

Design Factors for Distance Clinical Experiences

A Literature Review

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Residential university programs with required clinical experience will face obstacles if the format of the program moves to a distance method of delivery. The supervision of the students will need to take place entirely via digital technology. The literature offers several facets of program design that must be considered when adopting a distance clinical experience. Ethical considerations include applying multiple jurisdictions of regulations and standards, maintaining confidentiality, providing the means for a supervisor to intervene when a supervisee performs poorly, and selecting technology that supports ethical considerations. Developing a positive supervisory relationship includes designing procedures and selecting technologies that foster that relationship. Technology facets include providing training and technical support and what new affordances technology can offer to supervision. The supervisor's role includes issues of training on the role of a supervisor in a distance clinical experience and managing workload of the supervisors to maintain quality. These findings have implications for programs designing a distance clinical experience and for standards bodies who wish to accommodate such experiences.



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INTRODUCTION

Academic programs that wish to convert from a face-to-face format to hybrid or distance delivery must overcome several obstacles if they require a supervised clinical or internship experience. If a program is offered in a distance format with no geographic restriction on the students, then the faculty must develop procedures for supervising those clinical experiences at a distance. The clinical supervision of a distance student will require regular communication and often direct observation of the student's performance, which would have to be arranged at a distance, mediated by technology.

For the purposes of this article, clinical experience is a formal academic experience at a workplace where a student (supervisee) participates in typical activities of the field while under supervision from a mentor

(supervisor) approved by the academic program. In some cases, the mentor may be required to be employed by the academic program. This experience may be referred to within different fields as an internship, co-op, practicum, or clinical. The mentor may also be referred to as a supervisor, preceptor, or mentor. A distance clinical experience is where all or nearly all of the supervisor/supervisee communication, observation, and coaching is done via digital technology rather than physically face to face. It should be noted that it is nearly impossible to not use digital technology for communication in some way in a higher education setting, but face-to-face supervision, as opposed to distance, involves significant physical presence of the supervisor.

VIABILITY OF DISTANCE CLINICAL EXPERIENCES

The first question to ask is whether or not a distance clinical experience is effective, or at least as effective as the face-to-face experience as commonly practiced. Some studies indicate equivalence between the two formats. Reese et al. (2009) addressed this question through a research study. Counseling psychology students engaged in supervision in face-to-face and videoconferencing formats. The students rated their experiences in both modes to be equivalent and did not perceive the relationship between supervisor and supervisee to suffer from videoconferencing. Wilke et al. (2016) examined students in a social work program and their performance on a counseling situation after either a face-to-face or online, asynchronous clinical course. These students participated in a role-play assessment after the course to test their new clinical skills. No significant differences were found between the face-to-face and distance students, indicating that a distance method of teaching clinical skills can be a viable teaching method. Thus, distance supervision is possible and may prove effective.

However, in some situations, distance clinical experiences may not be effective. Gergen and Roblyer (2013) surveyed directors of occupational therapy programs about their knowledge of and attitudes toward distance program delivery. The directors indicated that they thought the knowledge for the program could be conveyed via distance courses. However, they perceived that the physical skills required for the program could not be taught viably through a distance format. Even program directors very familiar with distance education believed the physical skills could not be taught via clinical experiences in that medium. Smith et al. (2009) examined nursing instructors' views on online learning. They found among nursing content instructors and instructional designers an attitude of strong differentiation between clinical courses and nonclinical courses. The general sense was that clinical courses could not be taught online due to the necessity of students learning physical medical procedures in person.

These studies can be harmonized by looking at the types of skills to be learned in clinical experiences. In the case of clinical psychology (Reese et al., 2009) and social work (Wilke et al., 2016), these fields require significant verbal skills, and core tasks in the field could be conducted via distance methods. Thus, these skills can be taught via technology that affords synchronous audio and video as those capture the core elements of the field. In the case of occupational therapy (Gergen & Roblyer, 2013) and nursing (Smith et al., 2009), the field requires significant physical skills in working with the human body. Until simulation, virtual reality, and/or haptic feedback advance significantly, these skills will be more difficult to learn via distance methods.

Similarly, Regan and Youn (2008) concluded in their review of web-based technology and the literature that asynchronous delivery of clinical experiences should not be attempted. Instead, the review showed successful programs

had a hybrid model where most clinical components were taught synchronously online or in a face-to-face format (Regan & Youn, 2008). Thus, the fields that require visual and verbal skills that can be transmitted via current technology may have better success in implementing distance clinical experiences.

If distance clinical experiences are viable, at least in some cases, then programs need guidance on how to implement them effectively. A search of the literature revealed research articles, theoretical papers, and professional standards that all spoke to the design of these experiences. Several themes emerged from these, including ethical considerations, the supervisory relationship, technology, and the supervisor's role.

ETHICAL CONSIDERATIONS

The first major theme in the literature is the need to address ethical issues. Ethics are a significant concern for clinical experiences, no matter the model of supervision. Also, professional fields have ethical codes and practices specific to their domain that apply in clinical experiences. When supervision is conducted at a distance, the same ethical guidelines apply, but additional factors must be considered. One ethical consideration in a distance clinical experience is accounting for the multiple legal jurisdictions that apply. The supervisee may be working in a jurisdiction with one set of regulations; the supervisor lives and works in a second jurisdiction with its own regulations. The university that houses the academic program is in yet a third jurisdiction with another set of regulations. The supervisor may not be familiar with the regulations in the other jurisdictions, or even local customs and conventions, making it difficult to guide a supervisee in these matters (Rousmaniere & Frederickson, 2013). Resolving which regulations apply to the supervisory experience and guiding the supervisee to be compliant must be deter-

mined in advance of the clinical experience (Roby & Panos, 2004). Roby and Panos (2004) also noted the complications that can arise from an international placement, potentially meaning the laws and regulations of another country must be interpreted correctly.

Another issue is confidentiality, primarily the confidentiality of the clients the supervisee is assisting as part of the clinical experience, in fields such as medical (Miller et al., 2003), counseling (Carlisle et al., 2013; Lund & Schultz, 2015), and clinical psychology (Wood et al., 2005). An early theoretical paper on the design of distance clinical experiences noted that confidentiality must be addressed due to the ease with which information can be copied, shared, and then spread widely through the internet (Olson et al., 2001). Brandoff and Lombardi (2012) note how they had to find a secure physical space in the clinical location in order to conduct live, synchronous video supervisory sessions that maintained the confidentiality of the clients undergoing therapy. Brandoff and Lombardi work in art therapy, so a key component of the clinical experience was to share visually the artwork being created in the clinical experience.

Another ethical issue noted by Rousmaniere and Frederickson (2013) is supervisor intervention. In their field of psychotherapy, it may be necessary for the supervisor to intervene in a situation where the supervisee is performing poorly. In this case, the potential for harm to the client outweighs the need to mentor and guide the supervisee. They note that a typical technology used in face-to-face supervision is a one-way mirror so the supervisor can observe the supervisee unnoticed, but be able to intervene immediately by moving to the adjoining room. The authors note this is a concern for their field when considering distance supervision, as it is not clear how an intervention could be accomplished at a physical distance.

ETHICS AND TECHNOLOGY

Some articles noted the connection between ethical requirements and the choice of technology. Carlile et al. (2017) noted that technology plays a role in enforcing ethical standards. They surveyed distance supervisors on the technology used to mediate communication between supervisor and supervisee. They found that the most popular software applications used for synchronous video communication are ones that are likely not Health Insurance Portability and Accountability Act compliant. They raise this as a concern for other programs to consider when selecting technology for the synchronous video component of a distance clinical experience.

This connection of ethics and technology is also seen in how standards for certain professions address distance clinical experiences. The code of the Commission on Rehabilitation Counselor Certification states that supervisors must “take necessary precautions to protect the confidentiality of all information transmitted through any electronic means” (2017, p. 23). Standards for school counselors also state that any technology used to support observations during supervision must be designed to maintain client confidentiality (Council for Accreditation of Counseling and Related Educational Programs, 2016).

SUPERVISORY RELATIONSHIP

The relationship between the supervisor and the supervisee is another significant issue that emerges from the literature on distance clinical experiences. As with ethical concerns, this aspect of the clinical experience interacts with what is afforded by the technology used. In their early thinking on this topic, Olson et al. (2001) speculated that a supervisory relationship mediated by technology could result in a lower sense of connection and collaboration between the two participants. Other theoretical articles also speculate that this

relationship may be attenuated by communicating only via digital technology (Carlisle et al., 2013; Forte, 2005; Miller et al., 2003). In contrast, one research study on counseling psychology students supervised via videoconference found that the supervisees perceived that the supervisory relationship was not affected by the technology (Reese et al., 2009). However, this study used both in-person and videoconferencing for supervision at different times, so the perception of relationships may have been built up by the in-person sessions.

Brandoff and Lombardi (2012) reflected on their supervision experience together concerning their distance supervisory relationship. This relationship was considered key to the distance clinical experience, as relationship is a crucial component of their field of art therapy. While they found web conferencing generally effective, one disadvantage was they lost the sense of looking each other in the eye while communicating. The authors further indicated that they had an existing professional relationship going into this supervisory experience, so their supervisory relationship was built in part on an existing face-to-face relationship.

Jones expressed similar concerns in a study of a clinical social work program (2015). Students attempting to role-play a scenario had difficulty due to not being able to look each other in the eye. They also claim that some face-to-face components are needed in a program to build interpersonal relationships so that online communication may build on those relationships.

TECHNOLOGY

Another category represented in the literature is the selection and use of technology. Some note the need for the supervisor and supervisee to have sufficient skill and training on the technology used during the distance clinical experience (Forte, 2005;

Stretch et al., 2012). One research study found that the university provided training for 9% of all the software used during the distance clinical experience (Carlisle et al., 2017). However, that may have included technology such as email that could be assumed to not require training due to the participants having existing skill. The technology must also be of sufficient quality to be useful. Jones (2015) found that the hardware used for synchronous video sessions varied widely in quality, which resulted in a poor experience for some students.

Technology can also be viewed as an opportunity to use supervision techniques that would otherwise not be feasible. For example, Heafner et al. (2012) note that the synchronous video system they used for supervision allowed for simultaneous live viewing of the supervisee by multiple supervisors. While supervision procedures were not designed around this feature, it was found helpful when an individual supervisee was struggling, and two supervisors decided to observe the student simultaneously and offer suggestions. Both watched the supervisee live in separate locations and were able to communicate with each other live about how to best coach the supervisee.

Another way technology could support supervision is through distance group supervision. Dotson and Bian (2013) speculate that group supervision can be an effective pedagogical tool as the interns working in separate sites could each share their experiences and how they handled various issues. This technique would give all the interns the benefit of learning from each other's setting and the issues encountered there.

The availability of technology support is another factor to be considered. When complex technology for synchronous video communication is involved, there is a risk of technical failure that could jeopardize the success of the clinical experience (Miller et al., 2003). Reese et al. (2009) rec-

ommend a reliable system of technical support to ensure the supervisor and supervisee will work through technical problems quickly.

Technical support and skill are themes also present in professional standards. The standard for school counseling notes explicitly that the technology used in supervision must function correctly and that the university must support it sufficiently (Council for Accreditation of Counseling and Related Educational Programs, 2016). Two standards bodies for counselors require the supervisor to be competent in all the technology used in supervision (Association for Counselor Education and Supervision, 2011; Commission on Rehabilitation Counselor Certification, 2017).

In some cases, the standards also prescribe technology or disallow it altogether. For example, the Association for Counselor Education and Supervision (2011) has a strong preference for using synchronous video for supervision, indicating supervisory interaction should come as close to a face-to-face communication experience as possible. As an example of rejecting distance methods by barring the technology, the school psychology standards require programs to use only physical face-to-face contact for supervision. The National Association of School Psychologists standard 3.4 requires the "preponderance of field-based supervision [to be] provided on at least a weekly, individual, face-to-face basis" (2010, p. 8).

SUPERVISOR ROLE

Several related issues emerged in the literature with respect to the supervisor's role. First, supervisors need more definition for their role and guidance in it (Dotson & Bian, 2013; Stretch et al., 2012). Beyond the activity of supervision and mentoring following the academic program's guidelines, the supervisors working with a distance clinical experience must do this in a way that is effective, even when mediated by

technology. Regan and Youn found that those supervising clinical instructors need to develop sound learning theory about clinical experiences in online delivery (2008). Such a theory would guide the role of the supervisor in the complex task of supervision while mediated by technology.

Another concern seen in the literature is the workload of the supervisor. Several articles speculate that there is a risk for distance supervisors to be overloaded with supervisees based on the perception that they no longer have to travel to be physically present to supervise (Olson et al., 2001; Roby & Panos, 2004; Wood et al., 2005). Practically, a supervisor could take on additional supervisees if all travel to sites for observation were eliminated. The requirement for observation of supervisee practice varies greatly across fields; however, the number of supervisees per supervisor could grow to the point that supervisors cannot spend enough time on each for a quality experience. Specifically, Lund and Schultz (2015) present the case of a supervisee having a critical, time-sensitive problem that requires the supervisor's attention. If the supervisor's time is fully scheduled to accommodate all the supervisees, there may not be time to attend to the urgent needs of a particular student.

CONCLUSIONS

For programs designing a distance clinical experience for the first time, the literature indicates it can be successful, particularly when the typical work in the field can be transmitted via current digital technology. The literature also highlights many factors that should be considered. Primary among them is to examine the program's standards to determine what is required with respect to distance delivery. In the case of school psychology, distance clinical experiences are essentially excluded (National Association of School Psychologists, 2010), so this could automatically exclude the

possibility of distance methods. The other areas identified, including ethical considerations, the supervisory relationship, technology, and the nature of the supervisory, must be designed and executed thoughtfully to maintain adherence to standards in the field and provide a quality clinical experience for the supervisee.

While technology has its own aspect of design in the literature, it should be noted that in a distance clinical experience, technology choices will affect the other aspects of that experience. As seen in examples above, technology can help or hinder efforts to comply with ethical practices and build the supervisor/supervisee relationship. Thus, the choice of technology should not be made independently of other factors in the design of the distance clinical experience, but concurrently with other aspects of the program to ensure the program needs can be carried out. Pragmatically, a program may have to design a program around nonoptimal technology that is already available from an institutional level. In the case where the technology is preselected, the policies and procedures must be well designed to ensure quality and compliance with standards.

Finally, the standards bodies in each field have a responsibility with respect to digital clinical experiences. It may be unwise to reference specific technology in standards as the pace of change in digital technology may be far beyond the typical revision cycle for standards to keep current. However, the standards bodies may write the standards to indicate the general functionality of the technology that can support a distance clinical experience in the field. They may also specify design aspects such as how ethical practice would be maintained, by identifying procedures or requirements for confidentiality of digital records that must be shared between supervisor and supervisee. Given the speed of development and change in digital technology, the standards bodies may

have to adapt by providing the relatively stable set of standards as they do now, but also providing more frequent guideline documents that act not as standards but best practices in standards implementation. As new technology such as virtual reality develops and programs elect to use it in a digital clinical experience, standards bodies can provide nonbinding guidance to address them. If the technology proves viable and effective, that guidance may be adapted into the standard in their next review cycle.

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