#### **REVIEW ARTICLE**

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## A consolidated model for telepsychology practice

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#### Abstract

**Objective:** In this paper, we identify available telepsychology guidelines, understand similarities and differences, and organize the contents into a model of core practice domains pertinent to a variety of applications of telepsychology practice.

**Method:** A scoping review of current telepsychology guidelines was conducted to identify, organize, and distill available telepsychology guidelines (Arksey & O'Malley, 2005, *Int J Soc Res Methodol*, *8*, 19–32).

**Results:** We identified overlap among five sets of telepsychology guidelines currently available and presented a consolidated model including nine practice domains influenced by practice setting and modality.

**Conclusions:** Telepsychology has the potential to address current issues in availability, accessibility, acceptability, anonymity, and affordability of mental health services but establishing or engaging in telepsychology practice has been daunting for many practitioners. Telepsychologists can disseminate applications of this model in different settings and with different modalities and this practice model can inform future development of competencies.

#### KEYWORDS

guidelines, telebehavioral health, telehealth, telemental health, telepsychology, training

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#### 1 | INTRODUCTION

Many people in the United States are impacted directly by the potentially debilitating effects of mental health issues and the costs of the effects of compromised mental health are sizable at over \$300 billion per year (Insel, 2008). Nevertheless, many individuals in need of immediate mental health care are unable to access care and have turned to emergency room care, which has seen a 28% increase in utilization for substance abuse and mental health complaints since 2006 (Turner & Stanton, 2015).

One out of five (20.1%) adults with a mental illness report they are not able to get the treatment they would like to receive (Mental Health America, 2015). Areas that are particularly lacking in readily accessible mental health care options are officially designated by the Health Resource and Services Administration as "Mental Health Professional Shortage Areas (MHPSAs)" (U.S. Department of Human Services, 2016). As many as 89.3 million Americans live in the approximately 4,000 MHPSAs. Even when practitioners are available, cost is still a crucial barrier. Cost of services and lack of insurance were cited as obstacles by 47% of those believing they needed mental health care but did not receive it (The Henry J. Kaiser Family Foundation, 2011). This indicates a clear, potent need for accessible care that is both personally and publicly economical.

#### **1.1** | The rise of telehealth and telepsychology

Telehealth, defined as "the use of telecommunications to provide health information and care across distance," has become one major area of growth in addressing the disparity in available mental health services (Nickelson, 1998). The term "telehealth" is the broad umbrella term that covers all health disciplines and includes both clinical and nonclinical health services provided remotely. The prefix "tele" means distance and the word that follows provides the specificity of which discipline(s) is(are) represented. So, "telebehavioral health" and "telemental health" cut across different disciplines and licensures that address mental/behavioral health remotely. Most relevant here is the term "telepsychology" which is defined by the American Psychological Association (APA, 2013) as, "the provision of psychological services using telecommunication technologies" (p. 3).

Telehealth and telepsychology are often most often thought of as methods for service delivery. However, it can be used as an adjunct to services, such as using text messaging for appointment reminders or web-based, coping skills training. Additionally, certain mediums (i.e., discussion boards, email, and text) are considered *asynchronous*, meaning there is a time-lapse between the transmission and reception of the communication (Grigsby, 2002). On the other hand, *synchronous* technology means communication occurs in real-time, such as videoconferencing, instant messaging, and online chat.

Many research studies and several meta-analyses have demonstrated the effectiveness of telehealth utilization. In a meta-analysis of 65 articles focused on the use of videoconferencing psychotherapy (VCP), researchers found that VCP is feasible, has been used in a variety of therapeutic formats with a variety of diverse populations, is associated with good user satisfaction, and has similar clinical outcomes to traditional in-person psychotherapy (Backhaus et al., 2012). Hilty et al. (2013) also found telehealth to be effective, feasible, and cost-effective. Their meta-analysis specifically suggested telehealth is effective for diagnosis and assessment across many populations (adult, adolescent, geriatric, and ethnic), for disorders across many settings (emergency and home health), and is similar to in-person care (Hilty et al., 2013). Findings indicate that telemental health is effective and increases access to care. Finally, the American Telemedicine Association (2013) included the following statement in their guidelines for video-based services:

To date, no studies have identified a patient subgroup that does not benefit from, or is harmed by mental healthcare provided through remote videoconferencing. Recent large randomized controlled trials demonstrate effectiveness of telemental health with many smaller trials also supporting this conclusion (p. 9).

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Telehealth is reducing disparities in cost and access in ways that traditional psychotherapy has been unable to do (Morland et al., 2013). It is likely that key technologies to be used in the future of mental health care include videoconferencing, "smart" mobile devices, cloud computing, virtual worlds, virtual reality, and electronic games (Maheu, Pulier, McMenamin, & Posen, 2012; Norcross, Pfund, & Prochaska, 2013). While these and other upcoming technologies provide an elegant solution to the limited access to mental health care, most mental health care providers are lacking specific and in-depth training in this area and accredited training programs are not yet required to address them in their curriculum. Telepsychology holds great promise for addressing critical public mental health concerns, but only if qualified providers are prepared to do so.

Toward this end, at least five national and state psychological organizations have published guidelines of varying specificity and content. Still, other guidelines exist from other health disciplines and subspecialties in the mental health realm. While these guidelines and principles share many common foundational ideas, they diverge in both small and significant ways. This culminates in a confusing web of ethical considerations, legal issues, technological considerations, and interpersonal considerations, among others. Any agency or individual practitioner interested in providing telepsychology services will be met with a challenging task of discerning these distinctions and organizing and implementing the many practical suggestions. The purpose of this telepsychology practice model shown in Figure 1 is to consolidate the telepsychology guidelines available and provide a framework for organizing this process that acknowledges the impact of the modality and the setting on the application of any guidelines.

#### 2 | A CONSOLIDATED MODEL FOR TELEPSYCHOLOGY PRACTICE

#### 2.1 | Distillation of available guidelines

The authors used a scoping review methodology to identify, organize, and distill available telepsychology guidelines (Arksey & O'Malley, 2005). The review set out to answer the questions: what guidelines are available for telepsychology practice; how are they similar and different; and how might they be understood together to equip current and future telepsychologists for practice. Scoping reviews are appropriate when addressing a broad topic or one that is in early stages of development (Arksey & O'Malley, 2005). Practice guidelines are not typically available for systematic searches through scholarly databases; therefore, multiple search strategies were employed to identify the available telepsychology guidelines. Subsequent to the searches, results were sorted and synthesized into a model to inform practice.

In the search process, the authors first conducted Google Scholar searches for "telepsychology," "telemental health," "telebehavioral health," and "telehealth guidelines." Second, the authors utilized an online resource list, which included guidelines from across disciplines and subspecialties (Pope, n.d.). Lastly, the authors used the reference section of each set of guidelines to iteratively cross-check for additional guidelines not previously discovered. Guidelines from other health and mental health disciplines were excluded and only guidelines specific to the practice of psychology were retained to give the model reasonable parameters. The guidelines examined and summarized in this paper include the guidelines endorsed by the APA, Australian Psychological Society (APS), Ontario Psychological Association, New Zealand Psychologists Board (NZPB), and the Ohio Psychological Association.

The guidelines were distributed among the authors so that each set of guidelines was reviewed independently by two authors and divided into practice-relevant categories as defined by each reviewer/author. Over a series of meetings, the group reviewed the identified categories for each set of guidelines and compared and contrasted them to each other asking "how is this category or guideline similar or different to others." A domain was established when consensus was reached by the team that there was a meaningful distinction from other groupings. A domain, as used in this context, is defined as a "sphere of knowledge, influence, or activity" (Domain, 2019). The

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**FIGURE 1** A consolidated model for telepsychology practice. The practice domains distilled from the available guidelines are shown and the import of the modality and the setting on the application of the guidelines are incorporated [Color figure can be viewed at wileyonlinelibrary.com]

purpose of the groupings was practical and not prescriptive. The process was informed by the authors' collective experience in training, research, and service delivery in the telepsychology field. This process culminated with the distillation of nine overlapping practice domains.

The domain divisions were informed by previous patterns in the literature and by what the authors deemed as important, unique concerns for telepsychology. For example, the rationale for making Multicultural Competence its own domain was based on how previous guidelines had categorized sections and based on the current importance and emphasis on this construct that applies to all components of being a telepsychologist. In many cases, multiple guidelines provided direction on a domain; however, some aspects of practice were only covered by one set of guidelines, but were deemed important and therefore included in the model. Any individual guidelines that were difficult to place into a single domain were discussed and resolved by the group. For example, it could be argued that many aspects of the "best practices" enumerated in these guidelines could be placed under the Ethics category. However, the authors ultimately decided to be succinct so that themes would not be redundantly presented throughout the matrix. It is also important to note that some domains are mutually exclusive and some are interdependent.

Table 1 includes the core telepsychology practice domains, the tasks or considerations that operationalize each domain, and where the standard is discussed in each set of guidelines. A brief description of the guidelines used and

#### **TABLE 1** Distillation of available guidelines

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| Telepsychology practice domain   | APA            | Australia    | New Zealand          | Ohio       | Ontario |
|--|----------------|--------------|----------------------|------------|---------|
| Administrative skills  |                |              |                      |            |         |
| Verification of identity and location/imposter concerns  |                |              |                      |            |         |
| Verify the identity of the client (or the decision-maker if<br>the client lacks the capacity to consent to services);<br>make it possible for the client to verify the identity<br>and credentials of the counselor      |                | 9.3<br>2     | 2.2.6<br>5           |            | 7.4     |
| Record keeping   |                |              |                      |            |         |
| Maintain notes of all contacts with clients and obtain<br>hard or electronic copies of online communications   | 5.4            | 8.3          | 3g                   |            |         |
| Billing  |                |              |                      |            |         |
| Outline financial arrangements, costs for types of<br>services, reductions for outages, overage fee<br>responsibility, etc.  | 3.5            | 13.1-13.3    | 3e                   | 3e         |         |
| Organization information   |                |              |                      |            |         |
| Provide clients with access to counselors' professional<br>information, including internet presence, ownership,<br>location, website, contact information, licensure, and<br>regulatory bodies                           |                | 12<br>9.5    | 3n                   |            |         |
| Insurance/coverage   |                |              |                      |            |         |
| Obtain liability insurance coverage for all e-services   |                |              | 3r                   |            |         |
| Assessment   |                |              |                      |            |         |
| Considerations   |                |              |                      |            |         |
| Know evolving online assessments, limitations, and standardization procedures  | 7.1<br>7.3-7.5 | 11           | 2.2.1<br>2.3.2<br>3p | 2.a<br>1G  | 7.1-7.3 |
| Protection   |                |              |                      |            |         |
| Protect all online assessment data, as well as the<br>integrity of the test instruments  | 7.1-7.3        | 11.1<br>11.6 | Зр                   |            | 7.1     |
| Ethics and law   |                |              |                      |            |         |
| Relevant ethical codes and guidelines  |                |              |                      |            |         |
| Refer to and enact the ethical codes of your country and/  |                |              | 1b                   | 3b         |         |
| or profession; enact these exactly as one would in<br>traditional in-person services. Practice according to<br>local, state, national guidelines for your field and for<br>telepsychology and telepsychology specialties | 2.1            | 1.11         | 1c<br>3n             | 1.a<br>1.b | 2.1     |
| Remote environment   | 2.1            |              |                      |            | 1.5     |
| Assess for distractions, confidentiality, safety, etc.   | 2.5            | 3.5          |                      |            | 2.5     |
| Relevant law   |                |              |                      |            |         |
| Jurisdiction; licensure  |                |              | 2.2.7                |            |         |
| Ensure that services are only provided within legal  | 8.1-8.4        |              | 3n                   |            |         |
| geographic borders; verify client's location   | 3.1            | 9.1          | 3r                   | 3b         | 8.1     |
|  | 1.5            |              | 4.5                  |            |         |
| Mandatory reporting  |                |              |                      |            |         |
| Be familiar with and carry out the local laws regarding<br>who is designated as a mandatory reporter of<br>abuse, what duties are expected of them, and what<br>the timelines are for reporting and to whom              | 3.1            | 9.2          | 4.5                  |            |         |

#### TABLE 1 (Continued)

| Telepsychology practice domain  | APA        | Australia             | New Zealand      | Ohio | Ontario    |
|---|------------|-----------------------|------------------|------|------------|
| Informed consent (content, age, ability to consent)<br>Due to unique telepsychology considerations (e.g.,<br>telephone counseling), verify a client's identity and<br>ability to consent prior to the onset of services   | 3.1        | 2.2                   | 2.2.6<br>3b<br>5 |      | 7.4        |
| Multicultural competence  |            |                       |                  |      |            |
| Regardless of modality, be equipped to acknowledge and<br>address multicultural considerations. Attend to any<br>special multicultural considerations for telepsychology<br>especially knowing the area in which you are providing<br>services  | 1.4<br>3.1 |                       | 3I-3m            | 2C   | 1.4<br>7.3 |
| Psychotherapy   |            |                       |                  |      |            |
| Client appropriateness  |            |                       | 2.5              | 1F   |            |
| Know who fits with which modality (consider research,   | 1.3        | 2.1.5                 | 2.6              | 3a   | 1.3        |
| repeated emergencies, tendency toward crises,   | 2.1-2.4    | 5.3                   | 3c-d             | 3.C  | 1.7        |
| access to resources, client's comfort, etc.); refer to in-  | 2.6        | 5.4                   | 3hr-j            | 3.h  | 2.2        |
| client's inappropriateness emerges after onset of telepsychology services   |            |                       |                  | 1e   | 2.4        |
| Informed consent  |            |                       |                  |      |            |
| Inform the client of risks, benefits, and alternatives to<br>telepsychology in language that is easily understood;<br>inform of patient and clinician rights and<br>responsibilities; establish patient-provider relationship;<br>make sure client has capacity to consent                    | 3.1-3.3    | 2.1                   | 3b<br>5          | 3.e  | 2.3<br>3.1 |
| Professional boundaries and communication   |            |                       |                  |      |            |
| Consider issues related to electronic communication   | 4.2        | 2.4                   | 2.2              | 3g   |            |
| (e.g., maintain professional language over text/email,<br>do not forward client's texts/emails, etc.); inform<br>client of when and how you are available and what to<br>do in an emergency; do not interact with clients via<br>social media and explain this policy at onset of<br>services | 4.4        | 4.1-4.4<br>10<br>12.3 | 3o<br>3q         |      |            |
| Privacy and confidentiality   | 3.2        |                       |                  |      |            |
| Regarding the use of encryption, transmission,  | 3.4        | 3.1-3.7               |                  |      | 4.1        |
| storage, and disposal of patient health information   | 4.1        | 6.1                   | 2.2.5            | 1h   | 4.2        |
| (a) create policies and procedures, (b) demonstrate<br>knowledge of these issues, and (c) inform<br>the client  | 4.3        | 8.1                   | 3f               | 3g   | 5.1-5.5    |
|   | 5.1-5.4    | 8.2                   |                  |      | 6.1-6.3    |
|   | 6.1-6.3    | 9.4                   | 3r               | 3e   | 10.1       |
| Handle outages/downtime   |            |                       | 224              | 2~   |            |
| decision-making; communicate plans for<br>downtime with clients at onset of services;<br>make contingency plans for downtime and<br>enact them if needed  |            |                       | 2.2.4            | Jg   |            |
| Be competent to provide the service   |            |                       |                  |      |            |
| Effectively provide the content of the treatment  |            | <b>D</b> 7            |                  |      | 1.1        |
| (i.e., teleservices vs. in-person)  | 1.1        | Pg./<br>5.1           | 2.3.3<br>3a      | 3d   | 1.2<br>9.1 |

(Continues)

#### TABLE 1 (Continued)

| Telepsychology practice domain  | APA        | Australia         | New Zealand                    | Ohio                       | Ontario    |
|---|------------|-------------------|--------------------------------|----------------------------|------------|
| Termination<br>Know when and how to terminate services; analyze<br>progress of treatment goals; develop follow-up plan;<br>refer if necessary; analyze satisfaction with<br>telepsychology services   |            |                   |                                | 3.i                        | 1.6        |
|   |            |                   |                                | 3.j                        | 1.7        |
| Research and evaluation<br>Research/evaluation protocols<br>Consider collecting data on outcomes, satisfaction, and<br>experiences with telepsychology for individual use<br>(i.e., treatment planning, continuous quality<br>improvements in service delivery) or research<br>Informed consent   |            | 7.1               | 3c                             | 3j<br>4e                   |            |
| Inform participants of the nature and purpose of the<br>procedures/research, their ability to opt out, and<br>their data usage only with permission<br>Information security of data<br>Keep data collected via internet surveys secure and only<br>collect data from clients with their expressed permission  |            | 7.3<br>7.4<br>7.2 | 3b<br>3r                       |                            |            |
| Dick according to the field of |            |                   |                                |                            |            |
| Knowledge of local resources<br>Know the resources (for emergencies or in-person<br>services when necessary), how to access them, what<br>do to address any lack of appropriate resources, and<br>have a way to communicate these to the client   | 1.5<br>1.6 | 5.3               | 2.4<br>4.1-4.3                 | 3f                         | 1.5        |
| Know what to do in an emergency or crisis and how to<br>connect clients with local resources; have an<br>emergency contact on file  | 1.5        | 2.3               | 2.2.6<br>2.3<br>2.4<br>4.1-4.5 | 3.F                        | 1.5        |
| Supervision   |            |                   |                                |                            |            |
| Telesupervision<br>Be familiar with relevant literature; be competent in the<br>technology used for telesupervision and the<br>technology used by the supervisee for service<br>delivery if applicable; know supervision models<br>appropriate for telepsychology; determine if<br>telesupervision is appropriate; give supervisee<br>feedback and receive feedback   | 1.7        |                   |                                | 4.b-4.e                    |            |
| Technical skills<br>Counselor knowledge<br>Demonstrate knowledge of available evolving<br>technology, uses of technological mediums, strengths,<br>limitations, and effectiveness of technological<br>mediums, and technological definitions and concepts;<br>maintain telepsychology competence and obtain<br>continuing education   |            |                   | 2.2.5<br>2.2.8                 | 1c<br>2b<br>5a<br>3g<br>3b | 1.2<br>9.1 |

#### TABLE 1 (Continued)

| Telepsychology practice domain   | APA     | Australia | New Zealand | Ohio | Ontario |
|--|---------|-----------|-------------|------|---------|
| Client communication   |         | 1.6       |             |      |         |
| Translate and communicate the logistics of technology use to clients   | 1.1-1.3 | 1.7       | 2.2.2       |      |         |
|  | 1.7     | 5.2       |             |      |         |
|  |         | 5.3       |             |      |         |
|  |         | 6.2       |             |      |         |
| Equipment use  |         |           | 2.2.5       | 1d   |         |
| Use appropriate equipment and technologies for clients'<br>needs, including connectivity, bandwidth, software,<br>special equipment, etc. Obtain skills relevant to<br>troubleshooting and preventing disruptions in<br>technology |         |           | 2.2.8       |      |         |

Note: The sections cited from each guideline are listed according to the outline system used in each respective document, for ease of reference. APA guidelines identify the guideline number followed by the number of the paragraph the competency is located within. For example, 4.2 in the APA column refers to the second paragraph under Guideline 4, "Confidentiality of Data and Information" in the APA *Guidelines for the Practice of Telepsychology*. The APS guidelines section is broken down to further levels of granularity by an outline-style label system (e.g., 13.1, 11.15.2, etc.). The New Zealand guidelines are reference by the ordering the major headings and the guideline under the heading (e.g., 2.2 refers to Potential Risks, the second guideline under the heading "Risks and Benefits of Telepsychology). The Ohio guidelines are referred to by the number of each section followed by the letter under each section (e.g., "3.i" refers to guideline "i," listed under the third section called "Termination Stage of Online Therapeutic Relationship"). The Ontario Psychological Association's guidelines are referenced by the guideline number, followed by the paragraph number under that guideline (e.g., "1.3" refers to the third paragraph under the first guideline "Competence").

how to locate the standards within the guideline are also presented. The list of domains is nonhierarchical and listed in alphabetical order.

#### 3 | GUIDELINES INCLUDED IN MODEL

#### 3.1 American Psychological Association

In 2013, the APA adopted the *Guidelines for the Practice of Telepsychology*, which addresses the delivery of psychological services via telecommunication technologies (APA, 2013). Developed by the Joint Task Force for the Development of Telepsychology Guidelines for Psychologists and informed by the *Ethical Principles of Psychologists and Code of Conduct* and the *Record Keeping Guidelines of the APA* (APA, 2002), these guidelines are divided into eight parts and address critical components of and special considerations for the provision of psychological services through electronic mediums. Telecommunication mediums here include telephones, mobile devices, videoconferencing, email, chat, and text messages, and the internet. The task force, comprised of members of the APA, the APA Insurance Trust, and the Association of State and Provincial Psychology Boards, identified vital components in the provision of telepsychological services (APA, 2013). One potential weakness of the APA guidelines is that they are aspirational and not prescriptive. On the other hand, the aspirational nature may allow for flexibility as telepsychology practice evolves.

#### 3.2 | Australian Psychological Society

The APS published the Ethical guidelines for providing psychological services and products using the internet and telecommunications technologies (Australian Psychological Society, 2011). The guidelines serve as a framework for

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psychologists either currently or considering using telecommunications to provide their services. They were written with the goal of covering a broad range of circumstances including the type of technology used (e.g., email, SMS texting, videoconferencing, etc.), and type of services being administered (e.g., counseling, assessment, research, consultation, synchronous and asynchronous services, etc.) and are organized into 13 subsections. These guidelines rely on the APS's established *Code of Ethics* (2007) to inform the recommendations made about best practices in the realm of telepsychology. The strengths of this document and the guidelines lie in its clear organizational style and its in-depth specificity about a wide variety of situations and technologies. There is a strong emphasis on maintaining professional boundaries online in both one's personal online presence, as well as interactions with clients. One of the primary weaknesses of this document is its lack of consideration of multicultural issues.

#### 3.3 | New Zealand Psychologists Board

The NZPB put forth guidelines, entitled *The Practice of Telepsychology* (NZPB, 2012), which were designed to supplement the NZPB's *Code of Ethics* (2002) and the *Core Competencies* (2006) in the context of rapid growth in the practice of telepsychology. These guidelines were designed to address the risks, benefits, and ethical challenges of telepsychology for psychologists practicing in New Zealand and to further ensure the protection of the public and the safe practice of telepsychology. A notable strength of the New Zealand guidelines is their clear, detailed account of the risks and benefits of telepsychology as well as their inclusion of group ethical principles, cultural issues and the import of cultural competence, and guidelines regarding administration of psychometric assessments via electronic means. However, the practice of telesupervision and aspects of service evaluation and quality improvement are not explicitly addressed.

#### 3.4 | Ohio Psychological Association

The Ohio Psychological Association guidelines are divided into eight sections and presented in the form of the knowledge and the related skill needed. One of the major advantages of the Ohio Psychological Association guidelines is the way they describe relevant knowledge and how to apply that knowledge in practice. The skills to be applied are also specific and relatively straightforward. However, the guidelines are not entirely comprehensive. For example, many areas related to administrative skills of telepsychology were not addressed.

#### 3.5 | Ontario Psychological Association

In 2015, the Ontario Psychological Association Communications and Members Services Committee drafted guidelines for psychologists providing telepsychology services entitled *Guidelines for Best Practices in the Provision of Telepsychology*. The guidelines are outlined into 10 sections for the best practice of using telecommunication technologies like telephone, mobile devices, videoconferencing, and chat. The guidelines refer to other resources for best practices for using email and social media. The guidelines are clear and succinct in providing psychologists suggestions and considerations when using telehealth. Although it offers some suggestions with specific examples, much of the document lacks prescriptive guidance. It also did not directly address research or the administrative or equipment side of telepsychology. The guidelines were developed from the College of Psychologists of *Ontario Standards of Professional Conduct* (2009), the Canadian Psychological Association's *Code of Ethics for Psychologists* (2000), and other relevant literature including APA's guidelines for telepsychology (2013).

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#### 4 | BREAKDOWN OF THE PRACTICE CUBE MODEL

The distillation of the available guidelines in Table 1 provides psychologists with the necessary content of telepsychology practice, but does not account for the context. How a domain is interpreted and applied must be viewed within the context of the telehealth modality used (e.g., videoconference vs. text) and the setting (e.g., school vs. hospital). This led to the development of a cube model that allows psychologists to view the construct of telepsychology as a whole, but also account for setting and modality. The cube was not designed with nonclinical applications such as distance education and administration in mind and the guidelines used should never take the place of responsible clinical judgment. The intersection of the practice domain with modality and setting is significant because there are often special considerations to take into account and one must not assume that mastering the component of "psychotherapy" means they have mastered it in every setting and with every modality.

By conceptualizing one small block at a time, one is able to consider the intersecting parts of the model. Using Figure 2 as an example, a psychologist providing counseling services over videoconferencing in a Veterans Affairs setting might have different considerations within the psychotherapy domain "block" regarding client appropriateness and knowledge of local resources than a psychologist working in a university counseling center. In this model, to successfully attend to all practice domains, a psychologist choosing to use one modality within one setting would have a stack of nine blocks to unpack.



**FIGURE 2** Dismantling the consolidated model for telepsychology practice. The importance of modality and setting on each of the nine practice domains are emphasized [Color figure can be viewed at wileyonlinelibrary.com]

### 5 | DESCRIPTIONS AND APPLIED EXAMPLES OF TELEPSYCHOLOGY PRACTICE DOMAINS

#### 5.1 | Administrative skills

Service providers will need to exhibit skills in administrative roles, which entails creating (i.e., in private practice) or critically examining (i.e., in an organized health care setting) relevant procedures and policies. The Administrative Skills section is subdivided into several subsections: verification of identity and location/imposter concerns, record keeping, billing, organization information, and insurance/coverage.

#### 5.1.1 | Verification of identity and location/imposter concerns

Psychologists should be able to verify the identity of the client (or the decision-maker if the client lacks the capacity to consent to the services) and also make it possible for clients to verify the identity and credentials of the psychologist. Particularly if providing services over the telephone or Internet, service providers should make efforts to make sure they are speaking or typing to the person intended, and it may be helpful to have a system in place for this verification, such as pre-established security questions. If working with minors in a school setting, the provider may also need to have a way to confirm that the parent consenting services is the legal guardian.

#### 5.1.2 | Record keeping

Record keeping includes maintaining notes of all contacts with clients and obtaining hard copies and/or electronic receipts of online communications. Certain considerations will need to be made depending on the specific setting, including whether or not physical records or electronic records are kept. Clinicians should know how record keeping will be viewed by others in an agency, such as a hospital, VA, or prison. In these settings, other staff members outside of the department have access to notes, which changes how they are protected. When documenting services, there should be a way to distinguish the type of service modality, such as whether the session was in-person or over video. This can be in the label of the appointment and/or a required component of a progress note so there is documentation of the type of session. If all services are provided via online written communication, such as email or chat, psychologists should consider if entire transcripts of sessions (which everyone could see) would be saved. It may be useful for special policies for protecting certain types of information in certain settings to be created. This is also an issue of privacy and confidentiality, as the two categories tend to overlap significantly.

#### 5.1.3 | Billing

Billing is another important administrative skill, and there should be outlined plans for financial arrangements, costs for types of services, reductions for outages, and average fee responsibilities. Administrators should consider if fees are required at all for the services. If fees will be taken, policies should be in place about how to receive fees, since telepsychology services will usually not be in-person. Reimbursement parity for distance services is continuing to evolve on a positive trajectory, but telepsychologists should check to determine any specific considerations (e.g., modality and payor type) that would limit or change the services they provide.

#### 5.1.4 | Organization information

In terms of organization information, clients should be provided with access to psychologists' professional information, including Internet presence, ownership, location, website, contact information, licensure, and regulatory bodies. Across settings, clients should be informed consumers and have the ability to access the clinician's professional information if needed.

#### 5.1.5 | Insurance/coverage

Finally, service providers should obtain liability insurance and coverage for all teleservices and should verify that their provider covers telepractice. If providing contracted services, for example, telephone counseling services in a correctional setting, it is important to clarify if the facility will provide coverage or if independent malpractice insurance is warranted.

#### 5.2 | Assessment

The implications of merging technology with assessments are covered quite thoroughly by the APA and APS guidelines. Although many of the traditional psychological assessments are designed for in-person administration only, the field should continue to move in a direction in which more assessments over telepsychology are valid and reliable. This will allow for an expansion of practice for clients who do not have access due to where they live or due to diversity reasons, such as the language they speak (Luxton, Pruitt, & Osenbach, 2014). If technology is used for assessments, one should be aware of what assessments are used online, the limitations, and standardization procedures. The considerations generally cluster around the ideas of quality and security. For example, data security is important for both the respondent and the test creator. Respondent data should be kept secure and backed up. Access to test materials should be limited to protect copyrights and unanticipated use. Preservation and awareness of psychometric properties is also an issue as some psychological tests may not be appropriate for online administration. It may be difficult to confirm the identity of the respondent, control the test taking environment, and maintain standardized protocols. Having a trained assistant on site may be necessary to circumvent many of these concerns.

#### 5.3 Ethics and law

Though all health care requires a clear ethical code and that practitioners firmly adhere to these codes, the issue of ethics is especially crucial in new areas such as telepsychology. Toward this end, the authors paid special attention to the ethics sections presented in the various guidelines that we examined. In examining the guidelines, several common areas emerged: referring to and enacting relevant ethical codes, practicing according to local guidelines, assessment of the remote environment, and referring to and enacting relevant law. Under the umbrella of "referring to and enacting relevant law," several subsections exist jurisdiction and licensure, mandatory reporting, and informed consent. The goal of this section is prevent harmful consequences for clients and proactively promote best practices in providing telepsychology care.

#### 5.3.1 | Relevant ethical codes and guidelines

On a fundamental level, a practitioner must be familiar with and abide by the relevant ethical codes of their profession that exist at the local, state, or national level. Telepsychologists take particular note of any additional

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regulations such as the need for an in-person session to establish the patient-provider relationship. Due to the relatively recent development of telepsychology, there may not yet be guidelines in place for your specialty or locality. In these cases, it is likely that organizations in the broader "telehealth" realm such as the American Telemedicine Association and its State Policy Resource Center or academic medical centers that utilize telehealth practices may provide guidance.

#### 5.3.2 | Remote environment

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Once familiar with the relevant guidelines, practitioners need to assess the type(s) of remote environments they hope to be reaching with their telepsychology care. For instance, is there a single remote clinic location which all clients will conduct session from, or are clients simply being contacted for services directly? In either case, there are specific concerns to be addressed, including the security, distractibility, and level of confidentiality possible in each possible remote location. Practitioners ought, to the best of their abilities, to ensure that the client's remote location (whether at a clinic site or at personal site of the client's choosing) is quiet and free of distractions, sound-proofed or out of earshot of others in the vicinity, and ideally in an identifiable location (e.g., at a known address) in case of an emergency or crisis situation. In cases where the client is being directly contacted at a location of their choice (e.g., phone sessions in the client's home), the practitioner should confer with the client about appropriate locations/situations for their sessions. As an example, since the Veterans Administration is leading the way in in-home care, they might suggest that patients should not be actively caring for a small child or eating a meal while having a telephone counseling session from their home (unless those are planned interventions) so that they can be fully engaged with and gain maximum benefit from the care.

#### 5.3.3 | Relevant law

Finally, the basic legal aspects of providing telepsychology services must be considered carefully. Perhaps most relevant to telepsychology is the issue of jurisdiction and licensure. Due to the unique reach of telepsychology services, one must ensure that services are only provided within legal geographic borders in which one is fully licensed. Therefore, client location must be verified, even in cases where they may be out of state or country. Another crucial legal aspect is mandatory reporting. Be familiar with and able to carry out the relevant local laws regarding who is designated as a mandatory reporter of abuse, what duties are expected of them, and what the timelines are for reporting and to whom. In addition to verifying a client's actual location, for purposes of informed consent (i.e., age and ability to consent) certain important client demographic must be verified. Due to unique telepsychology considerations (e.g., interventions lacking visual cues like text and telephone) one must be able to verify a client's identity and ability to consent before the onset of services. Additionally, there are other aspects of telepsychology that may be regulated such as types of telepsychology services permitted, insurance/billing requirements, and requirements for establishment of a professional relationship. Unfortunately, these can change with time and payor type and it is up to the provider to keep up to date with the current requirements. Hopefully as telepsychology grows, more standardization will occur.

Furthermore, collaborative partnership agreements must be considered. This may occur when clients are coming into other clinics/organizations to videoconference with their psychologist or when a technology platform is used to schedule appointments and send paperwork. When the telepsychology service creates a collaborative partnership, there should be a written agreement that addresses all administrative, clinical, and technical requirements of that partnership, as well as applicable legal and regulatory requirements. This can be accomplished through a Memorandum of Agreement (MOA) or a Business Associate Agreement (BAA) depending on the configuration and Health Insurance Portability and Accountability (HIPAA) covered entity status of the organizations.

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For example, if a third party faxes forms from the client to the counseling clinic, the third party should also be HIPAA-compliant. In prison and hospital settings, for instance, all staff members included in the partnership should be adequately trained. Shifts may rotate and several staff members may be involved on a rotating basis, and they should all have the same knowledge of duties and policies. It is also important to keep in mind that correctional and hospital staff workers are often overworked and underpaid, and psychologists should try to lessen the additional workload whenever possible to maintain a good partnership.

#### 5.4 | Multicultural counseling competence

Foundational multicultural counseling competence refers to the ability of a psychologist to acknowledge and address multicultural factors of the client and their impact on the working alliance, regardless of treatment modality. Multicultural counseling competence is defined as the ability of a psychologist to integrate into their interventions and conceptualizations elements of diversity that impact the client, psychologist, and therapy process (Fuertes & Ponterotto, 2003, p. 52). Such factors of human diversity include "salient group-reference factors that are meaningful to the individual...which may inform or shape individual identity, behavior, worldviews, values, attitudes, and/or beliefs" (p. 52). Factors of diversity may include race, ethnicity, gender, sexual orientation, religion, and socioeconomic status or background, disability status, or any other "psycho-social-cultural dimensions of living" (Fuertes, 2012, p. 573). The importance of multicultural counseling competence is reinforced in the 2008 Report of the APA Task Force on the Implementation of the Multicultural Guidelines from the APA, which outlines six guidelines regarding the incorporation of multiculturalism in both research and practice as well as in education, training, and organizational change (APA, 2008, p. 3).

As mental health service delivery expands into the world of technology and telepsychology, special multicultural counseling considerations for telepsychology should be acknowledged and addressed. These special considerations, built upon foundational multicultural counseling competence, refer to the ability of a psychologist or mental health provider to have knowledge of the areas in which they provide services. One possible disadvantage to using telepsychology is that nonverbal data on the client such as full body language and smell is unavailable. When it comes to understanding the client's individual culture fully, the provider may need to have a more curious stance and be willing to verbalize more questions to help fill any gaps from nonverbal information that is missing.

Providers may also encounter clients with little prior interaction with technology who may need additional guidance and reassurance. Sometimes special accommodations may be used such as providing paper copies of intake paperwork when it is normally emailed. Telepractice can pose facilitators and barriers for individuals with disabilities by incorporating technology into service delivery. For example, homebound individuals may experience access to services they were never able to access before, while individuals with auditory impairments may struggle with lip reading when services conducted over video are less clear than in-person. Just as psychologists strive to make in-person services accessible within the boundaries of their competence, telepsychologists should strive to make reasonable accommodations for different needs.

Additionally, there is an increased likelihood with telepsychology that the client currently lives in an area different from the provider. Therefore, the provider might have the added disadvantage of being culturally uninformed of the client's local area. Responsibility to understand the local culture and norms of the area they are serving is recommended in addition to working on understanding the client's individual culture. This can help give the clinician insight into how the environment intersects with the individual client and how external stressors may be at play. If providing videoconferencing services in a rural community mental health setting, for example, psychologists should gain knowledge of rural culture, the culture of the town in which the client resides, and of health disparities faced by clients in the area (Slamma, 2004).

Providers should also be cognizant of and address the experiences of clients at the intersection of multiple identities and stages of identity development and how identity development may be impacted by their cultural and

# geographic setting. This may include an understanding of clients as members of groups and larger systems. Providers should seek to understand the impact of the stigmatization of marginalized groups on the individual and the impact of local and state policies and legislation on local attitudes toward marginalized groups and on the morale of minorities (e.g., local and state legislation regarding the rights of lesbian, gay, bisexual, and transgender individuals).

Providers should be aware of any shortages of social support or resources for clients in underserved areas and aid clients in finding support. To attain this knowledge, providers may, if feasible, visit the area in which their clients reside to acquaint themselves with the cultural environment, over or underrepresented populations in the area, local and state policies and laws, available resources and local attitudes, values, and beliefs. Providers may also engage their clients in conversation about their experiences living in the area and how these experiences may contribute to their presenting concerns. Additionally, it would be beneficial for networking to occur between local providers to exchange information, resources, and cultural knowledge specific to that area.

#### 5.5 | Psychotherapy

In many ways, providing telepsychology service is not fundamentally different than the traditional, "in-person" means of health care; therefore, the basics of providing quality services still need to be fully addressed in such a manner that speaks to providers' commitment to competence as a practitioner generally. However, there are special technological considerations to be made in providing telepsychology services that require attention. In the following section, we highlight key issues to consider in providing competent and quality psychotherapy to clients via telepsychology. The Psychotherapy section is broken down into several subsections: competence, client appropriateness, informed consent, privacy and confidentiality, managing outages and downtime, and professional boundaries, which includes the topic of social media. Finally, the topic of termination of services is covered.

#### 5.5.1 | Client appropriateness

Telepsychology allows for access to an unprecedented scope of clients, and the issue of client appropriateness stretches across the service, administrative, and ethics and laws domains, but was ultimately housed in the Psychotherapy domain in the spirit of consolidation. In addition to the clinical skills of assessing appropriateness, administratively, ethical practice will stem from well thought out policies and procedures including having alternative referral plans in place so that individuals may receive care elsewhere. Assessing for appropriateness begins with being familiar with the relevant empirical research about this modality and any populations the client is a part of. A client's history should be considered including any repeated crises, a client's physical access to local resources (which may dictate treatment focus or approach and therefore a clinician's competence to serve the client), and a client's comfort with receiving telepsychology services as opposed to in-person services. In regard to crisis management, telepsychology clients may pose more of a risk because of the potentially less controlled setting (e.g., in home with access to means for self-harm), lack of visual cues in some modalities (e.g., telephone), lack of ability to confirm the identity of the individual (e.g., text/email), and in many cases, lack of ability to confirm the person's location unless they are at a designated access site.

Other factors should also be considered, such as clients exhibiting sensory limitations and clients having limited access or literacy with technology. Clinicians must determine if these factors can be accommodated for by providing loaner equipment or additional technological assistance. In some cases, exposing clients with lower technical literacy to telehealth can provide training in additional life skills that may have positive effects in other areas of their lives (e.g., persisting in the face of frustration with technology or practice typing or using email). If for any reason a client does not appear to be appropriate, refer to in-person services when necessary. Policies may be

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developed to address client inappropriateness that emerges after the initial onset of telepsychology services. Another example of someone inappropriate for telepsychology services is if the service is in-home and the client is using this service as an excuse to not leave their home, enabling their dysfunction. It is helpful to establish a priori guidelines for one's practice to help guide clinical judgment in determining eligibility.

#### 5.5.2 | Informed consent

As part of the initiation of any health services, informed consent must be fully obtained. The special consideration for telepractice includes informing the client of any possible risks, benefits, and alternatives to telepsychology services. This should be done in language that is easily understood by a lay audience. Perhaps most crucial is informing the client of their rights and responsibilities. This is a critical time to establish expectations and precedents for the patient-provider relationship—this includes attendance policies, communication policies, and other relevant boundaries. Underlying all of these steps should be a verification that a client has the capacity to consent to the above. In a training clinic, this should include agreement of recording sessions for supervision purposes.

#### 5.5.3 | Professional boundaries

Certain types of telepsychology modalities may require particular professional boundary-setting. For example, communication and treatment via email and texting should maintain professional language use and not lapse into more casual texting styles. Due to the ease of forwarding texts and emails, practitioners should clearly communicate that these messages are intended for the client only and should not be shared with others. Given that technology may be accessible around the clock to the client, another consideration should be clearly documenting when and how a practitioner is available, especially during emergencies. At the outset of service, this includes setting up clear business hours and days/times during which the practitioner is available to communicate with a client. Note that the now ubiquitous nature of social media poses new challenges for practitioners as they set boundaries with clients. Consider issues related to one's own professional and personal social media presence, and maintain boundaries by not interacting with clients via social media. Clearly explain your social media policies at onset of services, such as not adding one another as "friends" on social media. This is especially true in small or rural geographic areas, and if the client and practitioner share certain community interests, which may lead one another to be "suggested" connections by social media sites.

#### 5.5.4 | Privacy and confidentiality

Unique to telepsychology services is the emphasis on the technological aspects of privacy and confidentiality. Administratively, psychologists should create policies for security issues (including the use of encryption, transmission, storage, and disposal), and incorporate federal policies, such as HIPAA and the Health Information Technology for Economic and Clinical Health Act (HITECH). When necessary, providers consult and contract with technology experts to help ensure compliance. Service providers should demonstrate knowledge of security issues surrounding the general use of technology, encryption, transmission, storage, and disposal. Clinicians should know how their sessions are protected through encryption and the location of private information even when disposed. Then, fully inform the clients about security issues. Clearly explain how their digital health information will be protected and kept from any outside interference during the course of telephone, video, email, or text-based therapeutic services. In addition to protection of information during the

course of a session, inform a client of how any health information such as recordings, progress notes and reports will be stored securely. Remind the client of their rights related to the management of their private health information. For example, a telepsychologist conducting email therapy can instruct clients on steps they can take to protect the data such a strong password, use of encryption, and viewing emails from private location and the limitations of the modality.

#### 5.5.5 | Managing outages and downtime

Even though a practitioner should and may invest significant effort into building a reliable technological system for providing services, outages and downtime are likely unavoidable. In light of this fact, practitioners should create a plan for managing these inconvenient realities. This includes communicating plans for downtime with clients at onset of services, such as who will attempt to contact who in the case of a dropped video call or lagging internet connection. Explain to clients that this is an infrequent, but expected part of telepsychology services and to not be alarmed should it occur. Also, ensure that there are contingency plans in place for technology downtime and be prepared to enact them if necessary. For example, if an unreliable internet connection renders videoconferencing unusable for the day, a telephone session might be offered to a client as a means of continuing services on the expected timeline. However, when using more than one modality it is important to have planned ahead and "unpacked" the individual service domain cubes with the backup modality. Above all, maintain regular and clear communication with clients about these issues so that they are not made to feel abandoned or unsure of their treatment. Managing outages begins administratively with well thought out policies and procedures and iterative revisions based on the experience gained across technical problems.

#### 5.5.6 | Competence

Most basically, a clinician must first be competent in his or her ability to effectively enact the content of the chosen treatment, regardless of the mode of communication (i.e., telepsychology vs. in-person). No matter the means of transmitting the services, a provider must be extensively trained and prepared in treatments that they are offering to clients. This includes receiving proper supervision and feedback throughout the training process. For example, a psychologist conducting cognitive behavioral therapy over videoconferencing would not only need to be properly trained in this treatment but also be able to make proper adaptations to treatment based on any available best practices and clinical judgment. An example of an adaptation may be mailing worksheets or sending them over a secure file transfer electronically so that they client is able to follow along and participate in homework.

#### 5.5.7 | Termination of services

Finally, issues involving when, why, and how to therapeutically terminate services with a client of telepsychology services are just as relevant as for in-person services. This can be done by continually analyzing a client's progress toward treatment goals and assessing their continued need of services. In the event that termination appears to be appropriate, the practitioner should develop a follow-up plan, such as the boundaries for contact after termination or any necessary referrals to other services. It can also be beneficial to analyze client's satisfaction with telepsychology services to ensure provision of quality services (e.g., give a satisfaction survey that the client can fill out).

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#### 5.6 | Research and evaluation

Many of the guidelines give little to no attention to the topic of research and evaluation. While some may consider research a nonclinical application of telepsychology, other professionals consider research as a part of their professional identity that cannot be removed and is linked to their other roles. While evidence of all the positive things about telepsychology is mounting, there are still holes in the literature and professionals should strive to fill those when their setting and service delivery modality have something to add. Consider collecting data on outcomes, satisfaction, and experiences with telepsychology for individual use in treatment planning, continuous quality improvements in service, and research. Special considerations may be needed when using technology to conduct research such as ensuring security of the data and verifying someone's identity when necessary and data collection from a distance requires planning.

#### 5.7 | Risk assessment

Knowledge of and competency in risk assessment is also critical for psychologists and other mental health providers providing telepsychology services. The risk assessment portion of the practice model is divided into two subsections: knowledge of local resources and emergency planning.

#### 5.7.1 | Knowledge of local resources

Within their knowledge of local resources, providers should have knowledge of or be acquainted with local in-person and emergency resources. Further, providers should know how to access these resources and should know what to do to address any lack of appropriate resources. They should further be able to communicate this knowledge to their client. Should a psychiatric emergency arise (e.g., the client is at high risk for suicide or homicide or is psychotic), a psychologist providing telepsychology services will need to collaborate with entities or agencies at the client's remote site or locale to facilitate client care. Before the onset of telecounseling, the psychologist should acquire knowledge of local inpatient and outpatient facilities or services, locations and services of local state mental health authorities, crisis and emergency lines, and protocols in place for local authorities for mental health emergencies. This information should be readily available to providers should an emergency arise, and should also be communicated to the client within the session, in an agency or provider information pamphlet or booklet, or on safety plans provided to clients. If the client has access to email, this information could be securely delivered to them over email.

#### 5.7.2 | Emergency planning

Emergency planning is also vital for providers in the utilization of telepsychology services. Providers should have protocols in place regarding what to do in an emergency or crisis and know how to use said protocols. Combined with knowledge of local resources, they should further be able to connect clients to local emergency or in-person services. It is also recommended that providers have an emergency contact on file for the client. For example, if utilizing telepsychology with a correctional facility, providers should have a plan in place of who to contact within the facility in an emergency. They should further document their role in recommending suicide watch or administrative segregation and the consequences of those decisions, and either document how to follow-up with the inmate or appoint someone at the facility to do so in-person. In a community mental health setting, providers

should know who to call or coordinate services with in case of an emergency. This may include providers at a remote site, the local state mental health authority, a local crisis line, or local mental health care providers or facilities, such as a psychiatric hospital or outpatient clinic.

Providers should further engage in safety planning with at-risk clients and take steps to ensure the client obtains a copy of this safety plan promptly. Providers may, for example, arrange to have the copies of blank safety plans at a remote site and request that the client complete it during the session or have a plan in place to fax, email, or mail the safety plan to the client. Safety planning should include components such as predictors of a crisis and resources, and strengths the client has to work through the crisis. It should be made clear the clinic's or provider's limitations in helping with crises situations such as time of day and distance from the client and the client should be made aware of the local 24/7 organizations that are able to provide support when the provider cannot. Having this discussion and plan with a client early on in treatment will help provide for safety in times of emergency.

#### 5.8 | Supervision

Supervision in this case, may refer to providing in-person supervision for someone providing telepsychology services or providing supervision from a distance, also known as telesupervision. Both types of supervision have potential to reduce health disparities by increasing access to care either by preparing more of the workforce to use telepsychology as a means to reach more people or by allowing professionals needing supervision to work in underserved areas where in-person supervision may be difficult or impossible to secure. As in all areas, general competence in supervision including knowledge of relevant theory, research, and applications are foundational. When considering telepsychology, one should be familiar with the technology modality being used and any relevant literature. If conducting telesupervision, a contingency plan for outages is a must.

It can be beneficial to record counseling sessions so that the supervisor has the opportunity to watch the supervisee and client in session. How to do this depends on the clinic's current set up but should keep in mind that the videos and/or audio need to be kept on a secured and encrypted drive or server that both the trainee and the supervisor have access to through an external server, for example. Professional judgment is a large factor in deciding when a supervisee would not be appropriate for telesupervision.

Many professional organizations currently have requirements regarding specific amounts of required in-person supervision. For example, the APA allows for 50% of supervision time to be delivered using telesupervision as the modality, although it is less clear how state licensing boards may count telesupervision hours. It is not clear if telesupervision guidelines are specific to individual supervision or how access to onsite, in-person oversight during training or group supervision accounts for supervision time. Thus, knowledge of local and national regulations is important, especially as these rules continue to change.

To date, systematic research of the comparative effectiveness of telesupervision versus in person supervision is almost nonexistent in part due to conflicts with accreditation and legal requirements. Studies of mixed supervision models (part in-person/part telesupervision) compared to in-person only models give limited evidence that telesupervision is at least as effective as in-person supervision (Conn, Roberts, & Powell, 2009; Gammon, Sorlie, Bergvik, & Hoifodt, 1998). Additionally, much needed, exploratory evaluations that include practical advice and documented experiences of challenges, successes, and lessons learned are emerging in the literature (Brandoff & Lombardi, 2012; Chipchase et al., 2014; Dudding, 2006; Luxton, Nelson, & Maheu, 2016). Single case and qualitative methodologies are appropriate at this stage and both proximal (i.e., supervisory working alliance and satisfaction) and distal (i.e., graduation and licensure rates) should be investigated. Given that cohorts of psychology doctoral students tend to be small, programs may need to work together to increase sample size and generalizability of findings.

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#### 5.9 | Technical skills

A vital aspect of providing telepsychology services is acquiring technical skills and fluency relevant to the technology used. The technical skills section includes psychologist knowledge, client communication, and equipment use.

#### 5.9.1 | Psychologist knowledge

Psychologist knowledge refers to the understanding of available evolving technologies, the use of these modalities, the strengths, limitations, and effectiveness of technological modalities, technological definitions and concepts, general telepsychology competence, and the acquisition of continuing education in the field. For example, in a prison setting it would be important for a psychologist to have an understanding of the types of equipment that would be allowed for use in a correctional facility (e.g., no cell phones) and the effectiveness that has been demonstrated with these available technologies in correctional settings.

#### 5.9.2 | Client communication

Client communication involves the ability to translate and communicate the logistics of technology use to the clients. For example, in a school setting using videoconferencing equipment, a psychologist should consider the roles of the minor and the adult present in explaining how to accomplish technical tasks such as turning on the video system and how to adjust the volume or the camera frame.

#### 5.9.3 | Equipment use

Equipment use refers to not only knowing about available technologies, but actually using and maintaining the proper equipment, including connectivity, bandwidth, software, special equipment, and so forth. Telepsychology service providers may need to work closely with information technology departments or contract for outside technical support. In organizations where telepsychology services are already in process, it is still appropriate to make sure that the existing policies regarding equipment and support are adequate and communicate with administrators as needed. Finally, handling a technology disruption/outage should not be overlooked as a technical skill, as it is important to be able to troubleshoot and prevent disruptions in technology. For instance, if a psychologist is using videoconferencing equipment in a community mental health setting, he or she should be able to identify Internet connectivity problems if the video becomes slow or unavailable, and one should have an understanding of how to adjust wires and settings if there is a disruption in service, as well as if the problem is on the psychologist's end or the client's end. In many cases, this skill is built over time through a willingness to engage in problem solving and openness to learning how programs, hardware, networks, and systems operate.

#### 6 | CONCLUDING OBSERVATIONS

Due to the rapidly evolving nature of telepractice, the authors cannot guarantee that the information in this practice model is or will remain a complete and sufficient resource for establishing a telepsychology practice. Nevertheless, this model distills practice domains and serves as a strong organizer for planning and development. In the future, competencies built from available guidelines and best practices should be established in a systematic process involving experts in the telehealth field. Support and energy are mounting for developing for telepractice

competencies (Colbow, 2013; Hilty et al., 2015, 2017; Johnson, 2014; van Houwelingen, Moerman, Ettema, Kort, & ten Cate, 2016). Some are focusing on specific disciplines, while others are calling for an interdisciplinary effort (Hilty et al., 2017; Maheu et al., 2020). A coordinated effort across disciplines, will likely lead to the best and most utilitarian practices. Nursing and medicine have the longest history in telemedicine and with diversity of ideas comes better outcomes. Health care professionals will continue to work more in interdisciplinary teams in practice, therefore, it will be critical to determine best practices and competencies in a way that facilitates team practice and sharing of telehealth resources, platforms, and knowledge.

Psychologists can also consider the positive effects of working outside typical health disciplines such as veterinary medicine and agricultural extension, both of which have an increased focus on population health. This is in line with an OneHealth perspective, which is defined as an integrative partnership of multiple disciplines working locally, nationally, and globally to achieve optimal health for people, animals, and the environment (Centers for Disease Control, n.d.). In telepractice, the infrastructure for establishing, delivering, evaluating, and maintaining services may be shared whether the endpoint is a human, animal, or community. Thinking about how telehealth guidelines and competencies should or should not differ globally is another area for future research. Perhaps due to the largely Western cultural contexts of the selected guidelines (e.g., United States, Canada, and Australia), no significantly distinct cultural differences emerged between the guidelines.

The telepsychology practice model we present could inform needed work to apply this to functional and foundational competencies and delineate associated knowledge, skills, and attitudes. This practice model emphasizes the importance of setting and modality, but it is unable to flesh out specifics of all the number of potential combinations of these. It is imperative to move the field of telepsychology forward and ultimately, positively impact the difficulties in access which feed the negative outcomes of poor mental health described in the introduction, that practicing psychologists share best practices from their experience. Guidelines, by nature, are largely descriptive and there is a need for specific prescriptive suggestions for practice across disciplines and modalities. This is especially true for those with no access to specialized supervision by a psychologist with telepsychology experience.

Future research could take a more developmental focus on various age groups and special populations. This would include a focus perhaps on different types of settings not well represented in this paper, including schools, pediatric care facilities, elder care homes, assisted living facilities, hospice, and so forth. Evaluating the implications for training across these domains would be in line with the competency development modeling in psychology (Rodolfa et al., 2005) and could also move the field forward. Gonzalez et al. (2019) suggest that once basic counseling competencies are established, "learning by doing is a critical process for telehealth trainees at this juncture in our development," and other descriptions of telepsychology doctoral training are emerging (Dopp, Wolkowicz, Mapes, & Feldner, 2017; McCord, Saenz, Armstrong, & Elliott, 2015; McKay et al., 2013).

More and more individuals are becoming interested in telepsychology practice either on their own or in response to urgings from agencies and institutions to meet unique and emerging needs. Telepsychology is undeniably transforming health care and has significant potential to improve care and increase access to care. One can quickly become overwhelmed when trying to learn and adhere to the available guidelines. Each guideline varies in length and breadth and depth of content covered. The telepsychology model presented here identified nine key practice domains covered across multiple telepsychology guidelines that in practice must then be refined based on the setting and technology used. It is impossible for any one set of guidelines to provide a step by step protocol for each unique telepractice situation, but the cube model presented here organizes the necessary components and provides a framework to build solutions that meet diverse needs. Aspiring telepsychologoists can apply the cube as they design their telepractice. Training programs may use the cube to teach trainees to think flexibly and critically about how each practice domain could be applied in different settings with different technologies. Credentialing bodies for professionals and training programs may use the cube to inform policy decisions related to telepsychology practice and training.

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