

Professional Psychology: Research and Practice

Critical Incidents in the Marriage of Psychology and Technology: A Discussion of Potential Ethical Issues in Practice, Education, and Policy

Jason Van Allen and Michael C. Roberts

Online First Publication, October 31, 2011. doi: 10.1037/a0025278

CITATION

Van Allen, J., & Roberts, M. C. (2011, October 31). Critical Incidents in the Marriage of Psychology and Technology: A Discussion of Potential Ethical Issues in Practice, Education, and Policy. *Professional Psychology: Research and Practice*. Advance online publication. doi: 10.1037/a0025278

Critical Incidents in the Marriage of Psychology and Technology: A Discussion of Potential Ethical Issues in Practice, Education, and Policy

Jason Van Allen and Michael C. Roberts
University of Kansas

We identified critical incidents in psychologists' use of technology in their service provision with clients. Study coordinators sent messages out to various listservs requesting that practicing psychologists respond to an online survey for their reports of how the integration of certain technology advances (e.g., e-mail, electronic health records, social-networking websites, etc.) may have compromised client privacy or confidentiality. Twenty-eight participants responded to the survey and noted a variety of concerns, including themes of (a) unauthorized access to electronic client records, (b) inappropriate dissemination of client information via technology, and (c) unique client concerns associated with social-networking websites (e.g., Twitter, Facebook, etc.). We discuss ramifications and strategies related to these ethical concerns in education, practice, and ethical standards and principles.

Keywords: technology, critical incidents, ethics, confidentiality, internet

Psychologists today utilize a vast array of technological advancements in their interactions and service provision with clients (McMinn, Bearse, Heyne, Smithberger, & Erb, 2011). These advancements (e.g., electronic medical records, e-mail communication, telemental health, etc.) have proved beneficial in many ways, because they have the potential to make clinical settings more efficient, to improve psychotherapy services, to provide services to underserved populations (e.g., in rural areas), and to facilitate communication between health professionals in a variety of settings. Unfortunately, professional psychologists have also identified a number of disadvantages associated with the increased use of technology in psychological practice, including difficulties in managing electronic database and communication security, unauthorized access to client data, inappropriate disclosures of identifying information, and unethical interactions in the social-media context (e.g., Facebook, Twitter, etc.), among others (Barnett &

Scheetz, 2003; Koocher & Keith-Spiegel, 1998; Lehavot, Barnett, & Powers, 2010).

In response, organizational leaders have been warning psychologists about these challenges for years in publications on professional ethics and conduct. For example, more than a decade ago Koocher and Keith-Spiegel (1998) noted some of these technology-related concerns and reiterated similar concerns more recently (2008):

Modern telecommunications and computers have substantially complicated matters. Massive electronic databases of sensitive personal information can easily be created, searched, cross tabulated, and transmitted around the world at the speed of light. Even prior to the Internet and the World Wide Web, mental-health professionals expressed concerns about the threats posed to individual privacy and confidentiality by computerized data systems (Sawyer & Schechter, 1968, p. 192).

They further described how these technological advancements can create ethical and legal concerns, especially in terms of protection of confidentiality and privacy of clients. Noting the importance of these issues, the 2009 Presidential Task Force on the Future of Psychology Practice (American Psychological Association, [APA], 2009) recommended that psychologists be specifically trained "to use and integrate technologies to provide quality services" (p. 5). Although these warnings and recommendations are helpful, imbalance between technological applications and ethical standards may persist until the ethical and competent use of technology becomes integrated within instruction at the graduate education and professional levels (e.g., as part of continuing education).

To further complicate matters, regulatory, ethical, and legal standards in psychology are not advancing at the same rate as technological advances. This technological adoption and infrastructure mismatch is associated with a variety of potential challenges and concerns (e.g., psychologists operating without guidance from the professional organizations or with a consensus of the

Editor's Note. This is one of 19 accepted articles received in response to an open call for submissions on Telehealth and Technology Innovations in Professional Psychology.—MCR

JASON VAN ALLEN received his MA in clinical child psychology from the University of Kansas. He is a graduate student in the Clinical Child Psychology Program at the University of Kansas. His areas of research and practice include professional issues, technology in psychology, clinical child/pediatric psychology, and positive psychology.

MICHAEL C. ROBERTS received his PhD in clinical psychology from Purdue University. He is director of the Clinical Child Psychology Program at the University of Kansas. His areas of research and practice include professional issues, therapeutic outcomes and program evaluation, mental health and service delivery, and clinical child/pediatric psychology.

CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Michael C. Roberts, 2009 Dole Human Development Center, Clinical Child Psychology Program, 1000 Sunnyside Avenue, University of Kansas, Lawrence, KS 66045. E-mail: mroberts@ku.edu

professional community). The ethical standard 4.02 (c), Discussing the Limits of Confidentiality, of the American Psychological Association's Ethics Code (APA, 2010) states: "Psychologists who offer services, products, or information via electronic transmission inform clients/patients of the risks to privacy and limits of confidentiality" (p. 7). This standard refers to direct psychological services through technology, but does not address the extent to which psychologists should inform clients/patients (or be knowledgeable about) how technology can influence privacy and confidentiality in other ways, outside of direct communication between the therapist and the client/patient.

As an analogy, this technology/regulatory–infrastructure mismatch has been likened to citizens of the 1880s waking up with shiny new sports cars, but being forced to drive them on the transportation infrastructure in place at that time (e.g., grass and dirt roads; Maheu, 2010). In this example, the psychologist "driver" has the tools to do exciting new things, but the current infrastructure is not developed in a way to support "testing" these tools without considerable risk. The analogy extends further, in that technology (like many brand new cars) can be difficult to completely understand without some training, but that does not always prevent drivers from using the new car anyway. In the same way that one might worry about endangering oneself and the new car on an underdeveloped surface, many psychologists worry about the potential harm to clients inherent in the use of technology. This potential harm is significantly increased when the provision of psychological services using technological advances is conducted without the same regulatory depth offered within other contexts.

Behnke (cited in Martin, 2010) stated that the APA Ethics Code was written in a broad enough way to indicate that the same ethical standards apply in technology settings (e.g., social media) as they do in traditional contexts of practice; in the Introduction and Applicability section of the APA Ethics Code (APA, 2010), it states that the Ethics Code applies to activities "across a variety of contexts, such as in person, postal, telephone, Internet, and other electronic transmissions" (p. 1). However, the application of these ethical standards can be more challenging when the psychologist may be inexperienced with an advancing technology and therefore does not understand some of its inherent risks. Some psychologists may be less adept at utilizing new computer applications or slow to adopt new web-based features developed for psychological practice. Even those experienced in certain digital media and electronics may have a poor understanding of the potential for problems. Emerging generations and early career psychologists, because of their comfort level and familiarity with online applications, may have less caution or suspicion. Having grown up with technology is no guard against its misuse, however. In our experience, naïveté is demonstrated daily by psychologists in the posting of personal information on social-networking websites, for example, including potentially compromising photos and comments that might harm job prospects or psychotherapeutic relationships. Whatever the generation, psychologists cannot be expected to be skilled experts in all technology applications, or in technological security. Nonetheless, standards within the Ethics Code could suggest and outline appropriate consultation between psychologists and technology experts, or appropriate education from psychology organizations or institutions (such as universities or hospitals) regarding how various technological applications

may affect health care providers and their adherence to ethical standards.

Despite the above-mentioned concerns, few investigations have attempted to more directly assess the primary areas of technological concern among psychology professionals. In one of the few investigations in the literature, McMinn, Buchanan, Ellens, and Ryan (1999) surveyed psychologists about the rate of occurrence for a number of technology-related events in their practice (e.g., faxing client information to the wrong location, exchanging e-mails with clients), as well as their ethical evaluation of those events when they occur. Results from this survey suggested that professionals utilized technology frequently in their service provision, and that the majority of this technology use occurred in the administrative activities of a psychological practice rather than using technology for direct psychotherapy. However, much has changed in many ways since the late 1990s. Professionals and health care organizations and institutions are increasingly communicating and sharing documents and personal health information electronically because it provides a fast, efficient, and more cost-effective method of information sharing than facsimile or postal services. In addition, the number of professionals using technology for direct psychotherapy has increased significantly (e.g., the increased use of telemental-health services; Reed, McLaughlin, & Milholland, 2000; Van Allen, Davis, & Lassen, 2011).

Although an extensive updated survey by McMinn et al. (2011) has recently been conducted to help identify common technology uses for psychologists, identifying critical incidents of problems should be (a) useful for practitioners as cautionary examples; (b) important to potentially make future research more parsimonious and targeted to significant situations; (c) useful for providing helpful information for guiding training offered to graduate students and professionals; and (d) helpful to future revisions of the Ethics Code and other regulatory efforts. As called for by Baker and Bufka (in press), this critical-incidents survey is designed to gather information about problems that health professionals are encountering in their use of technology. For example, issues regarding client confidentiality and privacy are likely common ethical issues related to technology (as alluded to by Koocher & Keith-Spiegel, 2008), and such confidentiality issues have been reported as the area of greatest concern in certain therapeutic contexts (Barros-Bailey & Saunders, 2010). Considering that e-mail consultation, teleconferencing and videoconferencing, electronic client records, flash drive storage, Internet-based storage, and the use of social-networking media are very common today, new opportunities arise for violations of confidentiality and privacy that are directly related to the technology itself.

We report here a qualitative survey study to identify critical incidents that elucidate areas of concern among psychology professionals in regard to the integration of technology in their daily occupational activities. We expected that participants would most often report technology issues related to their or others' activities that involved interactions with clients or client data; therefore, initial study questions were focused on such instances. Nonetheless, we also noted the possibility of other technology difficulties that could interfere with professionals' service provision, so we included such possibilities in the survey. In addition, this study questioned participants on their experiences with clients and social-networking websites (e.g., Facebook and Twitter). The ethical issues associated with such websites have been discussed in

detail by Lehavot et al. (2010), but that survey only included graduate students. The present report uses survey responses to identify critical incidents in order to raise ethical implications, develop possible quantitative research to establish prevalence rates, foster discussions among professionals about more effective or safe technological options in various contexts, and evolve more specificity in the Ethics Code.

The Survey

Recruitment and Participants

Participants included 28 individuals recruited from a variety of listservs, including practice listservs and listservs of state psychological associations. Following listserv approval, a message was sent out to each listserv that described the purpose of our survey, noted institutional review board approval, and provided a link to the Qualtrics web-based survey. Consent was obtained from their participation in the anonymous survey. The e-mail solicitation for the survey of critical incidents asked for responses only from those who had technology issues to report. The e-mail solicitation requested participation from practicing psychologists and their incident responses indicated situations in practice settings. In an effort to keep the survey as brief as possible, demographic questions were not included and we did not solicit information regarding each participant's employment setting.

Questions

This survey and subsequent response-evaluations were conducted using the Critical Incident Technique (CIT), which has been used in numerous investigations as an effective small-sample methodology to identify important points of consideration for future research, regulations, and education (Bedi, Davis, & Williams, 2005; Patrick, Scrase, Ahmed, & Tombs, 2009; Schluter, Seaton, & Chaboyer, 2007; Woolsey, 1986). The CIT is especially advantageous for areas of inquiry that are not yet well established, that would benefit from exploratory theory development, and that include a wide range of potential circumstances and responses. A large sample of participants is not necessary to generate a range of critical incidents to analyze and discuss in terms of ethical implications. Strategies of the CIT used in this study include (a) establishing inclusion criteria for responses, (b) reviewing all responses before establishing general themes, and (c) sorting responses into identified themes. Inclusion criteria for responses in this survey required that responses referred to behaviors of a psychologist working in the field and that the behaviors were related to the use of technology (broadly) or social-networking websites, and that the behavior involved a psychologist's client(s) in some way. Given the introductory nature of this survey, the questions were very broad and psychologists were asked to describe their experiences in an open-ended format if they responded "Yes" to any of the questions listed below:

1. "Have you had any experience with client information being compromised through technology? In other words, do you know of any times in which someone has seen your client's information who was not authorized to see it through a breach in technology of any kind? A breach of technology may include someone accessing a file electronically when they were not authorized, someone

accessing an e-mail regarding a client that they were not authorized to access, someone purposively breaking into the network/client database that holds your clients' information, and so forth?"

2. "Have you ever heard about situations in which another professional's client information has been compromised?"

3. "Have you experienced any technology-related issues with clients other than the potential issues mentioned above?"

4. "What experiences have you had with Facebook, MySpace, Twitter, and so forth with regard to clients? Any experiences with these websites would be helpful, considering the recent emergence of these websites as potential concerns regarding privacy, confidentiality, and professional interactions."

Results for Category Selection

Similar to other surveys utilizing the CIT methodology (as described above), responses to the above questions were subsequently grouped into categories that may elucidate common areas of concern among respondents solicited via psychology listservs in the context of technology and client information or interactions. The most common concerns expressed by participants included (a) experiences—either personal or relayed from a colleague—in which client data were compromised (generally as a result of unauthorized access to patient information); (b) inappropriate e-mail communication regarding clients; and (c) unique challenges or concerns with social-networking websites. The discussion that follows focuses on each of these common concerns expressed by participants.

Discussion

Overall, survey responses suggest a variety of technology-related concerns among practicing psychologists. Responses were frequently associated with inappropriate access and/or dissemination of client data, and challenges with the use of social media. Although APA has noted that general ethical standards apply to the provision of psychological services in all contexts, psychology's governing body has not provided explicit standards associated with the advancing and permutating hi-tech world.

In order to promote discussion and research, and to help identify particular contexts noted as challenges in regard to technology, we have included some verbatim responses and descriptions of situations noted by the participants of this survey. Following each response and description is a summary of its unique challenges and suggestions for appropriate response.

Compromises to Client Data

Example 1 (Inappropriate E-Mail Communication Regarding Clients)

I sent an e-mail to a custodial caseworker regarding a minor child/client. Within a couple days I was receiving e-mails from people I did not know regarding the client. Apparently, the caseworker had forwarded the e-mail to others, who then forwarded it to others, and so forth. The information in the e-mail was only intended for the caseworker.

In this example, one can see how easy it is to have confidential client information inappropriately disseminated via e-mail.

Though it is more efficient for health professionals on busy schedules to utilize e-mail for interdepartment communication, the above situation demonstrates the inherent challenges of electronic communication that is exacerbated by its convenience and haste. Although professional psychologists cannot control the behavior of others with regard to e-mail (or removing confidential papers from an office two decades ago), psychologists can ensure that they only exchange confidential e-mails with other professionals they trust, they can remind each person they communicate with that the information is confidential and for “their eyes only,” and they can conservatively communicate with outside professionals via telephone or postal services. Although telephone and postal service communications are subject to compromises as well (e.g., mailed letters can be copied and disseminated inappropriately, and telephone conversations can be recorded or misinterpreted), it is likely that the convenience of e-mail makes such compromises more likely, especially in situations that involve unintended compromises (e.g., sending a message via “reply to all” vs. “reply” when responding to a listserv communication or an departmental e-mail).

Example 2 (Unauthorized Access to Patient Information)

We had a suicide at a hospital where I recently worked. The news spread through the hospital (patients and staff) like wildfire and before IT services could lock down her chart, several people had entered into her chart, ‘to see what happened.’

In this example, a dramatic event led to increased interest in a particular patient’s file and numerous hospital employees accessed this patient’s file to appease their own curiosity. It is likely that some of these staff members were not part of this patient’s treatment team, and there was no need or authorization for this specific access. Examples such as these elucidate the importance of information technology (IT) departments and effective software that can serve as effective “gatekeepers” for client records (cf., Richards, 2009).

Example 3 (Inappropriate E-Mail Communication Regarding Clients/Technology Policy Not Discussed Proactively)

Client finds my e-mail address online and sends me an e-mail regarding an update on status or to ask a question. There is a procedure for information going out from my [institution] (“PHI” in the subject line allows the message to be encrypted), but not coming in. Also, my Blackberry is not equipped to encrypt messages from patients so if a patient sends me one, anyone can open the message on my Blackberry.

This example illustrates the ways in which clients themselves can pose risks to their own confidentiality. Obviously, it is not reasonable for psychologists to be without e-mail addresses in order to avoid these types of interactions. However, it is possible for psychologists to keep their personal e-mail addresses private; in addition, some psychologists have more public e-mail addresses, but explicitly note that clients should only e-mail the psychologist for appointments because they do not deliver psychological services via e-mail. It may also be beneficial to tell clients

before the start of treatment that e-mail exchanges can compromise their confidentiality, as this may not be readily apparent to them. In addition, this example describes the dangers of interacting with clients via “Smartphones” or other portable devices with Internet access, because confidential information could easily be accessed by anyone who picks up such a device and the data can be “hacked” through cell provider networks and/or wireless Internet networks.

Concerns With Social Networking

Example 1

Have a Facebook account, but don’t use it frequently. But have seen the sites of some people I work with. If I was working with them professionally, I would feel embarrassed or even shocked at some of the personal information available.

As previously mentioned, there are many challenges associated with Facebook and other social-networking sites (such as MySpace and Twitter) in regard to client and psychologist interaction. A psychologist’s reputation and credibility could potentially be harmed in situations similar to that described above, based on the material posted to various websites. Psychologists should assume that their clients will search for their profiles on social-networking websites, and take the necessary precautions to ensure that they have effectively privatized their profiles to the degree that they desire.

Example 2

Patients have tried to find me on Facebook. If they mention that they use the site or ask if I do, I tell them to not attempt to “friend” me as I do not accept patients as “friends” on that site. I explain how their confidentiality could be compromised and that usually takes care of it. As an added measure, I don’t have my actual picture as the findable picture.

Even when psychologists have adequately addressed their desired privacy settings, they may still receive “friend requests” from clients. These possibilities force psychologists to accept, reject, or ignore the request, each presenting unique challenges of their own in a psychotherapeutic relationship. In this example, the psychologist takes a conservative approach by not accepting patient friend requests and is up front with clients and patients regarding the reasons for such an approach.

Implications for Psychologists

The above examples demonstrate the vast array of potential compromises to client data that might be directly related to psychologists’ use of technology. This survey provided critical incidents for ethical consideration in mental-health situations involving electronic records, e-mail, social networking, and others. Many of these ethical issues can be attributed to the swift adoption of new technologies without evaluating their potential risks; still, others may be aware of the risks, but partially dismissive of the likelihood that they themselves will face such consequences. Although the base rate occurrence of such events is unknown, it is a

psychologist's responsibility to limit potential risks to clients that can be attributed to their own actions; it may be a mistake for a psychologist to assume that such ethical concerns are rare, and thus that they do not need to attend to such risks.

Sometimes, organizations may hold significant responsibility to reduce risks of compromises to client information. For example, some hospitals utilize software that provides hospital administration the ability to track each instance of access to a patient's file, giving them a date, time, and username for each instance (Richards, 2009). Other hospitals only provide access to psychology records to physicians and psychologists. The latter is an example of a more proactive management strategy, whereas the former is more reactive but still provides organizations with the ability to address unauthorized activity if it occurs. Educational guidelines for trainees and professionals can also significantly influence how professionals use technology in their service provision. Training at this level is important, because it is unlikely (and probably not feasible) for the standards of the Ethics Code to be written with the goal of addressing these ethical concerns with technology in great detail. Instead, similar to other issues that are mentioned in the standards but not comprehensively described, issues of technology should be addressed thoroughly in graduate training, organizational training, and continuing education programs for trainees and professionals alike. Graduate instructors could incorporate discussion regarding specific issues related to technology in ethics courses (which are required for APA-accredited graduate programs and for professional licensure), and directors of training clinics could begin incorporating social-media policies for their trainee clinicians and/or as part of the informed consent process for the clients in their clinics.

At the individual level, professionals can limit their responsibility and involvement in compromising client confidentiality in a number of ways. In fact, proactive decision making and practice standards may be the most effective risk-reduction strategy of all, because it can provide psychologists with the opportunity to set predetermined expectations for clients who may not realize how their own confidential information can be compromised via technology applications. For example, psychologists could make their e-mail communication and social-networking expectations clear to clients during their initial visit. Kolmes (2010) has developed an extensive social-media policy (available for adoption and editing for other professionals at <http://drkkolmes.com/for-clinicians/social-media-policy/>) that can be given to clients before they meet with the psychologist in an effort to proactively address potential problems (e.g., compromises to confidentiality) that arise as a result of electronic communication. This social-media policy, and discussion of this policy with clients, is an important aspect of the informed consent process, because it helps clients understand the scope of their relationship with the psychologist and the contexts in which they can expect to receive responses and services from their psychologist. Kolmes encourages clients to understand that interactions via the Internet can represent information that would be included in a client's medical record and is available in the public domain. Specifically, Kolmes (2010) addresses the various challenges associated with Internet blogs and social-networking profiles, and how such activities relate to interactions with clients.

Other methods to reduce the likelihood that psychologists face client concerns on social-networking websites include altering

social-networking profiles in such a way to be less "visible" to a general search of the psychologist's name. The default privacy settings on Facebook, specifically, allow any Internet user to view all pictures and communications on the professional's profile, and there is a learning curve to effectively manage a profile's privacy settings separately for personal versus professional accessibility. Psychologists may also benefit from the knowledge that many of the social-networking sites include privacy settings that prevent individual profiles from being displayed when someone conducts a search under a specific name. Separate personal and professional social-networking sites might also be a viable solution if carefully maintained. Overall, creating blogs, social-networking profiles, and other individual web-based forums is a personal choice, and if maintaining privacy on any of these accounts proves difficult it may be beneficial to consider removing some accounts altogether.

The portability of various technology applications via cellular telephones (e.g., "smart phones"), tablets (such as the iPad), and similar electronics have introduced other unique challenges for psychologists in maintaining confidentiality for clients. For example, cell phones with Internet access present the possibility that psychologists may check their e-mail or social-networking profiles while they are traveling or otherwise away from a computer. However, the security infrastructure that may be available as a part of one's organization (e.g., e-mail encryption) may not be available on a mobile device. In addition, as discussed above, depending on one's phone security (or one's lack of awareness to those reading over your shoulder out in public) anyone could potentially see communications on your phone if it is left unattended and accessible; this could be especially likely at home in the comfort of family and/or friends. Psychologists should ensure that they limit these possibilities by protecting access to their phones (requiring a password to unlock the keys), or refraining from allowing e-mail applications to stay logged-in for continual access.

Other issues not mentioned by participants could represent areas of ethical concern in the use of technology. For example, video conferencing has become more common within psychology today, and downloadable data from these interactions also represent potential sources of compromises to confidentiality. Furthermore, the use of Internet-provided videoconferencing (e.g., Skype) opens doors to other types of confidentiality compromises (e.g., session recording by the software providers). In response, the Ohio Psychological Association (OPA; 2010) has established guidelines for psychologists delivering services via teleconferencing or other similar technologies. The OPA has noted that some state psychology boards would pursue investigations of psychologists who have been accused of misconduct associated with telepsychology, and that these state boards would seek information and standards established at national or even international levels when state guidelines or standards have not been established. Given that the APA has yet to create guidelines for the delivery of telepsychology services, interpretation of ethical standards in this context may vary greatly in parts of the country until uniform national standards have been established. It is important to note, however, that a new APA task force has recently been formed jointly with the APA Insurance Trust and the Association of State and Provincial Psychology Boards to establish telepsychology guidelines (noted by Baker, 2011, and Koocher, 2011). Although the APA Ethics Code is not likely to address technology issues in detail (as mentioned

above), the next revision of the Ethics Code may benefit from briefly mentioning the importance of issues in technology and from making note of the resources that will actualize from taskforces such as the telepsychology joint taskforce. Such a revision could fit nicely within Standard 3 (Human Relations) of the Ethics Code, which broadly discusses a variety of interpersonal, consent, and confidentiality standards.

Summary

These concerns for technology challenges to the ethical practice of psychology are not just for those less knowledgeable of various applications; even those with greater familiarity with technology such as social networking may be inadvertently compromised by the technology with which they engage, especially if they are unaware of the limits of security or potential breaches of confidentiality. Caution instilled through years of practice, through education in and knowledge of ethical standards and general principles, and skeptical adoption or rejection of some technology may best serve the public and the profession. Summarily rejecting technology advances seems as equally inappropriate as an enthusiastic and uncritical embrace of all technology, given its potential to better serve those in need and the efficiency with which it can deliver such services. The critical-incidents methodology utilized here provides thematic examples for education, research, and policy considerations in this area so that psychologists can more confidently and ethically adopt various technologies in an effective professional manner.

This survey was not without some limitations. As noted above, information regarding participants' professional settings was not assessed in an effort to keep the survey as brief as possible; such information could provide important data regarding whether technological issues are different in certain contexts as compared with others (e.g., in hospitals vs. group practice settings). This survey did not aim to establish a base rate for the various ethical concerns noted by participants; such a survey could provide important information to identify particular issues as foci for intervention using the current critical incidents as initial points. The field may benefit from future research designed to more comprehensively survey technology issues and their rates of occurrence in various psychological practice contexts (Baker & Bufka, in press).

Overall, responsibility for ethical and professional integration of technology in practice lies with individuals. Although psychology governance can do more (and is taking initial steps at this time) to provide guidance, psychologists would benefit from assessing the security of their electronic communications, from establishing social-media policies for themselves or their organizations, and from proactively weighing the risks and benefits each time they consider incorporating new technologies in their professional activities. Graduate programs, continuing education, and organizations that employ psychologists can help foster these proactive behaviors by addressing concerns related to technology on a regular basis in their ethics courses and training experiences. Although direct writings and guidelines from the APA might benefit the appropriate integration of technology in service provision, it is likely that any explicit mandates or discussion in ethical standards would reference the role of education (either personal or structured) anyway; thus, the profession may be better served by

integrating such considerations in various educational areas immediately, rather than waiting for policy guidance.

References

- American Psychological Association. (2009). *2009 Presidential Task Force on the Future of Psychology Practice: Final report*. Retrieved from <http://www.apa.org/pubs/info/reports/future-practice.aspx>
- American Psychological Association. (2010). *Ethical principles of psychologists and code of conduct*. Retrieved from <http://www.apa.org/ethics/code/index.aspx>
- Baker, D. C. (2011). *Leading psychology into the telehealth world: How does it work?* Available from <http://apapracticentral.org/advocacy/state/slc-telehealth-baker.pdf>
- Baker, D. C., & Bufka, L. F. (in press). Navigating legal, regulatory, reimbursement and ethical issues in an electronic age. *Professional Psychology: Research and Practice*.
- Barnett, J. E., & Scheetz, K. (2003). Technological advances and telehealth: Ethics, law, and the practice of psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 40, 86–93. doi:10.1037/0033-3204.40.1-2.86
- Barros-Bailey, M., & Saunders, J. L. (2010). Ethics and the use of technology in rehabilitation counseling. *Rehabilitation Counseling Bulletin*, 53, 255–259. doi:10.1177/0034355210368867
- Bedi, R. P., Davis, M. D., & Williams, M. (2005). Critical incidents in the formation of the therapeutic alliance from the client's perspective. *Psychotherapy: Theory, Research, Practice, Training*, 42, 311–323. doi:10.1037/0033-3204.42.3.311
- Kolmes, K. (2010). *Private practice social media policy*. Retrieved from <http://drkkolmes.com/for-clinicians/social-media-policy/>
- Koocher, G. P. (2011). *APA Council of Representatives meeting summary*. Available from <http://www.apadivisions.org/division-39/publications/insight/2011/04/cor-2011-summary.aspx>
- Koocher, G. P., & Keith-Spiegel, P. (1998). *Ethics in psychology: Professional standards and cases* (2nd ed.). New York, NY: Oxford University Press.
- Koocher, G. P., & Keith-Spiegel, P. (2008). *Ethics in psychology and the mental health professions: Standards and cases* (3rd ed.). New York, NY: Oxford University Press.
- Lehavot, K., Barnett, J. E., & Powers, D. (2010). Psychotherapy, professional relationships, and ethical considerations in the MySpace generation. *Professional Psychology: Research and Practice*, 41, 160–166. doi:10.1037/a0018709
- Maheu, M. (TeleMental Health Institute). (2010). *Online counseling and online therapy: An overview*. Available from <http://telementalhealth.com/transportation>
- McMinn, M. R., Bearse, J., Heyne, L. K., Smithberger, A., & Erb, A. L. (2011). Technology and independent practice: Survey findings and implications. *Professional Psychology: Research and Practice*, 42, 176–184. doi:10.1037/a0022719
- Martin, S. (2010). The Internet's ethical challenges: Should you google your clients? Should you 'friend' a student on Facebook? APA Ethic's Director Stephen Behnke answers those questions and more. *Monitor on Psychology*, 41, 32.
- McMinn, M. R., Buchanan, T., Ellens, B. M., & Ryan, M. K. (1999). Technology, professional practice, and ethics: Survey findings and implications. *Professional Psychology: Research and Practice*, 30, 165–172. doi:10.1037/0735-7028.30.2.165
- Ohio Psychological Association. (2010). *Telepsychology guidelines*. Retrieved from <http://www.ohpsych.org/professionalissues.aspx>
- Patrick, J., Scrase, G., Ahmed, A., & Tombs, M. (2009). Effectiveness of instructor behaviors and their relationship to leadership. *Journal of Occupational and Organizational Psychology*, 82, 491–509. doi:10.1348/096317908X360693

- Reed, G., McLaughlin, C., & Milholland, K. (2000). Ten interdisciplinary principles for professional practice in telehealth: Implications for psychology. *Professional Psychology: Research and Practice, 31*, 170–178. doi:10.1037/0735-7028.31.2.170
- Richards, M. M. (2009). Electronic medical records: Confidentiality issues in the time of HIPPA. *Professional Psychology: Research and Practice, 40*, 550–556. doi:10.1037/a0016853
- Schluter, J., Seaton, P., & Chaboyer, W. (2007). Critical incident technique: A user's guide for nurse researchers. *Journal of Advanced Nursing, 61*, 107–114. doi:10.1111/j.1365-2648.2007.04490.x
- Van Allen, J., Davis, A. M., & Lassen, S. R. (2011). The use of telemedicine in pediatric psychology: Research review and current applications. *Child and Adolescent Psychiatric Clinics of North America, 20*, 55–66. doi:10.1016/j.chc.2010.09.003
- Woolsey, L. K. (1986). The critical incident technique: An innovative qualitative method of research. *Canadian Journal of Counselling, 20*, 242–254.

Received February 3, 2011

Revision received June 30, 2011

Accepted July 6, 2011 ■