantageous over auditory methods, as clients report phone calls in session to be disruptive and undermining to therapists' authority (Champe & Kleist, 2003). A bug-in-the-ear requires the counselor-in-training to attend to two speakers simultaneously, potentially interrupting rapport or flow of conversation in the counseling session (Scherl & Haley, 2000). An advantage of the visual-based interventions is that the guidance can be delivered in a non-intrusive manner, and the supervisee can incorporate the feedback into the session seamlessly (Miller et al., 2002). On the other hand, the visual-based interventions using teleprompters or computer monitors have been considerably more expensive and difficult to set up initially, requiring quite a bit of hardware and preparation. With the latest technology of wireless internet and tablet computers, however, these obstacles can be overcome, allowing for a combination of minimally-intrusive and simple to set up live supervision. This article discusses the anecdotal information gathered from 2 years of using this live supervision method at an on-site university counseling training clinic for master's- and doctoral-level practicum and internship students.

Equipment and Technological Applications (Apps)

The implementation of tablet-assisted supervision, eye-bug supervision, varies depending of its use as an adjunctive to a one-way mirror observation system or audiovisual system, as opposed to a setting where the tablet is used as a sole instrument in facilitating live supervision. It also varies depending on the kind of tablet used and the setting where live supervision takes place. In this article, the process described refers to the use of iPads exclusively; however, the basic implementation process easily applies to other types of tablets.

As an adjunctive system, the tablet is the instrument for instructional communication between the supervisor and the supervisee. In our setting, the supervisor observes the session and listens to the counselor-client dialogue from an observation room equipped with a camera and audio system.

The basic communication between the supervisor and the supervisee occurs through the iPads. In our case, both the supervisor and the supervisee have an iPad. Once in the room, the supervisee places the iPad in a place where it can be easily seen. We have coffee tables between the chairs where the supervisee and the client sit, so it is on this table where the counselor-in-training often places the iPad. Before the session starts, both the supervisor and the supervisee open a messenger application. For practice sessions, we recommend the use of the "messages" app that is usually included in the basic settings of your iPad. For real-time live supervision when supervisees are working with clients, we recommend the use of HIPAA compliant messenger apps (e.g., TigerText, HipaaChat, hippomsg).

Once the session begins, the supervisor will send any supervisory feedback (e.g., comments, directions, instructions, observations) via the messaging application. When using the messages app in the iPad, there needs to be a preparation process prior to its use in a live supervision session. To start, both the supervisor and the supervisee's iPads need to be connected to the Internet. We recommend adjusting the size of the font in the iPad so the supervisee can easily read the messages.

Technological Applications (Apps)

The basic technological applications used in tablet-based eye-bug supervision are described below. Although there are many more apps that can be used we are presenting the ones we have had more success using. Additional apps are also presented to illustrate the enormous potential that this method of live supervision has.

Messages. This basic iPad application facilitates communication between the supervisor and the supervisee via text messaging. It also allows for supervisors to send Internet links as well as photos and videos.

Tigertext. This is a HIPAA compliant text-messaging app. It requires a business e-mail (e.g., educational institution or business) for the creation of a profile in order to be used to communicate independently with other iPads.

Safari. This is the basic Internet browsing platform that is part of the initial iPad setup. Using Safari, the supervisor can browse any specific information using Google, Bing, Yahoo or any Web search engine and locate information that can be helpful to the supervisee during the session.

Photos. This app facilitates capturing images and videos that can be sent through the messenger app.

YouTube. This app can be used to stream music, videos, and psychoeducational presentations that can be used by supervisees with their clients.

Comparisons With Other Forms of Live Supervision

Eye-bug supervision remedies many of the limitations of other forms of live supervision. Many methods of delivering supervisor communication require interrupting the counseling session, including co-therapy, knock on the door, and phone in, which have been cited as limitations within the research (Klitzke & Lombardo, 1991; Miller et al., 2002; Scherl & Haley, 2000; R. C. Smith et al., 1998). Among other detrimental effects, interruptions in the session can affect the counselor-in-training's rapport with the client as the client becomes aware of the feedback. This can cause confusion about roles of supervisor and supervisee and may undermine the authority of the counselor-intraining (Champe & Kleist, 2003). The bug-in-the-ear (Miklich, 1975) apparatus, which delivers auditory communication to the counselor-in-training without an interruption to the session, is an improvement for the therapeutic alliance. However, this modality requires the counselor-in-training to attend to both the client and supervisor speaking at the same time, which can result in a "glazed eyes" appearance in the counselor-intraining, as well as the risk of over-instruction from the supervisor (Scherl & Haley, 2000, p. 276). The bug-in-the-eye system described by Klitzke and Lombardo (1991) requires large pieces of equipment, such as teleprompters or computer monitors, to be present in the counseling room, which can be distracting to the client and also easily read by the client, again bringing the feedback and supervision process into the client's awareness. With eye-bug supervision, no interruptions or large visual distractions are necessary. Feedback is visual, and the counselor-in-training has the option to incorporate feedback into the session as he or she find appropriate. The tablet itself is small and can be placed on a side table or armrest. The counselor-in-training can quickly read feedback and seamlessly incorporate it into the session. The counselor-in-training also has the opportunity to put feedback into his or her own words and develop therapeutic rapport without interruption, while still benefitting from a supervisor's guidance.

Advantages of Eye-Bug Supervision

From our experiences, eye-bug supervision has many advantages in comparison to other types of both live and asynchronous supervision. Eye-bug supervision uses technology that is very familiar to counselors in training such as tablets (e.g., iPads) and their basic technological applications (i.e., apps). One of the main advantages of using the eye-bug supervision system is the minimum disruption that occurs in the communication between counselors-in-training and clients. Because it is silent and the messages remain on the screen until the supervisee has an opportunity to address them, there is minimum disruption in the flow of the counseling session. The counselor-in-training is afforded autonomy in when, how, and whether to use the feedback, encouraging the development of clinical judgment.

Another important advantage of the eye-bug supervision system over any other system available is the increased number of supervision interventions available for the supervisor and the supervisee given the use of this technology. By using tablets, the supervisor can easily communicate with the supervisee through a messenger app. The supervisor then has the option of sending a variety of resources for the supervisee to use with clients such as Web links, videos, photos, music, and other materials that may not be possible with other types of technology. Finally, the use of tablet technology allows for supervisors to maintain a registry of supervision feedback given, which could be used to track student progress as well as to establish supervisees' level and quality of their response to supervision. This registry may also be used to determine the type of feedback that may be more appropriate given the supervisee's developmental level.

Students also have the ability to contact the supervisor to answer a question immediately if needed. For example, in our clinic, with the client's permission, we video record each session. At times, as the session is beginning, the supervisor and reflecting team in the observation room may miss if the client agreed and signed the form or not. With the eye-bug supervision device, the supervisor can ask the supervisee if the client gave permission to record, which the supervisee can reply with a simple, "yes."

Limitations of Eve-Bug Supervision

Some identified limitations of the eye-bug supervision system include the cost of the equipment, the level of technological proficiency needed for both setup up and use of the system, as well as confidentiality and privacy concerns.

Eye-bug supervision requires the use of two tablets at a minimum. In our case we use two iPad minis, which can represent some level of financial investment depending on the memory capacity. In addition to the iPads, some significant cost may be represented by any additional apps downloaded for use in supervision. This equipment cost, however, is actually lower when compared with other computer-based supervision systems (e.g., bug-in-the-eye). In addition, there is a need for wireless Internet service. Although at our university this service is provided, it is an additional financial and technical consideration (i.e., importance of monitoring the devices' wireless connection to check for lost signals).

The eye-bug supervision system requires supervisors and supervisees to have some level of technological proficiency. The supervisor needs to know the tablet settings to do the initial tablet setup for supervision.

Another limitation is the level of confidentiality and privacy of the information that is being used during supervision given the fact that basic communication among the iPads is done over the Internet. Some alternatives to minimize the risk to confidentiality and privacy are discussed in the legal and ethical considerations section below.

Recommendations for Implementation

Given the novelty of this method for providing live supervision, there are multiple recommendations to guarantee a successful implementation of the eye-bug supervision system. Specifically, we will address technical recommendations, procedural recommendations, supervision recommendations, and other general recommendations for its implementation.

Technical Recommendations

The eye-bug system requires the use of two iPads that are able to "talk" to each other. Once the iPads have been purchased, an Apple account needs to be created. In our clinic, we use iPad minis because of their lower cost and easier manipulation, but a full size iPad is an appropriate option. You can register multiple devices under the same Apple account. Each iPad needs to be set up either under the same or different Apple accounts. The instructions for the basic setup process for an iPad are provided by the manufacturer upon purchase. If the iPads are set up under the same Apple account, it is very important that each iPad has its own "identity." This unique identity is usually determined by the e-mail address that is used to communicate to and from the iPad. You may be able to ask your institutional IT Department to create e-mails for each iPad if needing to connect more than three iPads.

Communication between iPads varies depending on the specific messenger app you are using. If using the "messages" app included in your basic iPad settings both iPads need to have different e-mail addresses or phone numbers for them to "talk" to each other. Before using the iPads for live supervision, make sure that they are in fact "talking" to each other via the messages app (i.e., send test messages). More specific directions of how to set up multiple iPads for them to "talk" to each other can be found through the Apple Web site or through a search engine such as Google, Yahoo, or Bing.

Once the messages are being transmitted, you can adjust the language to use for communication with the supervisee. To adjust the keyboard language, you need to install additional keyboards (e.g., Spanish, English, Creole). The next technical step is to download any apps that may be used for the supervision process. The final technical recommendation is to adjust the text size for the tablet so the messages received by the supervisee are easily visible.

Procedural Recommendations

Before starting the supervision session, make sure that the iPads are appropriately charged. The next step is to send a test message to ensure that communication is occurring between the iPads. This is done before the supervisee starts a session with a

client. It is recommended that the supervisees receive a basic training on how to operate the iPad with particular attention given to the use of basic apps. Once the supervisee gets the test message, the next step is to expand the message view screen so the supervisee can see more information on the text space.

Once in the room, the supervisee will place the iPad in a way that facilitates for them to attend to the conversation with the client as well as to access any information sent by the supervisor. We recommend having a coffee table that can be place on the side or in between the counselor and the client (see Figures 1 and 2 for example set up). This requires a case that allows for the iPad to be propped upright on the table, with the screen facing the counselor-in-training. Some supervisees may prefer to set the iPad flat in their lap in the same way they would place a notepad if they were to take notes.

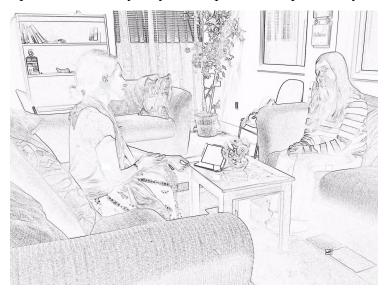


Figure 1. Counseling room arrangement.



Figure 2. Supervision room arrangement.

Supervision Recommendations

With any training clinic, clients should be advised of the live supervision process prior to their consenting to services in the setting. As part of the initial intake conversation, where the counselor-in-training advises the client of confidentiality and privacy policies, the client is also expected to be informed of the method of live supervision. The counselor-in-training will explain that the iPad will be used for receiving messages from a faculty supervisor during the session, and the counselor-in-training is expected to ask the client if they are comfortable and will consent to this. We also offer for the client to meet the faculty supervisor providing live supervision, as well as the other students who comprise the reflecting team. The following are a list of general supervisory recommendations when using the eye-bug supervision method:

- A. Become familiar with all the possibilities a tablet can offer in providing live supervision. Some of these possibilities include:
 - 1. The use of apps for assisting in the provision of specific skills such as relaxation skills, guided imagery, and theory related techniques;
 - 2. Use it to communicate additional information to the student that is highly relevant to the case (e.g., multicultural, legal, ethical, clinical);
 - 3. Use it to share links to specific materials that could enhance the process of counseling (e.g., relaxation transcripts or recordings, poems, pictures, songs, informational links).
- B. Privilege the use of short and concrete feedback. Use other forms of communication if counselor-in-training requires a more extensive consultation. The use of the "eye-bug supervision" code list (Table 1) is a good option. This code list outlines the "common code" utilized within our clinic for both supervisors and supervisees. Traditionally, tablets allow for the use of shortcuts to facilitate a faster delivery of directives.
- C. Make sure to spell the directives correctly as well as to use clear and correct grammar and phrase structure. Students may be confused when the instructions do not make immediate sense to them given the fact that they are attending to your directions concurrently to attending to their clients.
- D. If there is a need to send a more detailed message to the counselor in training, request for them to take a pause to communicate to the client what the supervisor or the reflecting team wants to convey.
- E. Recommend for counselors in training to use a "thinking face" instead of a "reading face" when looking at the messages received.
- F. Provide feedback to counselor-in-training using diverse methods such as words (e.g., great, good), phrases (e.g., good reflecting of meaning!) or emotions.
- G. If providing feedback in the context of a reflecting team, ask a team member to read the feedback that was offered out loud so the entire team is aware of the feedback given through the tablet.
- H. Make sure to send only information that you are comfortable sharing with clients. Clients may feel curious about the feedback received and may request for the counselor-in-training to show them what the supervisor or the team has said.
- I. Attend to the developmental level of the supervisee. This may involve sending messages that spell out what to say to the client (novice counselors) and moving to general directives with more seasoned counselors-in-training.

J. Use the iPad dictation feature to facilitate faster communication of feedback. The messages app allows for supervisors to dictate any directives for the supervisee rather than typing them.

Legal and Ethical Considerations

It is recommended that the use of a tablet for supervision of counselors-in-training be presented to the client as part of the informed consent process as mentioned above. The use of HIPAA-compliant applications is also an important ethical consideration. Some of the strategies to protect client and supervisee's confidentiality and privacy can also include the implementation of a security protocol. Our security protocol involves: using passwords for accessing the tablets, avoiding the use of any identifiable information when providing directions to the supervisee, and making sure that all communication is erased from the tablets once the supervision session concludes.

Other ethical considerations correspond with the new Section H of the American Counseling Association (ACA) *Code of Ethics* (2014), which attends to the ethics of technology, distance counseling, and social media. Section H was added to the most recent code due to the important role technology has in our daily lives. This section has six keys areas for counselors to consider when using technology. In addition to the confidentiality and privacy issues discussed above and within section H, item F.2.c. of the code stipulates that clinical supervisors should be competent in the technology they utilize (ACA, 2014).

Multicultural Considerations

Anecdotal information indicates that the use of eye-bug supervision is appealing to a new generation of counselors-in-training who are very familiar with the use of technology. The use of tablets facilitates the ability to employ multiple languages to convey information to the supervisee. Some texting applications, like messages, allow for the use of multiple keyboards so directions can be provided to supervisees in the client's and/or the supervisee's language. In addition to the use of multiple keyboards, the tablet also facilitates the use of language apps such as "Say Hi," "Google translate," or "translate." These apps are very useful if the supervisor or the supervisee have the need to translate or find the meaning of a word used in the counseling session.

Suggestions for Future Research and Practice

The use of eye-bug live supervision is an area with much potential given the familiarity of counselors-in-training with tablet technology and the incorporation of technological applications (apps) in their everyday life. Further areas for development of eye-bug supervision include its use for approach-specific instruction and training. In addition, research questions examining the use of eye-bug technology are plentiful, particularly examining the experience of supervisees and/or clients when such a mechanism for supervision is used. Another area to examine is the supervisory working alliance and the impact multiple modalities of live supervision have. The use of tablets during the supervision process has been described, including outlining key recommendations for implementation.

Table 1

Eye-Bug Supervision Code List

Shortcut	Directive	Definition/Example
RC	Reflect Content (Paraphrasing)	Paraphrase with own words what the client has said. "You are having difficulties in your relationship with your sister."
PC	Perception Check	A more specific form of RC, it is usually in the form of a brief question, e.g., "It sounds like," "Let me see if I understand this," which allows the client to agree or disagree with the accuracy of your paraphrasing.
RF	Reflect Feelings	Accurately identify the client's feeling and rephrase what is happening on an affective level: "You're feeling pretty immobilized" "It sounds like you feel extremely disappointed too." "pretty smothering it seems not much room for you."
RM	Reflect Meaning	Convey to client the basic meaning of their concern. It is done usually by identifying his or her values. "It seems that family is very important to you."
RP	Reflect Process	Discuss with your client what is going on in the "here and now" of the therapeutic process. It could be an opportunity to use the "self-of-the therapist" in the counseling interaction. "I noticed that your face changed when I said that you seemed to be avoiding the homework. I wonder if we can talk about the feelings or thoughts that me saying that may have prompted."
SM	Summarize	Briefly convey to the client the main points of a session or a portion of it. You can always ask the client to summarize as well. "It seems that you have been feeling more anxious this past week. We have discussed how the use of relaxation, particularly breathing has helped you in coping with anxiety. We also learned about the benefits of daily mindfulness exercises." "Can you summarize for me what we have discussed so far?"

Table 1 (con't)

Shortcut	Directive	Definition/Example
RF	Reframe	Translate a negative attribute or perception expressed by the client into a more positive, yet realistic strength. For example, where a young person has been described by his parents as unruly or unmanageable, a reframe may suggest the young person is "independent" or "strong-willed."
VA	Validate (Emotional Validation – Behavioral Validation)	Intentionally affirm your client's situation and reality as a valid and acceptable experience. (Emotional) "Since your new boss reminds you of your last one, I can see why you'd be scared to meet with her." (Behavioral) "I can see how you felt you needed to punch your classmate in the face in order to avoid others thinking that they could bother you."
NO	Normalize	Another level of validation, normalizing is intended to communicate to clients that experiencing certain difficulties is not uncommon or unreasonable, or that they are not alone in their experience "After everything that you have been through, it is pretty reasonable that you feel angry and frustrated." "It is pretty normal to feel as helpless and hopeless as you do after experiencing such difficult life experiences."
ND	Normalize Demographically	Use specific statistics to illustrate the commonality of a client's issues: "Many people experience anxiety on a daily basis." "Depression affects more than 21 million Americans every year."
OQ	Open Question	Ask questions in a way that prompts further exploration of the client's issues, not just a yes or no answer. Questions such as: "How would you describe" "What happened when" Or statements such as: "Explain more about" "Tell me what you mean by"

Table 1 (con't)

Shortcut	Directive	Definition/Example
SD	Self Disclose	Share personal feelings, experiences, or reactions to the client. Should include relevant content intended to help the client. "I use my dog as a motivation to go out and get some fresh air. I wonder if that would work for you." "Sometimes I feel pretty energized after doing even a little exercise. Perhaps it can have the same effect on you. What do you think?"
BR	Broaching	Convey understanding of the client's unique socio/racial/cultural context and worldview and the role it plays in his/her issues. "I can see how your family's opinion is so important to you. After all, you have told me that as a Latina, woman you are expected to be married to be able to move out of your parent's house; otherwise it would create a conflict in the family. I also know that, as a Latina avoiding conflict is something that you are accustomed to do. I can see how what you want sometimes is contradicting with what your are expected to do."
CO	Compliment	Offer a genuine compliment to the client about a perceived strength. Be as specific and realistic as possible to convey genuineness in what you say. "I truly admire your commitment to your well-being by pushing yourself to practice your coping skills even when you don't feel like doing it."
СН	Challenge	Help client identify discrepancies in their rationale and or behavior in a genuine, gentle, and compassionate way. "Help me understand this. On the one hand it sounds like And, yet on the other hand"

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