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ABSTRACT

This collection of resources focuses on several specific aspects of cybercounseling and its many ramifications. Some chapters are original articles written especially for this publication, while others were initially ERIC documents or articles in the ERIC/CASS Virtual Library. The sources were selected for their ability to present information on the topic of cybercounseling and to be of use to a wide range of counselors experimenting with or using cybercounseling. Chapters include: (1) "Building Virtual Communities in School Counseling" (R.A. Sabella and B. Halverson); (2) "Distance Career Counseling: A Technology-Assisted Model for Delivering Career Counseling Services" (Y. Djadali and J.F. Malone); (3) "Counseling over the Internet: Benefits and Challenges in the Use of New Technologies" (R.J. Sussman); (4) "E-Therapy: Practical, Ethical, and Legal Issues" (M. Manhal-Baugus); (5) "Skills for Online Counseling: Maximum Impact at Minimum Bandwidth" (K. Collie, D. Mitchell, and L. Murphy); (6) "The Internet, the Hidden Web, and Useful Web Resources: ERIC, ERIC/CASS, and The Virtual Library" (C. Kirkman, D.A. Frady, and G. R. Walz); (7) "Technology and the Continuing Education of Professional Counselors" (P.S. Leary); (8) "Cybercounseling and Empowerment: Bridging the Digital Divide" (C.C. Lee); (9) "Life in a Dot.Com World: Preparing Counselors to Work with Technology" (J. Lewis, D. Coursol, L. Khan, and A. Wilson); (10) "How School Counselors Could Benefit from E-Government Solutions: The Case of Paperwork" (R.A. Sabella); (11) "Career Guidance Services at Michigan Virtual University: Linking Careers and Education through Virtual Tools--A Lifespan Career Development Model" (P.M. Stemmer, Jr., B. Montgomery, and J.P. Moore); (12) "Expanding Professions Globally: The United States as a Marketplace for Global Credentialing and Cyberapplications" (T.W. Clawson); (13) "Evaluation

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Software in Counseling" (R.A. Sabella); (14) "Cybersupervision: Conducting Supervision on the Information Superhighway" (D. Coursol); (16) "Women's Internet Behavior: Providing Psychotherapy Offline and Online for Cyber-infidelity" (M.M. Maheu); (17) "E-Counseling: The Willingness to Participate" (L.M.H. Harun and R.H. Hamzah); (18) "International Consultation, Professional Development and the Internet: School Psychology Practice and the Future" (G.L. Macklem, R. Kalinsky, and K. Corcoran); and (19) "How People Learn (and What Technology Might Have to Do with It)" (M.P. Driscoll). (GCP)

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CyberBytes

HIGHLIGHTING COMPELLING USES OF TECHNOLOGY IN COUNSELING

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Garry R. Walz, PhD, NCC
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CyberBytes

**HIGHLIGHTING COMPELLING USES
OF TECHNOLOGY IN COUNSELING**



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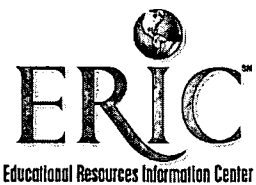
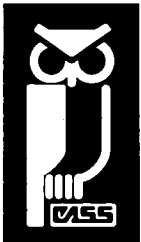


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Introduction

Information relating to cybercounseling is essentially of two types. The first type is that which focuses on providing a detailed and frequently lengthy discourse on the broad aspects of cybercounseling – the rationale for it and its potential uses and applications. A second type is more focused and deals primarily with a single aspect of cybercounseling – a new approach or relevant resource. *CyberBytes* is an example of the latter type, focusing on relatively specific aspects of cybercounseling and its many ramifications. It literally offers “bytes” which hopefully are tasty morsels, rather than a full course meal. Think *hors d’oeuvres*, rather than *entrée*.

The offerings in *CyberBytes* are highly diverse in content and focus. Some are original articles written especially for *CyberBytes*. Others were initially ERIC documents or articles in the *ERIC/CASS Cybercounseling Virtual Library*. Two are ERIC Digests written especially for *CyberBytes*. Whatever the source, to be included they had to meet two criteria: first, they present information on an important topic; and second, they have the potential to be useful to a wide range of counselors experimenting with or using cybercounseling.

How to Use *CyberBytes*

Because of the wide range of topics presented and the different foci present in the articles, *CyberBytes*, for many persons, is probably best approached as a resource where you pick and choose what to read rather than reading it cover-to-cover. Perhaps the most useful approach is to scan the full contents to get a sense of the breadth of the coverage as well as the focus of individual articles. You then can decide which are the articles you wish to probe in depth. *CyberBytes* can also be a highly useful reference source that you can turn to when you need information on a particular topic covered by the authors.

Chapter Content

Provided below are succinct statements regarding the content of each chapter. Scanning this section will assist you in deciding which chapters to read if you intend to be selective; or it may aid you in determining the order in which you read them if you intend to read the entire book.

The chapters have been selected for their range of diversity in issues but also their quality and content.

- In Chapter One, **Russell Sabella** and **Bill Halverson** discuss the usefulness of online communities and the way in which these communities can be used in school counseling;
- in Chapter Two, **Yas Djadali** and **James Malone** outline the development of distance career counseling models and argue for the continuing need for distance career counseling services;
- in Chapter Three, **R. J. Sussman** tackles the challenges of cybercounseling in a discussion of the advantages and disadvantages of e-mail, text-based chat, and video conferencing. He also discusses the issue of regulating cybercounseling;
- in Chapter Four, **Monique Manhal-Baugus** continues in a discussion of the ethical and legal issues involved in cybercounseling and e-therapy;
- in Chapter Five, **Kate Collie**, **Dan Mitchell**, and **Lawrence Murphy** model an online discussion providing extremely useful information for increasing positive e-mail and chat communications;
- in Chapter Six, **Chris Kirkman**, **Allen Frady**, and **Garry Walz** provide statistics on Internet size and use, while offering useful websites to keep counselors and educators informed;
- in Chapter Seven, **Pam Leary** discusses the ways in which technology is transforming continuing education for counselors;
- in Chapter Eight, **Courtland Lee** discusses the way in which cybercounseling can empower people and bridge the digital divide;
- in Chapter Nine, **Jacqueline Lewis**, **Diane Coursol**, **Lutfu Khan**, and **Annmaree Wilson** present a study on the perceptions, attitudes, and uses of technology in counseling and counselor education;
- in Chapter Ten, **Russell Sabella** again discusses the ways in which e-Government and e-forms may benefit school counselors through more readily accessible information and easy exchange of paperwork;
- in Chapter Eleven, **Paul Stemmer, Jr.**, **Bruce Montgomery**, and **J.P. Moore** discuss the intricate and highly useful career guidance services at Michigan Virtual University;

- in Chapter Twelve, Thomas Clawson discusses how U.S. professions can move into the global market;
- in Chapter Thirteen, **Russell Sabella** examines the technological issues that counselors should look at when buying software programs;
- in Chapter Fourteen, **Diane Coursol** discusses ways in which counselor supervision can take place through use of e-mail, videoconferencing, and other technological means;
- in Chapter Fifteen, **William Attridge** provides a brief history of communication using technology, discusses the current ways counseling can benefit, and looks to how the future can further aid counselors and clients alike;
- in Chapter Sixteen, **Marlene Maheu** discusses women's behavior on the Internet and the aspects of "cyber-infidelity";
- in Chapter Seventeen, **Lily Mastura Hj. Harun** and **Ramlan Hj. Hamzah** provide a study of cybercounseling – or e-counseling – in Malaysia;
- in Chapter Eighteen, **Gayle Macklem**, **Rachel Kalinsky**, and **Kristin Corcoran** discuss school psychologists' need to meet the needs of children's mental health and the ways in which computers can enhance their work; and,
- in Chapter Nineteen, **Marcy Driscoll** looks at the ways that technology can facilitate learning in students.

A Final Note

Hopefully, you will find *CyberBytes* both informative and stimulating. More complete information is available in *Cybercounseling and Cyberlearning: Strategies and Resources for the Millennium*, by John Bloom and Garry Walz. A new publication, *Cybercounseling and Cyberlearning: An Encore*, by the same authors, will be available in Fall, 2003. Have a pleasant and informative reading experience!

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Chapter One

Building Virtual Communities in School Counseling

by Russell A. Sabella and Bill Halverson

Introduction

What images or ideas do you have when you think about what the Internet can do for you in your work, or perhaps in your personal life? A first thought may be how the Internet makes readily available a vast amount of information and resources. Upon further reflection, you may recognize how the Internet facilitates the sharing of ideas, storing data, and communicating with others. Some may even see the Net as a global medium that brings people together in a shared environment to exchange ideas, learn, and engage in collaborative decision making. Shared environments on the Net are known by many names of which the most popular include online community, virtual community, virtual village, or invisible city.

Virtual communities have already been developed for a sundry of interests, such as in colleges to foster closer relationships among their graduates (Leibowitz, 1999); among media companies to unite fans of their shows (Gross, 1999; Lucas, 1999); for the disabled so that they may more easily overcome barriers to daily living (Kahn, 2000); with people interested in weight loss (Zetlin & Pflieger, 2001); for linking seriously ill children to play together from their respective hospital beds in a three dimensional interactive virtual community (Holden, Bearison, Rode, Rosenberg, & Fishman, 1999); to foster mentorship and support among mothers who are practicing physicians or medical students (Greenwood, 2000); providing online support for people who share a terrible fear of the dentist (Greenwood, 2000); or for teenagers to provide feedback for each other's writing works (Kehus, 2000) to name but a very few.

The true value of virtual communities came to light in the wake of the terrorist attacks occurring on September 11th, 2001. After this time, it is estimated that 33% of American Internet users read or posted material in chat rooms, bulletin boards, or other online forums. Although many early posts reflected outrage at the events, online discussions soon migrated to grieving, discussion and debate on how to respond, and information queries about the suspects and those who sponsored them (Horrigan, 2001). More than ever before, the Internet became a meeting place where people could gain solace more readily and easily than before.

School Counselors Can Benefit from Virtual Communities

School counselors also stand to benefit from developing virtual communities to better connect with important groups – students, parents, administrators, teachers, and others – as part of a comprehensive developmental guidance and counseling program. Indeed, effective school counseling programs are a collaborative effort between and among many important groups of people. Staff and counselors value and respond to the diversity and individual differences in our societies and communities (ASCA, 1997). One of the school counselor's roles is to coordinate resources and services to best assist children and families in fulfilling their needs. To effectively be student advocates, school counselors must work cooperatively with other individuals and organizations to promote the academic, career, and personal/social development of children and youth (ASCA, 1999). Creating and facilitating virtual communities can significantly increase a school counselor's ability to effectively provide a collaborative environment among important constituents. The remainder of this article focuses on the nature of virtual communities, including advantages and disadvantages, and resources that school counselors can use to begin building their own virtual communities at little or no cost.

How do I recognize a virtual community when I see one?

Virtual communities seem to be a quickly developing phenomenon which makes defining them difficult. Some say virtual community is but a learning tool, a tool of engagement, or a tool to get people together. Others

see it as a process, that is, an educational support process or way to strengthen idea development. According to Paccagnella (1997), “virtual communities” has become a fashionable term which is used as a useful metaphor to indicate the articulated pattern of relationships, roles, norms, institutions, and languages developed online. In 1993, Rheingold described the idea intuitively when he wrote, “Virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.”

The Foundation for Community Encouragement (see <http://www.fce-community.org/>) defines community as the following: “A community is a group of two or more people who have been able to accept and transcend their differences regardless of the diversity of their backgrounds (social, spiritual, educational, ethnic, economic, political, etc.). This enables them to communicate effectively and openly and to work together toward goals identified as being for their common good.” Using this definition makes the proliferation of community over the Internet more understandable because the Net is especially good at minimizing the effect of personal traits such as ethnicity on interaction.

In a study which investigates the practices and conditions that lead to a sense of community in middle schools, Belenardo (2001) uses the term “community” to refer to a shared psychological sense of coherence at a school. A sense of community, he writes, is the presence of beliefs, feelings, and relationships that connect members of a school community to each other; it provides a sense of belonging to something that transcends the situational relationships in an organization.

Advantages and Disadvantages of Virtual Communities

Each application within a virtual community (e.g., e-mail, listserv, webcam, bulletin board, chatroom) has its own advantages and disadvantages (White, 2001). As a whole, however, virtual communities afford the following advantages and disadvantages:

Advantages

- It is a place where people and information can be accessed anytime throughout the day or night, no matter what day of the year.
- Participants and experts from throughout the world can connect to orchestrate “brainstorming” sessions. Because participants’ expertise varies, ideas are typically more creative and innovative. New and varied perspectives can contribute to more effective problem solving and decision-making.
- Virtual communities are cost effective as most of them are free.
- Virtual communities can be organized and conducted in most any language and in multiple translations. Relatedly, virtual communities can foster connections with others of different racial, ethnic, and economic backgrounds, which, without the Internet, would probably not occur.
- Some people report that they feel less inhibited in their interactions in a virtual community.
- Many virtual communities are thought to have motivated renewed interest and action in citizenry, advocacy, and volunteerism.

Conversely, several disadvantages also exist and include:

- In public virtual communities, you sometimes may not know exactly with whom you are really interacting.
- Some participants may have hidden agendas or ill-conceived motivations for participating in a virtual community.
- Navigating through more intricate communities or communities that are allowed to grow too large can be chaotic and confusing.
- Some would argue that virtual communities contribute to a growing problem of social isolation.
- Although much easier today, one needs a relatively sophisticated level of technological expertise to create and participate in a virtual community.
- Public communities may preclude more sensitive, yet needed interactions.
- Potential members may not have the requisite hardware or software (e.g., webcam) to fully participate.

What do the most successful virtual communities include?

The most successful and sustainable virtual communities consist of many of the same components that are characteristic of successful “live” communities. They include foundation systems, participant goals, and shared online protocols (Rheingold, 1993). Foundation systems include appropriate computer hardware and software systems, the nuts and bolts of the community, which facilitates a seamless flow of multiple social interactions. Foundation systems may include webcams, music and video players, instant messaging, chat rooms, bulletin board systems, database (for collection and processing of data among members), polling, file and photo sharing, listserv, and application sharing. A second component of successful virtual communities are participant goals which help community members focus on a shared interest or area of expertise. Participant goals reflect a common desire for a particular knowledge base and related skill set. Finally, similar to live communities, virtual communities share a set of protocols or, simply stated, rules, guides and norms which direct members to interact with civility and organization.

Where do I find current counseling virtual communities?

According to Horrigan (2001), 84% of Internet users, or about 90 million Americans, say they have used the Internet to contact or get information from a group. How do such people learn about relevant groups? For one, relevant information about virtual communities is now typically provided by organizations such as professional organizations, churches, or schools. Many virtual communities are actually created by such groups as a way to better connect with their members. For instance, the American School Counselor Association (ASCA) has started and is continually building an online community for its membership. In this virtual community, members can contact each other through a directory, subscribe to e-mail listservs, read the ASCA magazine, and learn about valuable resources. Some businesses have created online communities for counselors such as the one found at Teachers.net (see <http://teachers.net/mentors/counseling/>) which includes an electronic bulletin board, columns, lesson plans, calendar, and much more. Similarly, myschoolonline.com (see <http://myschoolonline.com>) allows counselors to use online interactive tools to create content (e.g., calendars, newsletters, portfolio) for various groups of interest.

A second way to learn about relevant virtual communities is by using a specialized search engine such as one or more of the following:

<http://www.chatlist.com/>
<http://ecultures.homestead.com/search.html>
<http://groups.yahoo.com>
<http://www.topica.com>
<http://www.lsoft.com/catalist.html>
<http://www.tile.net/>

How Do I Create My Own Virtual Community?

In general, there are two options for building and operating a virtual community – create one on your own or partner with an existing community host. The latter option is preferable because to build a community on your own requires a great deal of technological expertise and expense, especially for purchasing needed software. Instead, you can create a virtual community using existing tools provided by a host such as one of the following:

<http://www.mylearningplace.com>
<http://www.delphi.com/dir-delphi>
<http://groups.yahoo.com>
<http://www.schoolnotes.com>
<http://www.topica.com>

Your virtual community may include several components from several different hosts. For instance, you may include an online course in which case you can use various free online “course development” applications such as <http://education.yahoo.com>, www.blackboard.com, or <http://www.webct.com>. In addition, you might add a discussion board or “knowledge thread” from one of these free chat room service providers: <http://www.ezboard.com>, <http://groups.yahoo.com>, <http://chatroomweb.com>, <http://www.talkcity.com>, <http://www.habbotel.com>, <http://clubs.yahoo.com>, <http://groups.aol.com>, <http://www.myassembly.com>, or <http://groups.google.com>.

Conclusion

When ARPANET, the Internet's precursor, came online in 1969, it did not have a foundational moment like the telephone's, when Alexander Graham Bell ordered his associate Thomas Watson: "Mr. Watson, come here, I want you." That sentence signaled an era of person-to-person communication over distance. In contrast, ARPANET connected a community. In its earliest days, it was a community of computer researchers at major U.S. universities working on similar problems. Since then, the Internet's capability of allowing many-to-many communications has fostered communities of various sizes and sorts (Horrigan, 2001). The rapidly growing development of virtual community networks seems to be having a binding effect on increasingly fragmented communities and also providing a voice for segments of society that have been traditionally ignored.

Virtual communities are already demonstrating that they can help to lower the barriers to democratic participation (e.g., ITTA, 2000; Oldenburg, 1999). According to Allen (1994), current trends and issues in education, and specifically in school counseling, indicate the importance of collaborating for student success. With the proliferation of computer and networking technologies at their finger tips, school counselors can effectively forge greater collaborations among various stake holders by creating virtual communities – electronically supported "meeting and sharing places."

References

- Allen, J.M. (1994). School counselors collaborating for student success. (ERIC Document Reproduction Service No. ED 377 414).
- ASCA, (1999). Position statement: The role of the professional school counselor. Available online [<http://www.schoolcounselor.org/content.cfm?L1=1000&L2=69>].
- ASCA, (1997). Position statement: The professional school counselor and comprehensive school counseling programs. Available online [<http://www.schoolcounselor.org/content.cfm?L1=1000&L2=9>].
- Belenardo, S.J. (2001). Practices and conditions that lead to a sense of community in middle schools. *Bulletin*, 85(627), available online [http://www.principals.org/news/bltn_prac_cond1001.html].
- Greenwood, A. (2000). How the net can make a difference. *New Statesman*, 129(4494), pp.24-26.
- Gross, N. (March 22, 1999). Building global communities. *Business Week*, Issue 3621, p. EB42.
- Holden, G., Bearison, D.J., Rode, D.C., Rosenberg, G., & Fishman, M. (1999). Evaluating the effects of a virtual environment (STARBRIGHT World) with hospitalized children. *Research on Social Work Practice*, 9(3), pp.365-382.
- Horrigan, J.B. (2001). *Online communities: Networks that nurture long-distance relationships and local ties*. Washington, D.C.: Pew Internet & American Life Project. Available online [http://www.pewinternet.org/reports/pdfs/PIP_Communities_Report.pdf].
- International Technology and Trade Associates (ITTA) Inc. (2000). *State of the Internet 2000*. ITTA, 1330 Connecticut Avenue, NW, Suite 210, Washington D.C. 20036-1704. Available online [<http://www.itta.com/internet2000.htm>].
- Kahn, J. (February 7, 2000). Creating an online community – and a market – for the disabled. *Fortune*, 141(3), pp.188-190.
- Kehus, M.J. (2000). Opportunities for teenagers to share their writing online. *Journal of Adolescent & Adult Literacy*, 44(2), pp.130-137.

- Leibowitz, W.R. (1999). Alumni offices use electronic media to forge closer ties with graduates. *Chronicle of Higher Education*, 46(8), pA45
- Lucas, S. (October 18, 1999). CBS builds interactive web communities. *Brandweek*, 40(39), pp.61-64.
- Oldenburg, R. (1999). *The great good place: Cafés, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community*. New York, NY: Marlowe & Company.
- Paccagnella, L. (1998). Getting the seats of your pants dirty: Strategies for ethnographic research on virtual communities. *Journal of Computer Mediated Communication*, 3(1). Available online [<http://www.ascusc.org/jcmc/vol3/issue1/paccagnella.html>].
- Rheingold, in L. M. Harasim, Ed., (1994) *The virtual community: Homesteading on the electronic frontier*. Available online [<http://www.rheingold.com/vc/book>].
- White, N. (2001). *The tools of online connection*. Available online [<http://www.fullcirc.com/community/connecttools.htm>].
- Zetlin, M., Pflieger, B. (October 29, 2001). Creators of online community. *Computer World*, 35(44), p. 34-36.

Chapter Two

Distance Career Counseling: A Technology-Assisted Model for Delivering Career Counseling Services

by Yas Djadali & James F. Malone

Abstract

The purpose of the present article is to demonstrate the need for distance career counseling services, and to present an evolving counseling model that combines the best practices of face-to-face career counseling with technology. The article begins by tracing the historical development of distance career counseling models, and then illustrates several rationales for applications of technology to career counseling models. Ensuing discussion includes an examination of the following topics: 1) client expectations and education regarding both face-to-face and distance career counseling services, 2) the integration of technology with career counseling, 3) counselor recruitment, training, and supervision, 4) ethical issues and credentialing, 5) assessments, web resources and written communication, 6) appraisal of client satisfaction and program effectiveness, 7) identification and handling of difficult situations, and 8) the establishment of mutually beneficial partnerships among career services, business, and technology professionals.

Distance Career Counseling: A Technology-Assisted Model For Delivering Career Counseling Services

In a constantly evolving society, career counseling professionals must continuously re-evaluate techniques and delivery systems in order to provide meaningful and effective services to the various populations they serve. By the year 2006, there are predicted to be over 900 million Internet users worldwide (Attridge, n.d.). Technological advances have provided opportunities for greater outreach and more efficient and expansive services in all realms of society. Distance learning is a prime example of how information technology continues to be used to access previously underserved populations (Sampson & Bloom, 2001). According to survey data from the Gallup Organization, almost 25% of college students report using the Internet as an information source for career planning, a number that is likely to increase rapidly as more students of the "Internet generation" progress through the educational system (Malone, Miller, & Hargraves, 2001). Even at middle and high school levels, counselors are using the Internet more and more to assist students in accessing career-related information (Refvem, 2000). However, the use of computer-related technology is not an entirely new event within the field of career counseling.

Technology-Assisted Distance Career Counseling Interventions: History, Rationales, and Delivery Models

History of Distance Career Counseling Practices

As with most technological advances in our society, the development of a technology-assisted distance career counseling model did not happen overnight. Over the last 30 years, counselors and clients have enjoyed the benefits of computer-assisted guidance and assessment models, as well as sophisticated computer information dissemination systems. Bloom and Walz (2000), among others, have recounted the historical relationship between counseling services and computer technologies. The trend toward increased Internet use and reliance on technology to assist the counseling process will continue to progress steadily for several reasons which include: 1) greater cost-effectiveness, 2) a general increase in use of Internet applications both inside and outside the home, and 3) continued pressure for distance learning services (Sampson, 2000).

We are presently in another stage of development of this continuously emerging practice delivery model. Current trends in counseling literature as a whole continue to address position and point-of-view articles expressing

concerns about distance career-related interventions (lack of technological access for some, invalid online assessments and information, overload of Internet resources, confidentiality, and many other challenging issues). However, we are also seeing increased examples of actual practice models and techniques that go beyond the use of computers to assist with assessment, information retrieval, and job search strategies. These models are seeking to make use of technology to provide actual career counseling where the counselor and client work from the strength of the counseling relationship. Rosenfield (1997) has offered a comprehensive treatment of counseling by telephone. Harris-Bowlsbey, Riley Dikel and Sampson (2002) offer a comprehensive guide to counselors and clients who choose to use the Internet in career planning.

Boer (2001) reports from the field on many actual examples of online counseling that help newcomers understand both the limitations as well as the encouraging results emerging from career counseling over the Internet. Much of the research at this stage is qualitative and exploratory, but trends are appearing which hold out positive promise for eventual theory-based practices.

Rationales for Distance Career Counseling Services

Sampson and Bloom (2000) cite a number of compelling reasons that counselors and clients are choosing to engage in distance career counseling. Counselors who are trained in distance career counseling techniques may help clients enhance already existing face-to-face services by providing an extension of availability to their own clients, and they may also provide extended supplemental help to clients in a value-added partnership arrangement with other counseling individuals or entities. The distance model also allows counselors to extend counseling availability to individuals because of factors related to convenience, location, physical challenges, personal communication style preferences, and a desire to access state-of-the-art services which are not available to them through face-to-face options. Thus, populations who may have been underserved in the past (i.e., commuter students, transfer students, university/college alumni, persons with disabilities that inhibit mobility, and persons who live in remote areas) now have more access to comprehensive career counseling services.

In addition, recent demographic trends have recognized a growing number of returning adult students, whose needs may differ from those of traditionally-aged undergraduate students served by university career counseling programs (Luzzo, 2000). Distance career counselors can assist this population of returning students as well as other clients in need of personally meaningful access to enormous Internet resources for career information and exploration. The Internet also provides counselors access to resources and services delivered by a wider range of specialists, which allows counseling sessions to be better tailored to individual client needs (Sampson, 1999b).

Types of Distance Delivery Models

In selecting the most effective and useful technology-assisted models for delivering distance career counseling, the most promising options may include various combinations of telecounseling, synchronous and/or asynchronous chat or e-mail-supported counseling, video-assisted live counseling, and guided use of Internet resources to support the client and the work of the counseling (Sampson & Bloom, 2000). The present article focuses primarily on telecounseling, with e-mail-support and Internet resources.

Data already exist suggesting that clients would find telecounseling effective and convenient, despite the lack of non-verbal communication (Coman, Burrows, & Evans, 2001). Telecounseling not only provides clients with greater access to services, but also with relative anonymity, which may be perceived as a safer venue for self-disclosure. Research has also demonstrated the success of a number of different structured counseling programs via the telephone (Rosenfield, 1997).

Client Education and Expectations About Face-to-Face and Distance Career Counseling Interventions

Before engaging in any form of career counseling, clients must be informed about the benefits and realistic expectations of the process. In other words, they must understand the nature and effective outcomes and limitations of career counseling. The National Career Development Association (NCDA) website (<http://www.ncda.org>) presents helpful information under the title *Consumer Guidelines to Selecting a Career Counselor*.

Integrating distance career counseling models and practices may further influence a client's outcomes and expectations. Their understanding needs to be "fine-tuned" further with respect to the specific terms, conditions,

risks, strategies, advantages, disadvantages, and logistical communication realities and ethical issues inherent in distance career counseling. Clients engaged in both face-to-face and distance counseling services need to recognize their own responsibility in the process. Even in a distance model, clients are expected to be available for scheduled career counseling sessions and fully engaged in the career counseling process. This commitment to the counseling relationship also includes responding promptly and appropriately to e-mails, a primary form of communication in-between telephone sessions.

Just as in face-to-face counseling, it is necessary that clients sign an informed consent agreement when receiving distance counseling, recognizing the risks and responsibilities within a distance counselor-client relationship (Malone, Miller, & Miller, in press). Clients may also reference the NCDCA website for *NCDCA Guidelines for The Use of The Internet for The Provision of Career Information and Planning Services*.

Reactive, Distance Career Guidance Services Versus Proactive, Systematically Delivered Distance Career Counseling Programs

The primary difference between reactive, distance career guidance services and proactive, systematically delivered distance career counseling programs is that the former are delivered “on demand,” whereas the latter allow for a “planned and anticipated” course of counseling. Evidence from meta-analytic studies conducted by Brown and Krane (2000) supports the power of individualized career guidance components, such as counselor-assisted interpretation of assessment and written action plans, to provide effective outcomes for clients when these practices are delivered systematically within a supportive counseling relationship.

The Internet is playing an increasing role in how persons learn and behave, so it seems only natural that this tool be applied to career counseling programs, where clients can use it for career assessment, exploration, and other helpful activities. Walz (2000) states that it is our responsibility as counselors and educators to prepare our clients for “informed and skillful use of an increasingly important resource,” one that he identifies as “the most ubiquitous of all learning resources” (p. 408).

Sampson, Kolodinsky, and Green (1997) conducted an analysis using the WebCrawler Internet search engine to search counseling home pages. Results revealed a growth rate of 15% over a 3-month period, with 3,764 sites found the first month and 4,584 found the third. Two hundred and seventy-five practitioners were also found offering direct-online services to clients, indicating that the integration of information technology with counseling is a present reality. Rather than ignoring the inevitable, it is our responsibility as career counseling professionals to ensure that it is used in a way that is most beneficial and effective for clients.

Implementing the counseling process within a proactive and systematically delivered distance model requires careful strategy and integration. For example, the ReadyMinds Distance Career Counseling Program (Ready and Motivated Minds, L.L.C.) integrates the use of technology within four stages of the career planning process: Self-Assessment, Exploration, Decision-Making, and Self-Marketing. Self-Assessment is conducted through an online intake form and the Internet Version of the Self-Directed Search (Psychological Assessment Resources). Through individual telephone counseling appointments, the career counselor is able to help clients further clarify their interests, values, and skills, and begin goal-identification and action plan strategies. Exploration, Decision-Making, and Self-Marketing are also addressed during the telephone counseling appointments, depending on client need, and are supplemented with Internet referral sources. Thus, career counseling, which has been traditionally conducted via face-to-face contact, can be conducted at a distance, using technology as a vehicle.

Counselor Recruitment, Training and Supervision

Recruitment of Distance Career Counselors

Considering the counselor’s key role and the special challenges of working in a distance delivery environment in the process, special attention must be paid to counselor recruitment, education, training, and supervision. The use of Internet and e-mail provides opportunities to recruit a diverse pool of career counselors, who have the convenience of working from home-offices during preferred hours (Malone, Miller, & Miller, in press). Implementing an effective distance career counseling program requires that these counselors have had training in telephone career counseling skills, technology capability and equipment, and oral/written communication strategies. Counselors at various stages of their own careers and professional experience will most likely need a

variety of training protocols as they engage in distance work with clients.

Training of Distance Career Counselors

In general, the training challenges of a distance model include adjusting already acquired and trusted counseling skills to a new communication environment, and integrating technology/Internet-supported techniques into the process. However, in order to be successful in this new delivery model of career counseling, counselors must be open to the required new learning opportunities being offered by experienced distance career counselors (Malone, Miller, & Miller, in press). These protocols include applying technology to career counseling skills and tele/videocounseling practices, and adjusting counseling interview techniques accordingly. For example, when communicating with clients via e-mail, counselors may adopt a more conversational and less formal writing style, using emoticons to establish a more personal connection. Rosenfield (1997) reports several helpful adaptations to counselor verbal behavior when working with clients via telephone.

To serve clients more effectively, counselors must be competent using Internet search engines. They also need to be familiar with and able to evaluate current counseling-related websites in order to direct clients towards resources that are targeted to their own specific career needs, so they do not have to search endlessly through hundreds of random sites. Special training is needed to help counselors integrate Internet use with counseling interventions while being aware of ethical issues and professional standards related to distance counseling. Because of the continuously evolving nature of the counseling profession, counselors and counselor educators must become aware of, and adapt to, our clients' changing needs and modes of learning (Jencius, 2000). Sampson (1997) recognized three key counselor behaviors that contribute to effective client use of computer-assisted counseling. These behaviors include: 1) screening clients to ensure that they would, in fact, benefit from computer applications, 2) orienting clients to computer applications that would fit their needs, and 3) following up with clients to ensure that such applications have effectively met their needs and that they can use this new information for future problem solving and decision making.

Special training in multicultural issues is also critical, particularly because a distance career counseling model allows counselors access to a diverse pool of clientele (Malone, Miller, & Miller, in press). Counselors who recognize and are sensitive to cultural characteristics of different geographic regions and ethnicities will be more effective in understanding client needs and ultimately providing greater support and better tailored services.

Supervision of Distance Career Counselors

Supervision practices may also be provided via distance modalities in addition to face-to-face scenarios. Christie (n.d.) conducted a study to determine the nature of four Master's level counseling interns at Oregon State University, in a distance clinical supervision environment. Results indicated a motivation to participate in the distance supervision experience, improved clinical skill, and movement toward greater autonomy. Thus, supervision may not only include new content (distance counseling work), but also a new relationship process. It is essential that distance career counselors have a means of continually evaluating their skills in critical areas: successful handling of their caseload, quality completion of all written communication, delivery of client satisfaction, and several other counseling competencies, all of which can be monitored through supervision (Malone, Miller, & Miller, in press).

Ethical Issues and Credentialing Related to Distance Career Counseling

Ethical Issues

When providing distance career counseling, it is essential for counselors to find resources and support systems to inform their ethical practices. The major counseling associations have issued guidelines and standards to recommend ethical practices for web/cyber/Internet/distance counseling. In addition to the NCDA reference previously mentioned, the following resources are both informative and helpful: *American Counseling Association Ethical Standards for Internet Online Counseling* (<http://www.counseling.org/resources/internet.htm>), and the National Board For Certified Counselors and Center For Credentialing and Education statement on ethics entitled *The Practice of Internet Counseling* (<http://www.nbcc.org/ethics/webethics.htm>). These guidelines cover the major areas of privacy, confidentiality, record-keeping, the counseling relationship, and informed consent, as well as the limitations and risks inherent in technology-assisted counseling work.

Additional resources are provided via ERIC/CASS on the Cybercounseling and Cyberlearning website (<http://cybercounsel.uncg.edu>). This resource includes contributions from the American Counseling Association Cyber Technology Committee. Finally, the Florida State University Center for the Study of Technology in Counseling and Career Development (<http://www.career.fsu.edu/techcenter>) provides significant information for individuals seeking information about the application of technology to counseling, research, and program development in the career development field.

Credentialing of Distance Career Counselors

Licensure and certification are also important issues since they both intersect and impact the practice of distance career counseling. There are differences between how licensure and certification both protect clients and afford counselors the right to practice. While both credentials intend to provide protection for consumers, the former governs the legality of counselors serving clients according to the regulations of each state that has a licensure law. Bloom and Sampson (2001), as well as Koocher and Morray (2000), present survey results from State Counselor Licensure Boards and Attorneys General regulations pertaining to “webcounseling” and other forms of electronic counseling. The practice of career counseling, however, is not regulated in every state which has a licensure law, and such regulations (including national, state, and local) of non-institutional private practice are clear only to a point with respect to distance counseling. Peterson (2002) provides an informative treatment of ethics and technology, while stating at the same time that a great deal of work needs to be accomplished in this area to protect clients, and to provide a level of support to counselors who are genuinely attempting to develop and deliver new service models. This issue is particularly important as counselors navigate technology’s sea of ambiguity, where the tides of change are a daily challenge.

Without ethical regulations and standards, the practice of distance counseling would be open to charlatans and unqualified service providers, ultimately sabotaging the integrity of the counseling profession, discouraging forward thinking, and eliminating technology’s potential for positive impact on clients (Hughes, 2000). The same holds true for any form of distance models. With more distance learning courses and opportunities being offered, standards have to be established to prevent “fraudulent diploma mills” from interfering with an alternate and potentially valuable delivery of higher education (Guernsey, 1999; as cited in Bobby & Capone, 2000, p. 375).

Distance career counseling programs that establish high industry standards for career counselors ensure that specific educational and experiential requirements have been met, thus lending to higher quality service. Such standards include a graduate degree in counseling, certification from nationally recognized credentialing organizations such as the National Board of Certified Counselors (NBCC), appropriate career counseling experience, and specialized training in distance career counseling (Malone, Miller, & Miller, in press).

Distance Career Counseling: Assessment, Web Sites, and Written Feedback

Online Assessment Tools

Distance career counselors have the opportunity as well as the obligation to provide their clients with effective assessment tools that are validated for online use. The creative integration of expressed, measured, and manifest career choice variables can afford very helpful information to clients as they seek to explore employment or educational options. Written assessment instruments along with carefully crafted in-take documents provide valuable client information which can be further expanded and validated by appropriate verbal assessment protocols. Assessment and evaluation results of overall counseling goals may be reported in a highly personalized manner using state-of-the-art, Internet-supported, counseling communication products.

Although web-based assessment tools are readily available to anyone via the Internet, both the validity and reliability of such tools must be considered. Because both valid and invalid assessments may appear similar to the average Internet user, it is unreasonable to assume that anyone will be able to identify a valid system (Sampson & Lumsden, 2000). An effective distance career counseling program can carefully select well-validated career assessment tools via the Internet through such reliable organizations as Psychological Assessment Resources (PAR), publishers of the Self-Directed Search, and other trusted assessment tools (Malone, Miller, & Miller, in press). Assessment results alone, however, may be subject to misinterpretation and may neglect to address more core counseling issues for clients. For this reason, current research continues to reinforce the belief that effective

career counseling involves a clear understanding of assessment results so that they do not serve as merely answers, but as tools for trained counselors to guide clients through exploration and well-formulated action plans (Malone, Miller, & Hargraves, 2001).

Web Resources

Well-designed and user-friendly websites can also provide clients with an understanding of the career counseling process and their own career development planning needs. Beyond these two important contributions, the site may also assist clients in linking to personally meaningful and pre-screened resources related to their specific needs. This brokering of client need with related resources saves individuals from feeling overwhelmed or confused in the face of the thousands of web resources currently available. Counselors who are familiar with Internet resources and who are trained in evaluating new information technology can help clients weed out extraneous information (Malone, Miller, & Hargraves, 2001), or information that is fraudulent or outdated (Sampson, 1998). For example, Richard Bolles, a career development professional, provides pre-screening career-related web sites on his own "What Color is Your Parachute" web site at the "Parachute Picks" section (as cited in Sampson 1999a).

By instilling the competence to search, retrieve, evaluate, and apply information from both on- and off-line resources, counselors are encouraging clients to become masters of their own career development. Again, the counselor is not providing clients with the answer, but teaching them the process of finding the answers for themselves, a tool that is far more valuable and can be used again and again. With the ability to evaluate and apply information, clients can separate the "substantive from the superficial" and convert this newfound knowledge into "personal action strategies" (Walz, 2000, p. 410). Whereas this learning process might prove simple to some clients, others with moderate or low "readiness" for decision-making require greater supervised Internet use (Sampson, 1999b). Counselors are empowering clients by providing them with web-surfing assignments in between counseling sessions, and by encouraging them to "be weaned from the counselor and become a self-actualized career researcher" (Verhoveve, n.d.).

Written Communication Via Technology

Recent research in cybercounseling/distance counseling literature (Boer, 2001) as well as more qualitative "reports from the field" suggest that the process of "reading-writing-reflecting" is yielding powerful insights for both counselor and client. Somehow, the experience of committing thoughts to print and the reverse experience of drawing insights from the written word, appear to be deepening the effectiveness of the career counseling process for both counselor and client. Distance career counselors can foster such insights not only through e-mail contacts, but also through commentaries that summarize the counseling process. Such interventions provide subsequent steps and web links for continued career planning as well as exploratory research resources, and motivation for clients to continue working on their own career development process. The ReadyMinds Distance Career Counseling Program refers to such a document as "Insight Into U™," a four-page personalized synthesis of the client's career development process as experienced by the ReadyMinds Career Counselor and provided to the client upon completion of the program (Malone, Miller, & Miller, in press).

Assessing Client Satisfaction and Program Effectiveness When Using Distance Methods

Effective and quality career counseling, whether from an individual or as part of an organizational program, requires clear and candid evaluation from clients. Written evaluative responses from clients using both quantitative as well as qualitative measures should speak to not only effective outcomes of the career counseling but also to the distance delivery system's impact on that counseling quality. Frequent and systematic review of constructive criticism will lead to improved service to clients. Analysis of initial research suggests that areas of satisfaction include: convenience, efficiency, strong working alliance with the counselor, helpful and personally useful resources, increased motivation to complete the work of the counseling, and a better understanding of the career counseling process. Constructive criticism topics include: wanting more time with the counselor, extending the counseling over a longer period of time, a desire for greater specificity in written reports, and difficulties in maintaining appointment times (Ready and Motivated Minds, L.L.C.).

Anticipation and Resolution of “Difficult Situations” in the Distance Career Counseling World

The logistical realities of engaging in distance work with clients amplify some of the already difficult scenarios that may emerge in counseling relationships and settings. These challenges range from missed appointments to crisis or emergency situations, which are certainly less likely to appear in non-therapeutic career counseling cases.

However, the need for more clinical counseling may emerge within the context of career counseling, or the former may be occurring simultaneously with the latter. Distance career counselors must be sure to have back-up information available before beginning work with clients for referrals or emergency interventions as well as appropriate release of information protocols for sharing information with related institutions or sponsoring organizations. Appropriate permission forms are needed for work with minors. Written emergency plans for suicide or homicide situations must be part of all training programs and receive appropriate emphasis so they are clearly understood. On a less dramatic note, clients who wish to access additional career counseling from a more local source should be supplied with options upon request or as perceived by the distance counselor (Ready and Motivated Minds, L.L.C.).

Business and Organizational Relationships in the Distance Career Counseling World

Clearly this new form of career counseling is bringing greater interaction among professionals from counseling, business, and technology. The points of view, as well as the institutionally-related cultural differences of these disciplines and fields of practice, are an invitation to exciting growth and honest resolution of challenges for everyone involved. For example, although it is important for distance career counselors to already have an advanced level of technical skill, it is also essential for a distance career counseling program to have technologically skilled staff members available for troubleshooting (e.g., with a specific computer, an Internet service provider, or technical breakdowns). Integrating input from such diverse entities will provide higher quality services through critical feedback and recommendations for program development and counselor training from all angles (Malone, Miller, & Miller, in press). Implications for global and multicultural cooperation flourish, as technology allows greater access and opportunities for collaboration and “unification of people from around the world” (Walz, 2000, p. 412). As long as *what is best for our clients* remains the gyroscope, the outcomes for technology-assisted distance career counseling appear to be promising.

Conclusion

Technology as a counseling tool has taken many counseling professionals by surprise, since the counseling profession itself has traditionally relied on “low-technology” tools (Jencius, n.d.). However, we must continue to enhance our competencies, “at a time when the relevance and worth of a helping service is judged by the extent to which and how well it uses technology” (Walz, 2000, p. 412). We must no longer use traditional thinking to deal with nontraditional events and resources but move “out of the box” (Walz, 2000, p. 410) and commit ourselves to the understanding and learning of a counseling medium that has proven to be “much more than a passing fad” (p. 412).

Biography

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References

- American Counseling Association. (1999). *American Counseling Association ethical standards for Internet online counseling*. Alexandria, VA. Retrieved July 30, 2002, from <http://www.counseling.org/resources/internet.htm>
- Aridge, W. C. (n.d.). *Internet counseling: Current practices and future implications*. ERIC/CASS. ACA Technology Committee. Greensboro, NC. Retrieved July 30, 2002, from <http://cybercounsel.uncg.edu/presentations/>
- Bloom, J. W. & Sampson, J. P., Jr. (2001). *Telephone and cybercounseling regulations: Legal and ethical issues*. Retrieved July 30, 2002, from <http://cybercounsel.uncg.edu/>
- Bloom, J. W. & Walz, G. R. (Eds.). (2000). *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 405-416). Alexandria, VA: American Counseling Association.
- Bobby, C. L. & Capone, L. (2000). Understanding the implications of distance learning for accreditation and licensure of counselor preparation programs. In J. W. Bloom & G. R. Walz (Eds.), *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 405-416). Alexandria, VA: American Counseling Association.
- Boer, P. M. (2001). *Career counseling over the Internet: An emerging model for trusting and responding to online clients*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Brown, S. D. & Krane, R. N. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S. D. Brown & R. W. Lent (Eds.), *Handbook of Counseling Psychology* (pp. 740-766). New York, NY: John Wiley & Sons.
- Christie, B. S. (n.d.). *Counseling supervisees experiences of distance clinical supervision*. Retrieved July 30, 2002, from <http://cybercounsel.uncg.edu/articals/>. ERIC/CASS. Cybercounseling/Cyberlearning. Cyberpractices. <http://cybercounsel.uncg.edu/practhtml/>
- Coman, G. J., Burrows, G. D., & Evans, B. J. (2001). Telephone counseling in Australia: Applications and considerations for use. *British Journal of Guidance and Counseling*, 29(2), 247-258.
- ERIC/CASS. (2002). *Cybercounseling and Cyberlearning*. Retrieved July 30, 2002, from <http://cybercounsel.uncg.edu>
- Florida State University. (2002). Center For the Technology and Study in Counseling and Career Development. Retrieved July 30, 2002, from <http://www.career.fsu.edu/techcenter>
- Harris-Bowlsbey, J., Riley Dikel, M. & Sampson, J. P., Jr. (2002). *The Internet: A tool for career planning*. Tulsa, OK: National Career Development Association.
- Hughes, R. S. (2000, March). *Ethics and regulations of cybercounseling*. Doc. EDO-CG-00-3. Retrieved July 30, 2002, from <http://ericcass.uncg.edu/digest/>
- Jencius, M. (n.d.). *Technology-enhanced instruction: Developing your digital vision*. Retrieved July 30, 2002, from http://cybercounsel.uncg.edu/articals/jencius_Cyber_aca.htm
- Koocher, G. P. & Morray, E. (2000). Regulation in telepsychology: A survey of States Attorneys General. *Professional Psychology: Research and Practice*, 31, 503-508.

- Luzzo, D. A. (Ed.). (2000). *Career counseling of college students: An empirical guide to strategies that work*. Washington, DC: American Psychological Association.
- Malone, J. F., Miller, R. M. & Hargraves, K. (2001, November). Using the Internet to help college students with career planning. *USA Today*, 52-53.
- Malone, J. F., Miller, K. S., & Miller, R. M. (in press). *The evolution of the ReadyMinds model of distance career counseling: Implications for training, practice and supervision of Cybercounselors*. Unpublished manuscript.
- National Board For Certified Counselors and Center For Credentialing and Education. (2001). *The practice of Internet counseling*. Greensboro, NC. Retrieved July 30, 2002, from <http://www.nbcc.org/ethics/webethics.htm>
- National Career Development Association. (1997). *NCDA guidelines for the use of the Internet for provision of career information and planning services*. Alexandria, VA. Retrieved July 30, 2002, from <http://www.ncda.org/about/polnet.html>
- National Career Development Association. (2001). *Consumer guidelines to selecting a career counselor*. Alexandria, VA. Retrieved July 30, 2002, from <http://www.ncda.org/>
- Peterson, D. B. (2002). In R. R. Cottone & V. M. Tarvydas (Eds.). *Ethical and Professional Issues in Counseling*. Upper Saddle River, NJ: Prentice Hall, Inc.
- Psychological Assessment Resources (PAR). (2000). Self-Directed-Search (SDS) Form R: Internet Version. Lutz, FL. Retrieved July 30, 2002, from <http://www.self-directed-search.com>
- Ready & Motivated Minds, L.L.C. (2002). In J. F. Malone & K. S. Miller. (Eds.), *ReadyMinds Career Counselor Training Manual*. New York: NY: Internal Proprietary Training Document.
- Refvem, J. (2000, August). Let's go surfing: Use of the Internet for career counseling in the schools. Doc. EDO-CG-00-9. Retrieved July 30, 2002, from <http://ericass.uncg.edu/digest/>
- Rosenfield, M. (1997). *Counseling by telephone*. Thousand Oaks, CA: Sage Publications, Inc.
- Sampson, J. P., Jr. (1997, April). *Helping clients get the most from computer-assisted career guidance systems*. Paper presented at the Australian Association of Career Counselors. Paper presented at the Australian Association of Career Counselors 7th National/International Conference, Brisbane, Australia. Retrieved July 30, 2002, from <http://www.career.fsu.edu/techcenter/Council.html>
- Sampson, J. P., Jr. (1998). *Effective Internet use in career services*. Unpublished manuscript. Florida State University, Center for the Study of Technology in Counseling and Career Development. Tallahassee, FL.
- Sampson, J. P., Jr. (1999a). *Effective design and use of Internet-based career resources and services: A North American perspective*. Retrieved July 30, 2002, from <http://icdl.uncg.edu/ft/050699-07.html>
- Sampson, J. P., Jr. (1999b). *Integrating Internet-based distance guidance with services provided in career centers*. Unpublished PowerPoint presentation. Florida State University, Center for the Study of Technology in Counseling and Career Development. Tallahassee, FL.
- Sampson, J. P., Jr. (2000). Using the Internet to enhance testing in counseling. *Journal of Counseling and Development*, 78, 348-356.

- Sampson, J. P., Jr. & Bloom, J. W. (2000). *A taxonomy for defining face-to-face and technology-assisted distance counseling*. Unpublished manuscript. Florida State University, Center for the Study of Technology in Counseling and Career Development. Tallahassee, FL.
- Sampson, J. P., Jr. & Bloom, J. W. (2001). The potential for success and failure of computer applications in counseling and guidance. In D. C. Locke, J. Meyers & E. L. Herr (Eds.), *The Handbook of Counseling*. Thousand Oaks, CA: Sage Publications.
- Sampson, J. P., Jr., Kolodinsky, R. W., & Green, B. P. (1997). Counseling on the information highway: Future possibilities and potential problems. *Journal of Counseling and Development*, 75, 203-212.
- Sampson, J. P., Jr. & Lumsden, J. A. (2000). Ethical issues in the design and use of the Internet based career assessment. *Journal of Career Assessment*, 8(1), 21-35.
- Verhoveve, M. (n.d.). *Career cybercounseling: Ripples on the global pond*. Retrieved July 30, 2002, from <http://www.cybercounsel.uncg.edu/book/manuscripts/ripples.htm>
- Walz, G. R. (2000). Summing up. In J. W. Bloom & G. R. Walz (Eds.), *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 405-416). Alexandria, VA: American Counseling Association.

Chapter Three

Counseling Over the Internet: Benefits and Challenges in the Use of New Technologies

by R.J. Sussman

Counseling on the Internet is alive and, in the opinion of some, well. The question is do counselors and other behavioral health professionals want to take an active role in shaping this new avenue of our discipline, or can we afford to adopt a “wait and see” attitude? After all, professional counselors do have a duty to protect the public from the chicanery of unqualified Internet “therapists” while still allowing the consumer to exercise choice.

This paper examines three areas of current concern: the tension between the advantages and disadvantages of counseling online, the modalities currently utilized to deliver counseling online, and some of the issues surrounding the need for regulation of online counseling.

Advantages and Disadvantages: The Balance

There appear to be advantages to offering counseling services on the Internet, one being the ability to bring mental health services to persons in under-served or geographically isolated areas. A game warden or pipeline worker in a remote part of the Alaskan wilderness is prone to experience personal growth issues and crises as much as persons in well served metropolitan areas. Those who may be better served by gerontological, rehabilitation or career specialists might have access to more qualified counselors. Those who are physically challenged or seriously ill would have the option of getting support without having to leave their homes. Those with child care or elder care responsibilities would be free to seek help without making other arrangements. Finally, those apprehensive about being seen walking into the office of a counselor, or individuals who have thought about counseling, but are not sure what it is about, may be more likely to seek services if they can do so from the safe and comfortable confines of their homes. An additional advantage for the practitioner is that entire sessions can be automatically recorded and preserved, thus eliminating the need for additional case notes, or any other form of session recording which may be required for supervision.

Because e-mail may be read by those other than for whom it was intended, concerns about protecting confidentiality is a major disadvantage. Possible solutions include digitally encrypting transmissions, and password protecting access to sensitive information on both the counselor’s and client’s computer. In reality however, phone conversations are more likely to be eavesdropped upon than are e-mail transmissions likely to be monitored. Another problem is the handling of emergency situations that arise with clients who may be halfway across the globe. Local authorities may be able to assist the online counselor by contacting emergency services within the client’s local area. A proactive way to deal with this quandary may be to get a prospective client’s local emergency numbers as well as their physical address and phone number before initiating work.

What if the client is dishonest? Actually the same possibility exists in face-to-face counseling. Rarely is a client asked to produce proof of identification and address when they come into the office for an initial visit. Once a relationship is established, emergency contact with an online counselor may be handled in the same way that it is handled in face-to-face counseling. The client may be given a home, cellular phone, pager or voicemail number, or they may be given information on local community resources. (Hopefully, for most locations, this information will soon be posted on the World Wide Web. However the majority of crisis hotlines will take calls from anywhere.) Or, in keeping with the online theme, the client may be asked to contact the counselor via e-mail.

Another concern is that a client may more easily terminate a session or a counseling relationship if the counselor touches upon sensitive issues. This is a good argument for getting a client’s phone number, physical and e-mail addresses before beginning work. The premature closing of a session or termination may at times be an issue with online counseling, however with this information the practitioner will have several avenues for

reestablishing contact. A final concern centers on malpractice litigation. If a client is in some way harmed, under what jurisdiction will they be entitled to bring suit against the counselor? As our technology evolves, our legal systems struggle to keep pace.

E-mail, Text-based Chat and Video-Conferencing

When talking about counseling online, three very different modes of interaction (e-mail exchange, text-based chat, and video conferencing) use the Internet as a means to transfer information. Presently, the most ubiquitous manner that online practitioners communicate with consumers is through e-mail.

E-mail is probably the easiest way to correspond on the Internet and almost everyone who has access to the Internet has an e-mail account. With asynchronous e-mail there is no need to schedule appointments. The client or potential client simply sends an e-mail and the practitioner answers at his or her convenience. In a way this is similar to writing a journal entry and getting professional feedback. Some have compared this manner of interaction to writing Dear Abby. Others have suggested that with e-mail or text-based chat there is a degree of anonymity, which influences the individual to disclose earlier, and more deeply, than in a face-to-face encounter. However, there are some clear disadvantages of using e-mail as a way to conduct counseling, one being the loss of the dialectical process. In face-to-face counseling a continuous and immediate feedback loop exists between counselor and counselee. When using e-mail, the feedback of both parties is intermittent and lacks immediacy. Another disadvantage to the use of e-mail is the complete lack of nonverbal information. Many counselors believe that nonverbals are even more important than verbals in some therapeutic situations.

Some online practitioners use text-based chat as a way of working with their clients in real time. This is more cumbersome in that appointments need to be set up in advance and there are generally more logistical details to be worked out. An advantage of chat is that it provides for continuous and immediate feedback in both directions. However, similar to e-mail, the client's nonverbals are lost except for the occasional abbreviation or emoticon (e.g. "lol" means laughing out loud and ":)" means happy). Thus the next logical step would be for practitioners to utilize video conferencing alternatives. This would be the closest thing to actually being in the room together and would be a boon to the facilitation of online counseling. This sounds enticing, however very few Internet counseling sites offer this option because of current video conferencing technology.

Presently, the video conferencing hardware and software options available to most consumers are in a sense more trouble than they are worth. They present multifaceted logistical issues and their performance is largely disappointing because much of the online community hooks up through dial-up connections which exhibit relatively slow data transfer rates. Pictures take up a great deal of bandwidth, and in order to get the appearance of full motion video, these pictures need to be refreshed many times a second. A standard dial-up connection allows only a few frames to be transmitted per minute. Nonetheless there is the opportunity to see the other person, however much of the dynamic nonverbal behavior is lost.

Hope for video conferencing comes in three alternative methods of connection: cable modems, satellite modems, and Digital Subscriber Lines (DSL). Although all three are currently being offered on a limited basis, major improvements in infrastructure must be made before these new technologies replace today's standard dial-up connection. When this happens, full motion video over the Internet will become a reality, and its implications for counselors will be substantial. Most experts believe that this will occur in two to four years. Thus, it would appear that there are two distinct directions Internet counseling could take. There is the present day formulation, which consists mostly of e-mail interaction with some text-based chat, and there is the real time video conferencing of the near future. Upon its arrival, full motion video and real time audio may make counseling online the next best thing to being there. Hence in making any decisions regarding the restriction or certification of Internet counseling, it is important to take both of these scenarios into account.

Regulating Through Legislation or Certification?

California was the first state to pass legislation affecting the practice of psychotherapy on the Internet. The California Telemedicine Act mandates that mental health services provided online to a resident of California can be administered only by a clinical psychologist or medical doctor licensed in that state. Additionally, managed care must cover online services that would be normally reimbursed in a face-to-face visit. Other states are currently working on legislation resembling the California model.

The glaring problem with such laws is not just that they restrict consumer choice, but that they are

contradictory to the basic nature of the Internet. The online world is devoid of any state or national boundaries. In an evening spent surfing the Net an individual may visit a dozen or more countries without a passport or any regard for the specific laws of these nations. For the most part the Internet is a lawless information frontier, and attempts to legislate and restrict not only fall upon deaf ears, but also can often be impossible to enforce. For instance, what happens when a resident of California establishes a counseling relationship with a practitioner in Australia? Chances are the Australian counselor will not be extradited and brought before a California court for violation of the Telemedicine Act.

So how can we protect the public interest without legislation? Several attempts at this feat are already underway. Metanoia (www.metanoia.org), a listing of Internet psychotherapy providers, checks the credentials of its listed practitioners with their appropriate licensing bodies. In addition Mental Health Net (www.cmhc.com) has rated each of the sites listed on Metanoia. Also, a service called Credential Check certifies practitioners with regard to the legitimacy of their purported degrees, certifications and licensure. Additionally, in September of 1997 the National Board for Certified Counselors (NBCC), with the guidance of its WebCounseling Task Force, adopted its "Standards for the Ethical Practice of WebCounseling" (www.nbcc.org/wcstandards.htm). Officially NBCC does not advocate the practice of counseling on the Internet. These voluntary standards have been constructed in order to provide direction for the online practitioner, and minimize any potential risks.

Some have accused NBCC and others of acting prematurely. As there has been virtually no research done in the area, it is impossible to ascertain the extent to which online counseling is either helpful or harmful. Due to efforts to control extraneous variables and the careful scrutiny of Research with Human Subjects committees, psychotherapy outcome studies can be quite cumbersome. Often faculty and graduate students steer clear of these projects. Perhaps grant money could be earmarked for such investigations given the urgent need on the part of credentialing and governing bodies to make decisions regarding this recent development in our field.

If it is in fact established, after adequate research, that counseling over the Internet appears to be either not at all helpful or in some way harmful, then it is the responsibility of organizations like the American Counseling Association (ACA) and NBCC to publicly speak out against such practice. However, if studies indicate that online counseling is in fact beneficial, then a fair and structured approach to certification must be implemented. Clearly, due to the global nature of the online community, any attempt at creating certification standards must be internationally sensitive. Such standards must take into account the different educational systems and credentialing practices of many different nations. Drafting a globally interchangeable certification policy may be a formidable task. It will be necessary not only to encourage the participation of representatives from many countries, but also those from the different domains within mental health.

This is not a project the counseling profession should try to take on by itself. It would certainly be beneficial to work as a team with psychologists, psychiatrists and social workers, to achieve the common goals of protecting the public and increasing the availability of services. In addition to coming to an agreement with other professionals, it is imperative that we dialogue with managed care on this issue. Whether we like it or not, insurance providers have a major role in determining what types of services are performed. With their support not only will Internet counselors be entitled to third party payments, but the public can be influenced, through economic means, to seek online services only with those practitioners who possess the requisite skills and have agreed to follow the guidelines necessary for certification.

Counseling over the Internet, while rapidly approaching its tenth birthday, is still in its infancy. As members of the counseling profession, we must take an active role in guiding the evolution of this new method of service delivery. It is important to take a farsighted approach by conceptualizing online interaction, not only in the manner that it normally occurs today, but also in terms of how such will evolve over the next several years. The path toward protecting the public interest while preserving individual choice appears to be best paved, not with legislation, but with certification. Clearly it is important that adequate research be done in the area before certification guidelines are enacted. If research does in fact suggest that counseling over the Internet is or could be beneficial, then it is important to establish international certification guidelines with the input of professional counselors, other mental health providers, and managed care.

Chapter Four

E-Therapy: Practical, Ethical, and Legal Issues

by Monique Manhal-Baugus

Abstract

E-therapy is a term that has been coined to describe the process of interacting with a therapist online in ongoing conversations over time when the client and counselor are in separate or remote locations and utilize electronic means to communicate with each other. It is a relatively new modality of assisting individuals resolve life and relationship issues. E-therapy utilizes the power and convenience of the Internet to allow simultaneous (synchronous) and time-delayed (asynchronous) communication between an individual and a professional. For the purposes of this paper, e-therapy is defined as a licensed mental health care professional providing mental health services via e-mail, video conferencing, virtual reality technology, chat technology or any combination of these. It does not include self-help methods such as public bulletin boards or private listservs. E-therapy is not psychotherapy or psychological counseling per se since it does not presume to diagnose or treat mental or medical disorders. However, e-therapy is flexible enough to also address many difficulties which clients present to the online therapist. As in other types of therapy (such as bibliotherapy, occupational therapy, and rehabilitation therapy), e-therapy does assist a person in addressing specific concerns with specific skills.

This article examines the following issues of e-therapy. First, the types of e-therapy and related services are described to provide a background for the article. Second, the ethical codes which have been adopted by three major professional organizations (American Counseling Association, National Board for Certified Counselors, and the International Society for Mental Health Online) pertaining to e-therapy are summarized for professional and consumer use. Finally, the practical, ethical, and legal issues of e-therapy services are discussed fully.

E-Therapy: Practical, Ethical, and Legal Issues

E-therapy is a term that has been coined to describe the process of interacting with a therapist online in ongoing conversations over time when the client and counselor are in separate or remote locations and utilize electronic means to communicate with each other (Ainsworth, 2000; Bloom, 1998). It is a relatively new modality of assisting individuals resolve life and relationship issues. The formal description of the National Board for Certified Counselors (NBCC) (1997) is the following: "WebCounseling is the practice of professional counseling and information delivery that occurs when client(s) and counselor are in separate or remote locations and utilize electronic means to communicate over the Internet" (p. 1). According to Grohol (1999b), e-therapy utilizes the power and convenience of the Internet to allow simultaneous (synchronous) and time-delayed (asynchronous) communication between an individual and a professional. For the purposes of this paper, e-therapy is defined as a licensed mental health care professional providing mental health services via e-mail, video conferencing, virtual reality technology, chat technology or any combination of these. It does not include self-help methods such as public bulletin boards or private listservs (Stubbs, 2000). E-therapy is not psychotherapy or psychological counseling per se since it does not presume to diagnose or treat mental/medical disorders (Grohol, 1999b). However, e-therapy is flexible enough to also address many difficulties which clients present to the online therapist. As in other types of therapy, such as bibliotherapy, occupational therapy, and rehabilitation therapy, e-therapy *does* assist a person in addressing *specific* concerns with *specific* skills.

A recent search on various search engines by the author revealed that there are several thousand counselors with Internet dimensions to their practice, such as advertising, providing basic information, and e-mail communication in conjunction with face-to-face therapy. This article focuses on those clinicians who provide counseling solely via the Internet. Providers are online because there is a demand for their services, or they would not expend the time and effort necessary to establish, administer, and maintain these services (Grohol,

1997). The number of individual counselors and counseling companies on the Internet has exploded in the last two years, and this trend will continue (Ainsworth, 2000; Guterman & Kirk, 1999; Sampson, Kolodinsky, & Greeno, 1997). In one search conducted in 1996, there were 12 mental health sites online, and today there are over 250 websites and over 400 therapists which offer online counseling (Ainsworth, 2000).

Just as the list of e-therapists is expanding rapidly, so are the issues surrounding this treatment modality (Ainsworth, 2000; Bloom, 1998; Finfgeld, 1999; Frame, 1997; Grohol, 1999a, b, c; Sussman, 1998). For example, the mental health codes have not yet quite captured the implications of this global technological advancement (Grohol, 1999a, b, c). This article examines important and urgent issues of e-therapy. First, the types of e-therapy and related services are described to provide a background for the article. Second, the ethical codes which have been adopted by three major professional organizations pertaining to e-therapy are summarized for professional and consumer use. Finally, the practical, ethical, and legal issues of e-therapy services are discussed fully.

Internet Counseling and Services

The e-therapy sites on the Internet fall into two broad categories: advice and e-therapy (Ainsworth, 2000). Advice is the situation in which a therapist responds once or on a few occasions in length in a psycho-educational manner; that is, concrete, specific information is offered to the client who has a well-defined, specific difficulty. This type of intervention is not appropriate for those with complex or life situations that are causing great distress, problems that have persisted for a long period of time, or difficulties that seem overwhelming. In these situations, e-therapy may be more appropriate. Mental health advice sites are individual therapists who answer a one-time, specific inquiry about any mental-health related topic, usually by e-mail transmission. E-therapists are very different from the "one question," "information," or "advice" services. E-therapy is about forming a relationship with a trained counselor. In short, e-therapy is the situation in which the therapist and client have an ongoing, personal relationship over time (Ainsworth, 2000).

There are five major *methods* of conducting e-therapy: e-mail, secure web-based message systems, real-time text exchange (chat), videoconferencing, and voice over Internet phone (IP) (Ainsworth, 2000; eTherapy.com, 2001; Sussman, 1998). E-mail is the most common way in which therapists interact with clients (Ainsworth, 2000; Sussman, 1998). Secure web-based message systems offer better security than e-mail, but they are still expensive to implement and somewhat inconvenient to use. Chat occurs when both the client and therapist are online at the same time and can write one another as if they are engaged in a conversation by alternately entering conversational text line-by-line; however, this method usually is expensive for the client, especially if charged by the minute. In addition, chat technology is still very slow and often crashes which entails time to log back onto the system, the client may not be a quick typist, and both the client and therapist often need time to think between typing responses.

Videoconferencing is the ideal mode for therapists to interact with clients, because it allows the therapist and client to have a two-way dynamic conversation with full two-way audio and full-motion video. This modality most closely approximates face-to-face counseling. However, video technology is still in the developing phase and is still too expensive to purchase and maintain and too intricate to utilize efficiently and effectively. It requires high-speed Internet connection for optimal sound and image quality (Ainsworth, 2000; eTherapy.com; Guterman & Kirk, 1999). There are three viable methods of video connection at this time: cable modems, satellite modems, and Digital Subscriber Lines (DSL). Although all three are currently being offered on a limited basis, major improvements in infrastructure will undoubtedly occur. Upon its arrival, full motion video and real-time audio will be readily available to everyone who has access to the Internet (Guterman & Kirk, 1999; Sussman, 1998). Likewise, voice-over IP will be available in the near future (eTherapy.com, 2001). Using a custom-built secure web interface, real-time voice-over IP provides the therapist and client the ability to engage in a two-way audio conversation like a telephone. The larger clinics are beginning to offer this service, and this allows client and therapist to respond directly to one another with no long-distance charges (eTherapy.com).

E-therapists offer a range of services such as psycho-education, emotional support, and guided self-help. There are various types of online services that are currently offered, such as e-therapy private practitioners, e-therapy clinics, and specialists (Ainsworth, 2000). E-therapy private practitioners work with clients in an ongoing series of e-mails or chats. Since 1995, most e-therapists have been individual private therapists; however, the growth of the industry has led to the innovation of large e-therapy sites in which many therapists are available

and a number of features are available. These large clinics have several positive characteristics: many therapists available on the site; utilization of security to support confidentiality of communication; secure setups for billing; Internet libraries and vast resources for consumers and therapists; specialist accountability and credential screening by the owners of the e-clinic. A disadvantage of these large, online clinics is that it is more difficult for clients to differentiate amongst therapists. The therapists' pages are similar, according to a site-wide template. A few of these large, online clinics are HelpHorizons.com (www.HelpHorizons.com), Here2Listen.com (www.here2listen.com), and eTherapy.com (www.eTherapy.com) (Ainsworth, 2000). Specialists are therapists who specialize in particular disorders, such as relationships and sexuality, eating disorders, child abuse, alcohol and other substance abuse, stress-related difficulties and time management, and Christian counseling. These specialists are found in both e-clinics and in private practice.

A list of each of the above categories and the providers are found on Metanoia (www.metanoia.com) (Ainsworth, 2000). In addition, this independent consumer guide offers relevant data about the therapist's credentials, fees, payment options, services offered, and credential checks. Although the credential check is an aid to help the consumer choose professional, licensed, authentic counselors, there are many other ethical issues inherent in e-therapy which professional organizations are beginning to address by adopting new and revising existing ethical codes.

Ethical Codes

Professional organizations, such as the American Counseling Association (ACA), the National Board for Certified Counselors (NBCC), and the American Psychological Association (APA) are hesitant to endorse new practices for good reasons. They must be very responsible about reviewing research and carefully examining the new practice before they endorse it. These organizations are responsible for ethical code establishment, and they are beginning to address the issue of online counseling by approving new codes to address these issues. The following codes will be described for easy access and comparison: ACA (1999), NBCC (1997), and ISMHO (2000a). Following the listings of the codes is a discussion of common, important practical, ethical, and legal issues pertaining to e-therapy.

American Counseling Association

ACA is a not-for-profit, professional and educational organization that is dedicated to the growth and enhancement of the counseling profession. Founded in 1952, ACA is the world's largest association with approximately 55,000 members and represents professional counselors in various practice settings. The association has made considerable strides in accreditation, licensure, and national certification. It also represents the interests of the profession before

Congress and federal agencies, and strives to promote recognition of professional counselors to the public and the media. In addition, ACA has been instrumental in setting professional and ethical standards for the counseling profession. According to ACA (1999), *The Ethical Standards for Internet Online Counseling* established appropriate standards for the use of electronic communications over the Internet to provide online counseling services, and they should be used only in conjunction with the latest ACA Code of Ethics and Standards of Practice. Following is an outline of the standards.

1. Confidentiality. Under this major issue are privacy information, informational notices, client waiver, records of electronic communications, and electronic transfer of client information. In short, privacy information means that counselors ensure their clients are provided sufficient information to adequately address and explain the limitations of computer technology in the counseling process in general and the difficulties of ensuring complete client confidentiality of information transmitted through electronic communications. To mitigate the risk of potential confidentiality breaches, counselors should utilize secure websites and e-mail encryption.

Information notices include security of counselor's site, counselor identification, and client identification. Notice of the security site includes that counselors inform clients about site security, encryption methods, and special software that clients may need. The counselor identification notice informs clients about the identities of the counselors with access to the information, credentials and qualifications of the counselor(s), and the supervision methods. Client identification means that counselors verify the client's identity. The client waiver portion requires the client to acknowledge and accept the potential risks of confidentiality breaches due to Internet

transmission. The fourth issue in this section deals with records and explains that counselors should inform clients how session transcripts and other information are stored and the length of storage. Also, counselors should maintain appropriate procedures for ensuring the safety and confidentiality of client information acquired through electronic communications, including but not limited to encryption software, proprietary on-site file servers with fire walls, and saving online or e-mail communications to the hard drive or file server computer systems. The final issue in this section, electronic transfer of client information, states that confidential information to authorized third-party recipients may occur only when both the professional counselor and the authorized recipient have "secure" transfer and acceptance communication capabilities and the recipient is able to effectively protect the confidentiality of the client confidential information to be transferred. Clients must also give consent for these transactions.

2. Establishing the online relationship. The next major section, establishing the online relationship, consists of five sub-divisions: appropriateness of online counseling, counseling plans, continuing coverage, boundaries of competence, and minor or incompetent clients. The appropriateness of online counseling states that professional counselors: (a) develop an appropriate in-take procedure for potential clients to determine whether online counseling is appropriate for the needs of the client, (b) warn potential clients that online counseling services may not be appropriate in certain situations, and (c) inform the client of specific limitations, potential risks, and/or potential benefits relevant to the client's anticipated use of online counseling services.

The second sub-section, counseling plans, states that counselors develop individual online counseling plans that are consistent with both the client's individual circumstances and refer clients to alternative counseling methods if online counseling seems inappropriate. The third sub-section, continuing coverage, includes providing clients with a schedule, response rates, and an alternate means of contacting the counselor. Also, another counselor's name and information is provided when counselor is unavailable. The fourth sub-section states that counselors should practice only within their qualification and skill areas. Finally, professional counselors must obtain the written consent of the legal guardian or authorized person in the cases of minors and individuals incapable of granting such consent.

3. Legal considerations. The next major heading pertains to legal issues. This suggests that counselors confirm that their liability insurance provides coverage for online counseling services, and that the provision of such services is not prohibited by or otherwise violate any applicable state or local statutes or codes of professional membership organizations and certifying boards, and codes of state licensing boards.

National Board for Certified Counselors

In 1995 the NBCC Board of Directors appointed a WebCounseling Task Force to investigate the practices and potential difficulties of online counseling sites. The committee discovered a wide range of sites, ranging from individuals who were advertising their private practices to sites that claimed to offer therapeutic interventions. The committee also discovered a wide range of expertise, ranging from those sites sponsored by anonymous individuals or those with fraudulent credentials to those operated by qualified, licensed therapists. It became apparent that there was a growing presence of online therapists, so the Task Force implemented a set of guidelines that could offer a direction to the variety of professional, ethical, and legal issues occurring online. NBCC's position is that it, as an organization, does not advocate the practice of WebCounseling, but the organization did formally adopt the standards in 1997 to provide direction for mental health professionals who practice online therapy (Bloom, 1997; Hughes, 2000; NBCC, 1997).

There are 13 major issues addressed by the NBCC (1997) regarding online counseling, and they state that WebCounselors shall:

1. Review pertinent legal and ethical codes for possible violations emanating from the practice of WebCounseling and supervision;
2. Inform WebClients of encryption methods being used to help insure the security of client/counselor/supervisor communications;
3. Inform clients if, how, and how long session data are being preserved;

4. In situations where it is difficult to verify the identity of WebCounselor or WebClient, take steps to address impostor concerns, such as by using code words, numbers, or graphics;
5. When parent/guardian consent is required to provide WebCounseling to minors, verify the identity of the consenting person;
6. Follow appropriate procedures regarding the release of information for sharing WebClient information with other electronic sources;
7. Carefully consider the extent of self disclosure presented to the WebClient and provide rationale for WebCounselor's level of disclosure;
8. Provide links to websites of all appropriate certification bodies and licensure boards to facilitate consumer protection;
9. Contact NBCC or the WebClient's state or provincial licensing board to obtain the name of at least one Counselor-On-Call within the WebClient's geographical region;
10. Discuss with their WebClients procedures for contacting the WebCounselor when he or she is off-line;
11. Mention at their websites those presenting problems they believe to be in appropriate for WebCounseling;
12. Explain to clients the possibility of technology failure; and,
13. Explain to clients how to cope with potential misunderstandings arising from the lack of visual cues from WebCounselor or WebClient.

International Society for Mental Health Online

The ISMHO, a nonprofit organization, was formed in 1997 to promote the understanding, use and development of online communication, information and technology for the international mental health community. Some of the goals are to: educate mental health professionals and others about existing online information and communication technologies and applications; explore and develop the use of computer assisted communication in the work of mental health; provide online discussion forums and news concerning the work of mental health online; promote information and education on confidentiality, privacy, pseudonymity, and anonymity issues online; and develop standards for online interactions between mental health professionals and consumers (ISMHO, 2000a). These standards are outlined as follows:

1. Informed consent. The client should be informed about the process, the counselor, the potential risks and benefits of those services, safeguards against those risks, and alternatives to those services. There are three major headings under informed consent: process, counselor, and potential benefits; there are four sub-headings: potential risks, safeguards, alternatives, and proxies. The process section discusses the misunderstandings that may occur with text-based modalities, turnaround time from asynchronous communication, and counselor protection from unwanted recording of sessions. The counselor section states that clients have the right to the counselors credentials, real name, and instructions on confirming such information. The benefit section states that clients should be informed about the benefits of online counseling, such as decreased inhibition than face-to-face interactions. The risk section states that clients should be informed about the risks, such as possible breaches of confidentiality of e-mail transmissions.

The next sub-section, safeguards, discusses the importance of informing clients about the protection offered by counselors and the actions the client can take to safeguard against risks. The alternative states that clients should be told about possible other mental health sources. The final part of this section, proxies, states that when clients are not in a position to consent themselves to receive mental health services, consent should be obtained from a parent, legal guardian, or other authorized party.

2. Standard operating procedures. In general, the counselor should follow the same procedures when providing mental health services online as provided in person. Under this main topic are the following: practicing within boundaries of competence; following the licensing and credentialing requirements to practice; agreeing upon the structure of the services, such as format, frequency, and cost; conducting a proper initial evaluation of the client's problems and determining appropriateness of online counseling; protecting confidentiality; properly maintaining records

and informing clients of procedure of such action; and finally, following other established guidelines and ethical codes of relevant professional organizations.

3. Emergencies. This section states that the procedures to follow in an emergency, along with procedures to contact a local professional, should be discussed with clients.

These three professional organizations have adopted the above codes in order to begin to address concerns and issues proposed by e-therapy. However, the very nature of ethical codes means that there will be ethical dilemmas and potential difficulties. Below is a discussion of the practical, ethical, and legal issues surrounding this newer mode of therapy.

Issues of E-therapy

There are some risks inherent in e-therapy, but there are also advantages. This discussion is not meant to be an exhaustive list, but is intended merely to highlight some of the more significant challenges and opportunities afforded by e-therapy. While an appropriate regard for the potential disadvantages of providing interactive text-based intervention is ethically mandated, these potential risks need to be evaluated within the context of the potential benefits. So, instead of taking sides on the issue, this section will explore the various practical, ethical, and legal aspects of this new therapy.

The first issue deals with the time barrier that may deter individuals from seeking traditional therapy. An advantage of online counseling relates to convenience of time. Presently, the most frequently utilized means of e-therapy is through e-mail. Every site on Metanoia's listing of practitioners utilize e-mail as part of their services (Ainsworth, 2000). The advantage to online counseling is that no appointments are needed; clients can contact their therapists whenever they have access to a computer and can do so from the comfort and privacy of their own home. In most instances, e-therapists commit to responding within 24 to 72 hours (Fingfeld, 1999).

When e-therapy is conducted via e-mail, it allows both the client and the professional the time to fully reflect on issues discussed in a previous correspondence and also allows time for the client and therapist to conduct research into their difficulties. Unlike traditional counseling methods, e-mail therapy's strength is in the ability to explore and reflect about a person's concerns without the pressure to think quickly (Fingfeld, 1999; Grohol, 1999b). When e-therapy is conducted via real-time text exchange, however, therapists and clients need to find mutually acceptable times for sessions and both parties must think and respond quickly.

Another convenience which e-therapy offers relates to financial issues. At present, affordability can be viewed as an advantage, because online therapists are charging a range of approximately \$15-\$50 for an e-mail response and \$26 to \$65 for a 60-minute chat session (Laszlo, Esterman & Zabko, 1999; Fingfeld, 1999; Sampson, Kolodinsky, & Greeno, 1997). Because the fee is relatively reasonable, individuals can avoid utilizing their health insurance programs to finance their mental health needs.

This issue is related to the experimental nature of online counseling and lack of systematic research on the nature, scope and outcomes of this modality. Only a handful of outcome studies have appeared in the professional literature (Cohen & Kerr, 1998; King, 1994; Kovalski & Horan, 1999; Lange et al., 2000). The findings have been mainly positive about e-therapy; however, the sample sizes have been small and not enough information is available at this point to determine the efficacy and positive therapeutic variables of e-therapy. Clearly, the current body of research is limited in scope and rigor and it leaves unanswered many crucial questions related to the quality of Internet therapy.

Related to this experimental nature of online counseling is that the theories of therapeutic change derived from face-to-face therapeutic relationships may not be applicable to text-based communication. Arguments in support of cyberspace counseling stem from the theoretical underpinnings of solution-focused (Egan, 1998) and narrative-type (White & Epston, 1990) psychotherapies. Clearly, journaling has a longstanding track record in psychotherapy, and its effectiveness is attributed to a variety of factors. Murphy and Mitchell (1998) suggested that committing a problem to written format, such as e-mail, assists the client to analyze their situations by formulating a clear problem statement and reading and re-reading it for emotional clarity and accuracy. In effect, this exercise is hypothesized to assist clients in placing their problems within a context that removes some of the irrational emotional fervor that may cloud rational thinking and decision making.

On the negative side, the absence of appropriate training in text-based communication may affect the clinical competence of therapists attempting to deliver text-based interventions. New models and research for producing therapeutic change which are appropriate to the medium of the Internet may need to be developed

prior to providing competent online text-based interventions (Grohol, 1997; ISMHO, 2000b; Sampson, Kolodinsky, & Greeno, 1997). From the standpoint of clinical theory and technique, it may be that clinical work in cyberspace is an extension or a supplement to the more familiar styles of psychotherapy. However, it is possible that entirely unique theories and techniques will evolve within this new communication medium.

Recent research has shown that the technique of psychotherapy is not as important as the therapeutic alliance formed with a therapist (Ainsworth, 2000). Anonymity is one of the most influential factors contributing to the popularity of online counseling and the client's ability to form an alliance with the therapist (Fingfeld, 1999; Grohol, 1997; ISMHO, 2000b). Because individuals know that they are more anonymous online, they respond and behave differently than in person. The perception of anonymity eases the discomfort and potentially embarrassing and stigmatizing disclosure of behaviors and thoughts; in turn, clients are able to discuss deep, personal issues in a therapeutic relationship online more quickly than in real life, face-to-face interactions (Fingfeld, 1999; Grohol, 1997; Meier, 1988). In addition, if the client does not feel that the e-therapist is providing adequate assistance and the relationship is not helping, the client is actually able to change therapists with a few mouse clicks. According to Ainsworth (2000), in a recent survey of over 400 clients of online therapists, more than 90% responded that the therapist helped them. This suggests that it is possible to form meaningful relationships even on the basis of text-based correspondence, and these relationships can be healing. Online counseling is not a substitute for traditional psychotherapy, but it is helpful for many people and can be therapeutic (Ainsworth, 2000).

However, e-therapy's greatest advantages, anonymity and the lack of face-to-face contact, are also one of its greatest disadvantages for the ethical therapist (Bloom, 1998; Grohol, 1997, 1999b). Since the therapist won't have all the usual visual clues such as voice tone, facial cues, and body language, the client and therapist may have some misunderstandings about written information, and more clarification steps are needed. It is imperative that e-therapists who utilize chat or e-mail procedures make sure they understand what the client meant by the writing. There are some e-therapists, also, who argue that body language may be overplayed, and these clinicians offer alternative strategies for overcoming any limitations that e-mail technology may impose (Murphy & Mitchell, 1998). They suggest that clients and therapists express their emotions by literally bracketing words that illustrate what they are feeling. This helps the clients identify their feelings and encourages them to invest time in reflexively considering what their feelings mean. In addition, describing ones' difficulties is suggested to have a pretreatment effect because clients clearly identify the issues they are motivated to work on and begin to seriously think about the actions they are and are not willing to take to diminish their intrapsychic discomfort (Fingfeld, 1999; Murphy & Mitchell, 1998). In sum, writing empowers the client to take responsibility for his or her feelings and behaviors. Also, emoticons (emotional images created with keystrokes), emotional bracketing, descriptive immediacy, and the use of similes, metaphors, and stories are commonly used techniques that enhance the meaning of written text (Collie, Mitchell, & Murphy, 2000; Sussman, 1998).

Individuals who are in a crisis state or need immediate personal attention due to an urgent matter will probably not receive the help they need via e-therapy. Likewise, individuals with complex situations may be best suited with a long-term, personal-contact relationship with a counselor. In addition, the NBCC (1997) states that WebCounselors need to disclose topics that are not appropriate for e-therapy, such as sexual abuse as a primary issue, violent relationships, eating disorders, and psychiatric disorders that involve distortions of reality. As a protective mechanism for their clients, many of the online sites state this on the front page of their sites or the therapist explains this to clients upon the initial contact and during the ethical introduction. Also, in the case of suicidal clients, online sites should have a notice for the person to call a hotline or seek immediate attention at their local crisis center or emergency room. Once a relationship is established, emergency contact with an e-therapist may be handled in the same fashion that it is handed in face-to-face counseling. The client may be given the home, cellular, pager, and voicemail numbers of the therapist and given information on local community resources.

On the other hand, there is an existing body of literature on other types of nonverbal therapy, namely telephone therapy. Telephone therapy has been shown to be a cost-effective, clinically useful, ethical intervention modality (Haas, Benedict, & Kobos, 1996; Lester, 1996). We trust some of the most serious mental health problems to phone interventions now (e.g., suicidal hotlines), and this modality lacks nearly all nonverbal cues. The one item phone interventions possess that online interventions do not is voice. Voice can include important cues; however, voice over the telephone is usually real-time and immediate. Online therapy is most often conducted via e-mail exchanges, which allow for greater thought and elaboration. It remains to be seen whether online interventions are as effective as telephone interventions as much more research is needed in this area

(Ainsworth, 2000; Grohol, 1997; Guterman & Kirk, 1999).

Conceivably, some of these perceived barriers of nonverbal communication may eventually be overcome by the wider accessibility of real-time audio and video applications and smaller, inexpensive equipment. To date, such services are primarily based in large health-science centers; however, in the near future, two-way synchronous video conferencing between e-therapist and client may be commonplace (Guterman & Kirk, 1999; Sussman, 1998). The elitism that has been associated with online therapy will diminish as this exploding technology continues to grow and is widely and easily accessible to virtually everyone in libraries, schools, and university computer laboratories. This empowers consumers by offering them the opportunity of when to connect with their therapists.

Proponents of e-therapy also claim that written psychotherapy also empowers the client by placing them in a situation in which their unique ideas can be transmitted in a clear and uninterrupted manner. Specifically, therapists' premature interpretations and perspectives are prevented from clouding the essence of clients' messages. For this reason, e-therapy may have unique advantages for women and other traditionally oppressed groups who have been frustrated by the lack of sensitivity to their unique concerns (Finfgeld, 1999). Opponents of e-therapy state that e-therapists are vulnerable to cultural insensitivity and unintentional discrimination against their non-White, non-Western clients (Frame, 1997). Without the benefit of nonverbal communications, counselors may miss critical clues about their clients and may make incorrect assumptions about their cultural or racial identity. In a time when sensitivity to cultural and ethnic diversity is paramount and appropriate interventions are essential (McFadden & Jencius, 2000; Pederson, 1995; Sue, 1996), any medium that compromises these important dimensions of counseling is suspect. To circumvent these problems, e-therapists should have clients complete an intake form asking for such information. Also, some counselors and clients already have the video and audio equipment that allows them to see and hear one another (Frame, 19987; Guterman & Kirk, 1999).

In the new millennium, the need for culturally competent mental health professionals includes those who are technologically competent (McFadden & Jencius, 2000) and vice-versa. Cyberspace offers a nearly endless amount of information and opportunities for gaining cultural knowledge and relating to others from a variety of nationalities, religions, belief systems, and worldviews. Developing professional contacts with people from other cultures is easily done with e-mail, newsgroups, listservs, chatrooms, and even video conferencing. Cyberspace offers e-therapists and counseling students the tools to conduct cultural collaboration with colleagues on a worldwide platform and also to gain knowledge and information from hundreds of thousands of websites pertaining to cultural issues. In sum, the Internet does provide for e-therapists to improve their skills and increase their knowledge in cross-cultural counseling.

Writing thoughts and feelings is not appropriate for everyone, of course, and opponents of e-therapy state that it is limited to clients who are reasonably educated writers and readers if these clients are to reveal their feelings in an informational, emotional manner and then comprehend the therapist's responses. This leads to the issue of elitism (Finfgeld, 1999). The use of literary techniques to conduct therapy may be relegated to a select group of educated, middle- to upper-class individuals. However, it can be argued that some of these same demographic factors also present barriers to accessing face-to-face psychotherapy. That is, real-life psychotherapy is usually based on average intellectual abilities and skills and is more costly than the online therapies.

In addition, innovative initiatives have demonstrated that most people are fully capable of utilizing computer technology for health care purposes, including senior citizens (Krishna, Balas, Spencer, Griffin, & Boren, 1997). The United States Department of Housing and Urban Development is helping to make computer technology accessible to low-income individuals who lack these resources and the technology skills. Research findings suggest that such initiatives are successful and that low-income users tend to become empowered by access to such technology (Bier, Gallo, Nucklos, Sherblom, & Pennick, 1998).

One of the best advantages of e-therapy is that it dissolves geographical boundaries between clients and therapists. However, in the case of the law, this feature is a potential problem. Laws that govern counselors vary from state to state, and there currently are no international laws to govern counselors from various nations (Hughes, 2000). A disadvantage stemming from this legal issue is the grievance process for the client's protection. In the online world, clinicians are treating people who live in different states, and the therapist may not be licensed in that state. To date, there have been no lawsuits brought up in any state that address e-therapy, but this is an area of concern for both providers and consumers (Ainsworth, 2000; Grohol, 1999c). The grievance process for addressing complaints against e-therapists is currently uncharted territory. In short, if something does go wrong and the client has a complaint, the legal system is probably not going to be able to do anything

about it at this time. The ethical online therapist will clearly define his/her policies for grievances and who to contact if there is a grievance (Grohol, 1997).

A major ethical issue addressed by all of the codes of ethics is confidentiality of information shared in sessions (Hughes, 2000; Sampson, Kolodinsky, & Greeno, 1997). Online risks can occur at four locations: transmission, therapist-end, client-end, and legal subpoena (ISMHO, 2000b). Ethical therapists take very seriously their responsibility to protect privacy and confidentiality and are offering increasing levels of security on their websites for protection. There are secure web-based messaging systems as opposed to regular e-mail. Instead of sending regular e-mail to a therapist, the client logs on to a secure web page and then submits a message in a password-protected, secure form. However, most Internet therapists still do most of their work by e-mail because of the convenience and cheaper cost (Ainsworth, 2000). There are free e-mail encryption packages, such as PGP (www.pgp.com), and secure e-mail, such as ZipLip (<https://www.ziplip.com/zlplus/home.jsp>) and Hushmail (www.hushmail.com), and clients should choose therapists who offer such methods of protection. Even with these packages, however, it is easy to make inadvertent errors and compromise privacy. Another potential transmission breach is the situation in which the therapist or client accidentally misaddresses an e-mail and sends it to an unintended recipient.

Breaches may also occur on the client- and therapist-end. If the client or therapist prints e-mails and saves the hardcopies, someone may find the private information. Also, employers do have the right to read e-mails on machines that they own. Or, unauthorized access to a therapist's or client's e-mail by family members, staff members, or even the public may occur, so it is best to utilize a web-based e-mail system, such as hotmail (www.hotmail.com) or hotbot (www.hotbot.com). Relating to privileged communications, it is currently unclear if communication using the Internet is covered by therapist/client privilege (ISMHO, 2000b). This may be especially important for clients involved in child custody and divorce proceedings. Client communication to the therapists may be subject to the legal process, and when different nationalities are involved, the issue becomes even more confusing. These situations should be explained to the client during the first session.

Overall, the online world does offer some risks to a client's confidentiality and privacy, but it is not apparent or proven that these risks are significantly or inherently greater than similar risks already taken in real-world therapy sessions. According to Ainsworth (2000), talking to a therapist online is probably as safe as talking to one in person; both are very confidential and neither is 100% perfect. Understanding the potential dangers is the first step toward giving clients truly informed consent, and taking measures to reduce these risks is the second step (Grohol, 1999a). When deciding upon a moral dilemma, it is imperative to weigh the pros and the cons of an action.

Another issue that is addressed in each of the codes of ethics is verification of the *client's* and *counselor's* identities (Hughes, 2000). It is important that therapists offer clients enough information to independently verify credentials. An e-therapist should provide his/her real name, the state and country in which the practice occurs, office telephone number, discipline, certification, and licenses. It is imperative that clients take the time to determine that the therapist is licensed, certified, and qualified to provide such service.

Likewise, text-based communication restricts the mental health professional's ability to verify the *client's* identity. This difficulty becomes a significant issue regarding the treatment of minors and in addressing crisis issues such as suicidal ideation, homicidal intent, and child abuse (ISMHO, 2000b). However, the e-therapist should gather and verify contact information in a confidential manner, just as the face-to-face counselor does (Grohol, 1999a). A proactive way to deal with this quandary may be to obtain a client's local emergency numbers as well as their physical address and phone number before initiating therapy.

In addition to these ethical issues are related legal issues. Legal and jurisdictional issues are in the early formative stages and are complicated by the trans-boundary nature of the Internet (Hughes, 2000). When the client resides in a different legal jurisdiction from the therapist, it is unclear which laws are applicable. For example, in situations in which mental health professionals are required to breach confidentiality and report a client's danger to self or others, or suspected incidents of child, elder, or spousal abuse, it is unclear which laws, those covering the therapist's geographic region or those of the client's, are applicable.

Another legal issue complicated by the trans-boundary nature of e-therapy is that of licensure. Licensing laws in most areas restrict the practice of psychotherapy, not e-therapy (Hughes, 2000; ISMHO, 2000b). These licensing laws, which determine the state in which a therapist can legally practice, are called into question when practicing over the Internet across state and national boundaries. California was the first state to pass legislation affecting the practice of psychotherapy on the Internet. The California Telemedicine Act mandates that mental

health services provided online to a resident of California can be administered only by a clinical psychologist or medical doctor licensed in that state (Sussman, 1998). Additionally, managed care must cover online services that would normally be covered in person. Other states are currently working on similar legislation for e-therapists. These states could follow the example set forth by the Telemedicine Development Act, which proposed that states should not restrict the virtual travel of patients who seek medical advice outside of the state and that an Internet (or non face-to-face) contact by a patient with a physician in another state is regulated by the doctor's home state (American Telemedical Association, 1999; Hughes, 2000).

Some online therapists may try to limit legal and ethical constraints on the services they provide by offering a disclaimer in which the services they provide are called psycho-educational, advice-giving or coaching services (Finfgeld, 1999; Grohol, 1999c; ISMHO, 2000b). However, such a disclaimer should not be viewed as offering blanket protection in the United States, since courts and state regulators do not use the words of the therapist as the criteria for determining whether a therapeutic relationship has been established. Instead, the courts take the view of the reasonable expectations of the client (ISMHO, 2000b).

To circumvent some of these potential problems, it is imperative that e-therapists portray the types of services they are offering as accurately as possible, portray themselves as accurately possible (i.e., credentials, specialties), and deliver the services as advertised. As in traditional therapy, the e-clients should always sign a statement of consent to treatment that explains their rights and both parties' responsibilities. Finally, the e-therapist should contact his/her state licensing board to determine the formal position of the state. However, to date, most licensing boards do not have any regulations in place (Grohol, 1999c, ISMHO, 2000b). In sum, there remains considerable controversy regarding the jurisdictional authority of geographically determined governing bodies over many of the activities occurring in the trans-boundary domain of cyberspace, but e-therapists can take precautions to provide ethical and legal services.

Conclusion

To date, e-therapy has been dealt with in a rather fragmented and parochial fashion by state legislatures, the federal government, professional organizations, managed care companies, and the providing professionals themselves. These individuals and organizations need to work together in a timely manner to establish legal, ethical, and practice guidelines for the protection of clients. Undoubtedly, as the practice of e-therapy continues to exponentially grow as it has, the federal laws, professional licensing and credentialing guidelines, and the ethical and legal codes will eventually develop and solidify.

Clinicians who practice online would benefit from research in this area to assist them in determining the effectiveness of this modality and ensuring that the advantages outweigh the disadvantages. Research studies have already started to provide concrete evidence regarding online counseling that will provide a scientific means for evaluation of the practice. Well-designed research is required so that clinicians can confidently implement evidence-based interventions. Also, it may be that online therapists would be required to partake in an ethical course for online practice to ensure that they are familiar with the codes outlined above.

Some mental health professionals feel very strongly that it is not ethical for psychotherapists to interact with their clients over the Internet, while others are actively doing so. The creative tension must continue, and professionals, managed care companies, and consumers alike need to be reminded of the risks and benefits. To date, however, there is a basic truth: individuals are seeking mental health assistance from e-therapists. Many individuals are receiving such service from responsible, competent, and ethical mental health professionals and are forming effective helping relationships via the Internet - relationships that help and heal.

References

- Ainsworth, M. (2000). *Metanoia: The ABC's of internet counseling*. [Online]. Available: <http://www.metanoia.org/imhs>.
- American Counseling Association. (1999, October). *Ethical standards for Internet online Counseling*. Alexandria, VA: Author.

- American Telemedicine Association (1999). *News and event*. [Online]. Available: <http://www.catelehealth.org/cont.html>.
- Bier, M., Gallo, M., Nucklos, E., Sherblom, S., & Pennick, M. (1998). *Personal empowerment in the study of home Internet use by low-income families* [Online]. Available: <http://www2.educ.ksu.edu/Projects/JRCE/v28-5/Bier/article/textonly.html>.
- Bloom, J.W. (1997). *NBCC introduces its standards for the ethical practice of WebCounseling* [Online]. Available: <http://www.nbcc.org/ethics/wcintro.htm>.
- Bloom, J.W. (1998). The ethical practice of WebCounseling. *British Journal of Guidance and Counseling*, 26, 53-59.
- Cohen, G.E., & Kerr, B.A. (1998). Computer-mediated counseling: An empirical study of a new mental health treatment. *Computers in Human Services*, 15, 13-26.
- Collie, K.R., Mitchell, D., & Murphy, L. (2000). Skills for online counseling: Maximum impact at minimum bandwidth. In J.R. Bloom & G.R. Walz (Eds). *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 219-236). Alexandria, VA: American Counseling Association.
- Egan, G. (1998). *The skilled helper: A problem-management approach to helping*. Pacific Grove, CA: Brooks/Cole.
- eTherapy.com. (2001). eTherapy.com [Online]. Available: <http://www.etherapy.com>
- Finfgeld, D.L. (1999). Psychotherapy in cyberspace. *Journal of the American Psychiatric Nurses Association*, 5(4), 105-110.
- Frame, M.W. (1997). The ethics of counseling via the Internet. *Family Journal: Counseling and Therapy for Couples and Families*, 5(4), 328-330.
- Grohol, J. (1997, October). *Why online psychotherapy? Because there is a need* [Online]. Available: <http://sucjemtra/cp/archives/n102297.htm>.
- Grohol, J. (1999a, April). *Best practices in e-therapy: Confidentiality and privacy* [Online]. Available: <http://psychcentral.com/best/best2.htm>.
- Grohol, J. (1999b, April). *Best practices in e-therapy: Definition and scope of e-therapy* [Online]. Available: <http://psychcentral.com/best/best3.htm>.
- Grohol, J. (1999c, October). *Best practices in e-therapy: Legal and licensing issues* [Online]. Available: <http://psychcentral.com/best/best4.htm>.
- Guterman, J.R., & Kirk, M.A. (1999). Mental health counselors and the Internet. *Journal of Mental Health Counseling*, 21, 309-323.
- Haas, L.J., Benedict, J.G., & Kobos, J.C. (1996). Psychotherapy by telephone: Risks and benefits for psychologists and consumers. *Professional Psychology: Research and Practice*, 27, 154-160.
- Hughes, R.S. (2000). Cybercounseling and regulations: Quagmire or quest? In J.R. Bloom & G.R. Walz (Eds). *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 321-338). Alexandria, VA: American Counseling Association.

- International Society for Mental Health Online. (2000a, January). *ISMHO/PSI suggested principles for the online provision of mental health services* [Online]. Available: <http://www.ismho.org/suggestions.html>.
- International Society for Mental Health Online. (2000b, November). *Introduction to potential risks and benefits of online psychotherapeutic interventions* [Online]. Available: <http://www.ismho.org/issues/98012.htm>.
- King, S. (1994). Analysis of electronic support groups for recovering addicts. *Interpersonal Computing and Technology: An Electronic Journal for the 21st Century*, 2, 47-56. [Online]. Available: <http://www.helsinki.fi/science/optek/1994/n3/king.txt>.
- Kovalski, T.M., & Horan, J.J. (1999). The effects of Internet-based cognitive restructuring on the irrational career beliefs of adolescent girls. *Journal of Cognitive Psychotherapy*, 13, 142-152.
- Lange, A., Schrieken, B., van de Ven, J.P., Bredeweg, B., Emmelkamp, P.M., van der Kolk, J., Lydsdottir, L., Massaro, M., & Reuvers, A. (2000). *Behavioural and Cognitive Psychotherapy*, 28, 175-192.
- Laszlo, J.V., Esterman, G., & Zabko, S. (1999). Therapy over the Internet? Theory, research and finances. *Cyberpsychology and Behavior*, 2, 293-307. [Online]. Available: <http://www.geocities.com/HotSprings/Resort/7579.internet.htm>.
- Lester, D. (1995). Counseling by telephone: Advantages and problems. *Crisis Intervention*, 2, 57-69.
- McFadden, J., & Jencius, M. (2000). Using cyberspace to enhance counselors' cultural transcendence. In J.R. Bloom & G.R. Walz (Eds). *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 67-83). Alexandria, VA: American Counseling Association.
- Meier, S.T. (1988). An exploratory study of computer-assisted alcohol education program. *Computers in Human Services*, 3, 111-121.
- Murphy, L.J., & Mitchell, D.L. (1988). When writing helps to heal: E-mail as therapy. *British Journal of Guidance and Counseling*, 26, 21-32.
- National Board for Certified Counselors. (1997). *Standards for the ethical practice of WebCounseling*. Greensboro, NC: Author. [Online]. Available: <http://www.nbcc.org/ethics/wcstandards.htm>.
- Pederson, P.B. (1995). Culture centered ethical guidelines for counselors. In J.G. Ponterotto (Ed.), *Handbook of multicultural counseling* (pp. 34-49). Thousand Oaks, CA: Sage.
- Sampson, J.P., Kolodinsky, R.W., & Greeno, B.P. (1997). Counseling on the information highway: Future possibilities and potential problems. *Journal of Counseling and Development*, 75, 203-212.
- Sue, D.W. (1996). Multicultural counseling: Models, methods, and actions. *The Counseling Psychologist*, 24, 279-284.
- Sussman, R.J. (1998). Counseling online. CTOline [Online]. Available: <http://www.counseling.org/ctonline/sr598/sussman.htm>.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: Norton.

Chapter Five

Skills for Online Counseling: Maximum Impact at Minimum Bandwidth

by Kate Collie, Dan Mitchell, and Lawrence Murphy

In July and August of 1999, Kate Collie (KC) conducted an interview with Dan Mitchell (DM) and Lawrence Murphy (LM) on the topic of online counseling skills. The interview was done by e-mail so DM and LM could simultaneously describe and demonstrate skills they use in their e-mail counseling practice. The interview is reproduced here, along with a brief introduction in which the context for the interview is outlined, the people involved are introduced, and the key concepts that underlie the discussion are highlighted.

In online counseling, computers and the Internet are used to make it possible for counseling to occur without the counselor and client(s) being in the same physical place at the same time. Online counseling falls into the general category of telehealth, that is, the use of telecommunications technologies to make health care available to anyone who, whether by choice or necessity, receives care without the physical presence of a caregiver.

The three authors have been involved in the development of two forms of online counseling. Thus, the comments in the interview are based on direct experience. DM and LM began an e-mail counseling and therapy practice in 1995 (Murphy & Mitchell, 1998) and are among the few people who have both practiced online counseling and published on the subject. Their approach is called therap-e-mail and embraces narrative (White & Epston, 1990) and solution-focused (de Shazer, 1994) perspectives on counseling. They also have been instrumental in developing ethical guidelines for online counselling (Bloom, 1998). KC has been involved in the collaborative development of computer-supported distance art therapy (Collie & Cubranic, in press; Cubranic, Collie & Booth, 1998), an art-based form of online counseling that uses synchronous speech communication and shareable hand-drawn computer art.

Both therap-e-mail and computer-supported distance art therapy are low bandwidth forms of online counseling. Bandwidth refers to the amount of electronic information that can be transmitted at once between networked computers. It is a measure not only of the maximum speed of transmissions, but of the expense of using the system. When computers and the Internet are used to expand access to health care by making a service available to people in their own homes, it is advantageous to keep the bandwidth requirements low enough that the service can be used by people with standard home computers and dial-in access to the Internet. The lower the bandwidth requirements, the more people will be able to use the service.

There is some evidence that bandwidth limitations do not need to have a detrimental effect on the quality of communication. For example, in a study of pairs of people who used either videoconferencing systems or text-based chatlines with shareable drawing spaces to do collaborative architectural design, Vera, Kvan, West, & Lai (1998) found that the participants "implicitly compensated for the narrower bandwidth" (p. 503) so that there was no difference in the quality of the results achieved by the two groups. The low-bandwidth group compensated not by altering their design strategy, but by focusing their attention on the crucial aspects of their tasks.

In counseling situations, there may be advantages associated with not being able to see the other person. ColUn (1996) suggests that in online therapy there may be fewer emotional distractions. In a discussion of telephone communication, Rutter (1987) proposes that a lack of face-to-face contact may favor psychological proximity when the purpose of the encounter is to be personal, as is the case with counseling.

When discussing health care services that involve computers and the Internet, it is easy to let the technology be the main focus of the discussion, and to compare types of equipment rather than types of human interaction. However, the human aspects of computer-mediated communication may be as significant or more significant than the technological aspects. One of the most striking results of an initial evaluation of computer-supported distance art therapy (Collie, 1998) was that the particulars of the computer system seemed less important than guidelines and procedures for using the system. This suggests that success as an online counselor might depend

on acquiring specific online communication skills.

DM and LM have developed a set of online counseling skills through their work as online counseling practitioners and researchers. These skills were developed for text-only online counseling, however, they address issues that pertain to many types of distance therapeutic communication. The e-mail interview that follows contains a discussion of these skills.

The Interview

KC: Hello, Dan and Lawrence. It is a pleasure to have this opportunity to interview the two of you. Before we begin our discussion of online counseling skills, I wonder if one of you could briefly describe how your e-mail counseling practice works.

DM: Hi Kate. I'm very excited about this opportunity and want to thank you for the work you're putting into this chapter. Let me first prepare myself (explicitly, so you know how I do it) the way I do when replying to my clients. Before I type even my first keystroke, I have only one thing on my mind: express warmth and personal caring. If I were permitted only to say one thing in this interview, it would be that: express warmth and personal caring. To this end, even as I write at this moment, I have pulled up a chair for you and a chair for Lawrence, and placed them beside me. In a similar fashion, I would like to invite our readers to imagine the three of us sitting in chairs in front of them as if they were watching the interview. They may even choose to place three chairs in front of them. Kate, I'm imagining your warm smile and I feel a sense of anticipation about the insightful questions I know you're about to ask. So I'll begin by answering your first question.

New clients contact us through our web site <<http://www.therapyonline.ca>> using an automated form that we receive by e-mail. The form asks for appropriate consents and demographic information. Once we receive a completed form, we send clients the Virtually Solve It™ (VSI) worksheet via e-mail. The VSI is comprised of a series of questions intended to help clients begin to externalize their problem(s) and to orient themselves for change. Clients fill out the VSI off-line at their convenience. When they have completed some or all of the worksheet, they e-mail it to us, and the process of exchanging therap-e-mail begins. To each e-mail sent by clients, we reply with therap-e-mail as soon as possible. Clients send us e-mails whenever it suits them. They usually only communicate with us via e-mail, but they can also ask for clarification via toll-free telephone.

KC: Dan, I am amazed. You certainly conveyed warmth and caring in your first paragraph – and your words changed my state of being. You “warmed me up” – I mean, I was feeling very matter-of-fact and rational when I wrote the first question. I feel a closer rapport with you now, and I feel more inclined to speak from my heart.

Let me move on to my next question. Lawrence and Dan, you say in your article, “When writing helps to heal: e-mail as therapy,” which appeared in the *British Journal of Counselling and Guidance* in 1998, that your approach to online counselling is based on narrative therapy and solution-focused therapy. Can you describe briefly what the therapeutic goals might be within these perspectives?

LM: Hi Kate. I want to echo Dan's sentiments. It's a pleasure to be involved with you on this project and after reading Dan's work on the first question I'm sitting here smiling with anticipation myself. The set of questions you've prepared is very engaging. Thank you so much for all the work you've done (and will have to do after we're done responding!).

To be brief, in the narrative approach what we are involved in is reauthoring the stories clients tell themselves about themselves. The idea, somewhat simplified, is that we all tell ourselves a story about ourselves that allows us to make sense of the world. This story is learned over time and is co-constructed by us, our families, our culture, and society. Race and gender and sexual orientation, intelligence and talent and family traditions all play a part in our story. As a therapist working in this tradition, I am interested in unpacking the influences of this story and helping the client to rework their story so that it is conducive to their mental health and to their continued healthy development.

In the solution-focused approach, again somewhat simplified, I am interested in learning what the client is doing that already works and helping them to do more of that. There are always things that clients are doing that reduce the power of the problem in their lives, or give them brief glimpses of the experience that they want to

have all of the time (or at least more often). My goal then is to uncover these thoughts, feelings, actions, places, people, and what have you, and help clients orient themselves towards these aspects of their lives.

When we combine the two we conceive of the existing solutions – the things that the client is already doing that are working – as an underlying story of ability and success that is covered over by the dominant problem-saturated story. In some sense, the solution-focused approach is the means to the end of helping clients reauthor their story.

KC: Thanks, Lawrence, for reducing complex concepts into a clear synopsis. I am struck by your use of the word “reauthoring”. In therap-e-mail, clients do the reauthoring by writing rather than by talking, and they produce a reauthored story they can keep and read later. I would guess that the writing process would help make the change process real and believable for the client.

LM: When a client tells me in a face to face interview of a success that they’ve had, it is very easy for them to retract their responsibility for that success the next week. This is not impossible when the evidence is in print, but it’s that much more difficult. Further, once the evidence is in writing, the client can refer back to it, should the problem ever rear its ugly head again. One of our goals is to begin collecting such solution stories so that people who have been able to overcome adversity can share their successes with others. We believe that an online interactive network of such stories could be beneficial to clients and therapists alike in helping people to reauthor their lives.

KC: One of the issues that gets discussed in reference to online counseling is the lack of non-verbal cues. In a text-only form of counseling like e-mail counseling, there are even fewer non-verbal cues than there would be in telephone counseling, where you hear a lot in the person’s tone of voice, the silences, the speed of the speech, etc., or if you were communicating with letters, where you would see the handwriting. The lack of non-verbal information is often assumed to be a serious drawback to online counseling (e.g., ColŪn, 1996). In your article, you agree that the lack of non-verbal cues presents a challenge. However, you claim that by using techniques that contextualize and enhance the meaning of therap-e-mail it is possible to produce a therapeutic experience that rivals face-to-face interviews.

You have developed very specific online counseling skills for this. Three you mention in your article are: “emotional bracketing,” “descriptive immediacy,” and the use of similes, metaphors, and stories. I am going to ask you to explain each of these and give examples of how you might use them, but first can you explain why “contextualization” and “meaning enhancement” are important in online counseling?

DM: Sure. It’s like the difference between reading the newspaper and reading a novel that makes you cry. The former, while providing information, does nothing to attempt to personalize or make the stories relevant to your particular context. The novelist helps you become emotionally involved by bringing you into the presence of the characters, showing you the personal meaning and impact of events on the characters. Likewise, in therap-e-mail, intensification of what is relevant to the client’s context and to the therapeutic relationship both personalizes and enhances the meaning of the interaction.

KC: Now for some specifics: What is emotional bracketing?

LM: I’ll explain emotional bracketing and demonstrate it at the same time [feeling pleased that I thought of this]. This technique is used throughout therap-e-mails. When we thought about our face to face therapy experiences, it seemed obvious to us that the non-verbal element is [feeling unsure of the wording I want] in the background of our conscious awareness. It takes effort, and indeed training, to be aware of these elements. Once aware, we discover that the non-verbal dimension often communicates emotional material. Sometimes this is congruent with the person’s words, sometimes not [now feeling very on track]. In therap-e-mail, we discovered that we could compensate for the lack of non-verbals by bracketing the emotional content behind the words. We place, and invite our clients to place, important emotional content (particularly emotional information that we couldn’t otherwise glean from the text) in square brackets. Here is an example of what a client might write:

I have reread your last therap-e-mail several times [feeling stupid again] and although I

appreciate your words [can't believe you have such faith in me] I don't think I'm ever going to have a worthwhile relationship [very very sad]. Richard called again to say I'm an idiot [angry with myself]. He's so mean [actually I think I'm more angry with him]. But, hmm, now that I think about what you said again, I am actually feeling angry with him [Weird. I feel pretty good just now].

This accomplishes at least three things. First, it gives the therapist and the client more information about each other, in a way that is relatively simple to learn. Second, it encourages the client to be more deeply aware of his or her emotional content and thus more self-aware. Third, it creates a context in which clients are able to begin to externalize part of their conversation with themselves (and us). Many therapeutic traditions, from Gestalt to narrative, use some form of externalizing to encourage change.

KC: And descriptive immediacy: What is it, and how and why would you use it?

LM: Descriptive immediacy is a technique that we use to deepen the connection between client and therapist. We also encourage clients to use it when they feel that it will give us important information. Here is an example of what a therapist might write:

I have just finished reading your last therap-e-mail, Angie, and my smile is a mile wide. As I think about your successes over guilt, I find myself nodding my head and saying the words "you did it, you did it" smiling all the while. If you were here with me now you would see me shrugging my shoulders with my hands in the air, as if to say "well...looks like guilt's power is all burned out". Congratulations Angie.

We use descriptive immediacy in several situations. First, we use it to highlight a moment of intense emotion, any situation in which a simple verbal response is not enough. This may be about a success, as in the example above, or it may be in response to a very painful disclosure. Second, we use it in situations where we might use immediacy face-to-face. An example would be a situation in which the client's words seem incongruent, or contradict a previous therap-e-mail. We would use descriptive immediacy to first deepen the intimacy between us before venturing to – even mildly – confront. However, the technique can be used any time the therapist feels that it would be helpful to deepen the bond with a client.

DM: I often use descriptive immediacy in greetings and closings. For example, when I receive the first e-mail from a client, I may reply with the following:

"Hello John, In my mind's eye, I'm stretching out my hand to you right now with a welcoming smile on my face saying, 'I am very pleased to meet you.' If I could, I'd offer you a nice cup of tea as well..."

In a closing I might say:

"Laughing with you as you see through the empty threats of anxiety, Dan"

Descriptive immediacy is one of a broader category of skills that Lawrence and I have called "presence techniques." With therap-e-mail, we are not simply conveying thoughts, or even feelings via text. More than that, we strive to establish and maintain a therapeutic relationship in which we maintain a subtext of genuine warmth and caring for the client. We use presence techniques to bring clients into our presence, as I am doing by having the two empty chairs beside me. We also use presence techniques to make more vivid for *our clients* the experience of being present with *us*. The latter is the case with descriptive immediacy.

A subtle, but crucial thing happens when I use presence techniques: I find myself using language that implies that my client and I are face to face. When I receive e-mail from other counsellors whom I have never met, I almost always begin my reply with, "It's a pleasure to meet you." I said something similar in my example of a greeting to a client a moment ago. Oh, I just did it again! [surprised at myself] "A moment ago" is not usually a phrase used in text. One would normally write, "In the example above..." but "above" is not my own

or my client's experience. "A moment ago" draws attention to the experience we just shared rather than to the text itself.

LM: One thing that I would like to point out here is that we use presence techniques *and* teach them to our clients. Thus, clients are encouraged to be more aware of themselves, their experience, their behaviour, and their environment. Some therapists wouldn't attempt such teachings in therapy because they would prefer that the client be unaware of what his or her non-verbals are communicating. Others don't have the time. We have the luxury of unlimited time on the client's part since the time they take to compose their therap-e-mail is (apart from length) unrelated to the time we spend reading and responding. And we believe that the more tools we can give our clients, the better.

KC: In your article, you mention the use of metaphorical language for meaning enhancement. How would that work?

LM: Most fiction uses some form of metaphor or simile to communicate and deepen meaning. We believe that accessing the part of the brain that processes metaphorically allows us to access a deeper, non-verbal (perhaps pre-verbal) level of consciousness. In our face-to-face work we often invite clients to bring in symbols of their problems, or desired solution states, in order to access this part of themselves. In text, we can invite clients to describe their problems or desired states in metaphor. "The guilt is like a weight. It's like liquid concrete in a sack. It moves wherever I move, never lets me get out from under it." We have found that when clients share with us in this manner, it deepens the connection between us (this is also true in face-to-face therapy). It also helps clients to get a better idea of what they want and what they don't want, and why.

Such language can also be quite simple. "My heart feels like a weight inside my body as I write to you John. I am so sorry that your mother died." Or "Reading how happy you feel now that you're out of that damaging relationship Carol, it was like my monitor itself was going to start laughing." Because a text-based interaction lacks some of the richness of a face-to-face interaction, therapists need to add richness to their writing. One doesn't need to be a Pulitzer caliber writer, but one has to enjoy writing, and be willing to become creative...

KC: ...which would encourage clients to be creative in their writing and perhaps also in their lives.

Have you developed any other techniques since you wrote the British Journal of Guidance and Counselling article?

DM: Yes, we have! This is the part I find most exciting.

Perhaps I can first focus on the appearance of the e-mail itself. Some clients write using 8 point fonts. Others use coloured text with special backgrounds. Still others use the defaults that come with their software. This creates for me something of a first impression – similar to the moment of having a client enter my physical office. From the appearance of the e-mail, I begin to form hypotheses about clients' stories.

Looking more closely at the text itself, I may notice that the client has used the lower case "i" to refer to himself. Could this client be a little bit shy? Possibly. Or, I may notice that some words have been misspelled. Does that mean the client was in too much of a rush to check, or does it speak to the client's literacy level? A moment ago, I spelled the word "coloured" using Canadian spelling. If a client had done so, I would wonder whether he/she has British or Canadian origins.

Sometimes clients use ALL CAPS to emphasize a point or even to convey emotion that can be interpreted based on the context. For example, a client may write, "I took your advice and told my mother. I can't believe I ACTUALLY DID IT!" Clearly the client is showing excitement and pride in his or her accomplishment.

Naturally, I can use any of these observations therapeutically as well! For instance, perhaps it is important for me to take a one-down position with a client so that a certain intervention will be effective. I may choose to do so by using lower case "i" and by reducing the size of my font. Or, I can use a dash – or a series of dots to denote a pause in my thought process... and thus intensify the point I'm making.

And of course I can use pseudo-words such as "hmmmm" or intentional misspellings such as "ooooohhh boy." Were you able to hear that long "ooooohhh" in your head?

Hmmm. Stretching the length of words... Isn't that non-verbal communication? [Can you tell I'm feeling a little smug right now?]

Did I just notice a smile creeping over your face, Kate? ...or was that my imagination?

Here I'm using spacing, presence techniques, and sequence to anticipate, and to some extent, even create your reactions.

Perhaps I should slow down and explain what I'm talking about. I used spacing to control the timing of delivery. Large spaces create an extended pause. In this case, where I was trying to bring in some levity, I used extra space to create a sense of delayed timing.

What did I mean by "sequence?" The nature of e-mail is that it is read sequentially. While reading, clients certainly cannot interrupt me as they can in a face-to-face situation. This allows me to develop a mood, or to set the stage for making a certain point, or to control the level of intensity.

Although e-mail is read sequentially, I suspect that it is rarely written completely sequentially. I can use the backspace key, I can cut, paste, reword, and so on. In fact, I'm doing that now. This allows me, and, as our anecdotal evidence suggests (Mitchell & Murphy, 1998), clients, to clarify thoughts and feelings more deeply. With e-mail, unlike any other form of communication, I can decide whether and where to interject my reply or comments. If I wanted to, I could reply to clients with a new, blank e-mail. Or, I could place my entire reply at the beginning or at the end of clients messages. I rarely choose to do any of those. I find it much more personal to interject my comments and reactions where they best fit in the sequential context. The resulting document looks more like a transcript of a conversation, which, in fact, it is.

I'm sure that some of our readers will be wondering about the use of "emoticons." Emoticons are strung together keyboard symbols that, when turned 90 degrees clockwise, look like facial expressions. Here are some examples:

- :-) happy, pleased
- ;-) just kidding, a joke, (called a winkie)
- :-(sad, sympathetic, compassionate

I use these occasionally, especially when I want an informal tone. I find the "winkie" particularly useful for marking an attempt I've made to be humorous or to introduce some levity. I've found that humour sometimes doesn't come through very well in text. So I need to use special care to ensure that I convey the message I intend. Being explicit about the tone of voice I'm using and a winkie can help. Especially if it wasn't funny ;-).

The final technique that I want to talk about is text-based externalization. This is similar to the two-chair technique, using text instead of chairs. For example, if a client is deliberating about whether to leave her husband, I might invite her to explore each side of the internal struggle she is having. My invitation might go something like this:

"Janet, I know the battle that's going on inside you. It's like you're having this argument with yourself that never is resolved. One part of you says, 'I can't take this! I have to leave.' The other part of you loves him and can't bear to hurt him.

"I have an idea that may sound a bit weird at first but I know it can be helpful. Other clients have tried it and I use it myself sometimes when I have an argument going on inside myself. It helps me 'hear out' each side of the argument without having the other side interrupt.

"What I do is I name the two sides. Perhaps in your case it would be, 'I'm leaving' and 'I love him.' (Name them with names you find fitting.) Then start writing purely from one side until you feel you've said your piece. Then switch your attention to the other side and write purely from that perspective. The conversation might go something like this:

"I'm leaving: I can't stand the way he totally ignores what's going on around him... etc, etc "I love him: Yeah, but he and I can be such good friends at times. He's so much fun... etc., etc.

"Let me know if this makes sense. It's a little difficult to explain, so I'd like you to ask me for clarification if you need to."

Text-based externalization also can be used to externalize problems and to give them a voice. Does all of that make sense?

KC: Yes, it does. And I see now that compensating for the lack of non-verbal cues is only part of what you address with the online counselling skills you have developed. You also have ways of compensating for the lack of shared physical presence.

I have noticed when reading about online counselling that physical presence and non-verbal cues often get lumped together as one thing. Maybe they shouldn't be: In the case of a blind person, there can be physical presence without visual cues and in the case of videoconferencing there can be visual cues without shared physical presence. In the study of computer-supported distance art therapy I conducted with Davor Cubranic (Collie, 1998), lack of shared physical presence emerged as one of two very serious problems (along with the risk of technical failure), but not being able to see the other person was seen as a problem with many possible solutions and in some cases a distinct advantage.

Are there other concerns that come into play with therap-e-mail that require special online skills?

LM: In circumstances in which a client's writing is different from my own, I can do what I would do in a face to face interaction. I can, respectfully and without parroting, adapt my style so that it reflects the client's. One takes the concepts concerning joining that one learns when one is first starting to do therapy, and one adapts them to a text-based medium. So my sentences can be longer or shorter, my vocabulary more or less complex, my metaphors computer-based or religiously-based, all depending upon the client's writing. I respond to the client's writing patterns in much the same way that I would respond to a client's speech patterns.

I'll just note one other thing here that can be very troubling – and you note it above – which is technical glitches. E-mails do still get lost. Sometimes they get truncated. Systems fail, programs get infected, and ISP's have server troubles. It is extremely important, at the outset, to inform clients of such possibilities, and to have in place plans in case things go wrong. For example, there should be a window of time during which clients can expect a response. If they don't receive one, they are to write and tell us so. Thus, a lost e-mail does not become a huge misunderstanding.

KC: When I was planning this interview and imagining how it might go, I didn't expect that you would have so many different skills and techniques to discuss! You have shown that there can be a large non-verbal dimension to "text-only" communication and that there are many ways not only to compensate for not being in the same room, but to take advantage of opportunities that are available with online text communication.

Would you say that the skills you have developed for online counseling have helped you in your work as face-to-face counsellors?

LM: This is a great question. The answer is a very powerful yes. The very first thing I notice in doing therapy online is how critical it is to suspend judgments and assumptions about people. Since I can't see them, I need to ask quite a few questions about my clients in order to know who they are. When I then go to my office to do face-to-face therapy, I am sensitized to this. And what do you know? A client walks in who looks and talks and acts like me. His skin's the same colour, he's about the same age, and he wears a wedding ring. And I discover that there's a part of my brain that just assumes that I know who he is. Not entirely of course, but I discover that I'm less inclined to ask him the kinds of questions that I'd ask of someone different from myself. And yet when I do ask those questions of him, the answers often surprise me. I have come to believe that we make far too many assumptions about our clients when we, or perhaps since we, see them face-to-face.

Another thing that is critical in therap-e-mail is attention to the impact I'm going to make before I make it. As a result, I am now much more aware in face-to-face work of having a part of myself devoted to planning assumed that the client would simply learn how to better tackle problems by watching me and mimicking me; learning by osmosis. But because there is more explaining that I feel needs to be done in a therap-e-mail, and because that has had such a positive impact, I have found myself doing it face-to-face.

I have one more question. What advice would you give to someone who wants to begin acquiring online counselling skills?

LM: First, communicate with someone who has done it and who has experienced some measure of success. Second, it is absolutely essential that you put the client's well being and thus the ethics of what you are doing before everything else. Third, make sure that you know the technology. You need to be as familiar with the computer as you are with empathy. And finally, be prepared for a period of transition. It is unlikely that you will be able to do the same kind of therapy that you have been doing face to face. In some instances, your whole perception of the process of change will be shaken. This approach is not for everyone, whether client or therapist. Doing therapy online requires a great deal of humility and a willingness to adapt and to be a student once again. Be prepared.

KC: This brings us to the end of our e-mail conversation. Dan and Lawrence, thank you for your thoughtful and informative answers. It has been a pleasure collaborating with you on this project, and I look forward to discussing readers' responses with you.

References

- Bloom, J. W. (1998). The ethical practice of WebCounseling. *The British Journal of Guidance and Counselling*, 26, 53-59.
- Collie, K. (1998). *Art therapy online: A participatory action study of distance counselling issues*. Unpublished master's thesis. University of British Columbia, Vancouver, Canada.
- Collie, K., & Cubranic, D. An art therapy solution to a telehealth problem. *Art Therapy: The Journal of the American Art Therapy Association* (in press).
- ColŪn, Y. (1996). Chatter(er)ing through the fingertips: Doing group therapy online. *Women and Performance: A Journal of Feminist Theory*, 9, 205-215.
- Cubranic, D., Collie, K., & Booth, K. (1998). Computer support for distance art therapy. In Summary of CHI'98 (pp. 277-278). Los Angeles, CA: ACM Press.
- de Shazer, S. (1994). *Words were originally magic*. New York: Norton.
- Mitchell, D. L. & Murphy, L. M. (1998). *Confronting the challenges of therapy online: A pilot project*. Proceedings of the Seventh National and Fifth International Conference on Information Technology and Community Health; Victoria, Canada. Can be downloaded from the web at <http://itch.uvic.ca/itch98/papers/ftp/toc.htm>.
- Murphy, L. J., & Mitchell, D. L. (1998). When writing helps to heal: e-mail as therapy. *British Journal of Guidance and Counselling*, 26, 21-31.
- Rutter, D. R. (1987). *Communicating by telephone*. Oxford, England: Pergamon.
- Vera, A. H., Kvan, T., West, R. L., & Lai, S. (1998). Expertise, collaboration, and bandwidth. In Proceedings of CHI'98 (pp. 503-510). Los Angeles, CA: ACM Press.
- White, M., & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: Norton.

Chapter Six

The Internet, The Hidden Web, and Useful Web Resources: ERIC, ERIC/CASS, & The Virtual Library

Chris Kirkman, Allen Frady and Garry R. Walz

Introduction/Overview

According to eTForecasts, the number of world-wide Internet users surpassed 665 million in 2002; by 2005, the number of users will extend beyond 1 billion (eTForecasts, 2002). Of the users in the United States, three-quarters use the Internet to search for information at least once a week and spend between 1.5 to 9 hours per week searching (Sullivan, 2001a, 2001b). The term *informavore*, coined by psychologist George Miller in the 1980s, has increasingly been applied to humans in our need for more information.

We are constantly searching for new information, assessing and questioning what we read, and continuing to gather more. Yet, our searching strategies often take us considerable time and cause us considerable frustration in getting the results we want (Sullivan, 2001b). Increasing importance is placed on the quality of documents found on the Internet. Learning better search strategies, knowing “hidden” databases, and using reputable sites as portals can increase the success of Internet searchers on the Web.

The Internet: Just How Big Is It?

The Online Computer Library Center estimates there were 8.7 million websites in 2001; the number of individual web pages calculated at 800 million in 1999 could currently be assumed to be in the billions (Lawrence and Giles, 1999). While the Internet continues to grow each year, calculating the size of the Internet is an inexact science. Websites change, adding new pages or taking down old ones, on a regular basis. The exact number of websites is unknown as varying factors play a role in its growth. Changes in the economy, human interests, and accessibility, among others, alter the rate of new additions to the Web.

The percentage of Internet growth however has declined over the past 5 years (OCLC, 2001). The change in positive growth from 1997 to 1998 was 82%; from 2000 to 2001, the growth change was 18%. Each successive year between 1997 and 2001 showed a decline of the rate of growth signifying a change in importance in our views of the Net. In the late 1990s, the Internet was a place of *quantity*, where now Web users look to the Internet for *quality*. There are expectations that organizations, companies, and universities will have websites, and that these sites will contain accurate and useful information. The importance of quality on the Internet is seen as more users turn there for information. According to a study from The Search Engine Report, the Internet has become the top source for information for Americans (Sullivan, 2001a). U.S. Internet users find the Net more important than television; many now consider the Net as important as books and newspapers (UCLA, 2003). As a primary resource, continuing emphasis will be placed on the quality of information as the growth of new websites slows and the number of new users continues to increase.

On the Internet, one in every twenty-eight pages is a search results page (Alexa Insider, 2000). Searching has become the most popular task online next to checking e-mail. As users turn to the Net for reliable sources, their knowledge of where to look for information, how to use search engines, and how to use creative searching techniques when others methods fail will become increasingly important for continued success online.

Searching the Internet

Search engine size and strength has been an important element of successful searches for quality information. Since 1995, search engines have drastically changed in their capacity to register information and create space for users to “surf.” Before 1996, search engines typically cataloged less than one million web pages; currently, Google, one of the top five engines, indexes over 3 billion pages. With this data, a user’s knowledge of searching

is more vital than ever. Some basics that can help are:

Search Engines

A search engine is a program that searches for specific keywords on Web pages. With proprietary algorithms for each company, search engines find keywords, create indices, and, ideally, return the most relevant documents to the user. Knowing keywords and terms are important in a search. The top search engines are:

AllTheWeb – <http://www.alltheweb.com>

Altavista – <http://www.altavista.com>

America Online – <http://www.aol.com>

AskJeeves – <http://www.askjeeves.com>

Excite – <http://www.excite.com>

Google – <http://www.google.com>

Infoseek – <http://www.infoseek.com>

Lycos – <http://www.lycos.com>

Yahoo – <http://www.yahoo.com>

Some Strategies

Be As Precise As Possible. With the enormous size of the Internet, a keyword search for the term “career” returns a result of 15.1 million pages on Altavista, 19.4 million pages on Google and 41.4 million pages on Lycos. To wade through 15 million documents would require weeks, defeating the usefulness of the Internet. Good search techniques employ multiple keywords; so instead of using the very general “career,” narrow the terms down to more specific language: use “workplace satisfaction” or “career development facilitators guide.”

Use Quotation Marks Around Phrases or Words Occurring Consistently Together. The use of quotation marks around words or phrases in a search engine returns results where those words appear in that specific order. For instance, if searching for the ethical standards of online counseling, a search engine will find documents with those words in the page but not necessarily in order or even adjacent to each other. Without quotations, the search engine could find pages having very little to do with the topic as the terms may occur sentences or paragraphs apart. Using quotation marks finds pages with those words in the specified order.

Use + and – Symbols to Narrow Searches. Most search engines utilize the + and – symbols as methods adding terms or subtracting them from a search. (Some engines use alternative symbols or words so it is important to know how your search engine works.) If searching for career development sites that also include a job board (a listing of available jobs), the following search could be used: “career development” + “job board.” Or, the opposite could be employed as well: “career development” – “job board” for career development sites that do not have a job board.

The Hidden Web

The best searches reach only 16% of the actual available information on the Internet. The other 84% of the Internet is considered the “hidden Web” (Dahn, 2000). In fact, the hidden Web may be much larger, by millions of documents, than the surface Web (Mardis, 2001). The hidden Web remains obscured from typical search engines (such as those listed above) because the documents reside in “hidden” databases or non-HTML formats. The documents from the hidden Web are made up of highly focused, relevant, quality documents to all areas of interest (Mardis, 2001). The databases tend to be highly focused on a particular subject area, and are administered and maintained by a reputable source.

Finding the “hidden Web” is not always easy. The best results come from the reliable resources within your field. Professional organizations may maintain their own databases (or mini-databases) or will often provide links to them. Within the broad field of education, the ERIC database remains one of the best and biggest of the hidden Web. Over one million abstracted documents lead the user to highly useful and important information, however ERIC remains hidden from typical search engines.

The ERIC System and The ERIC Database

ERIC (Educational Resources Information Center) is a federally-funded database of educational materials.

Sixteen clearinghouses, each organized on a subject-specific educational topic (such as Counseling & Student Services, Urban Education, Elementary and Early Childhood Education, and Information & Technology), contribute to the ERIC database as well as producing books, websites, and other resources relevant to its individual scope and to education. Established in 1966, ERIC has become the primary resource world-wide for locating education-related materials. The ERIC database, cataloging over one million documents, is not searchable from regular search engines such as Yahoo, Google, and Altavista; ERIC is part of the hidden web, a database of quality documents that can be accessed only from select points on the Web.

The world's largest education database, ERIC materials include books, journal articles, presentation papers, research papers, and dissertations, as well as other education-related materials. The database can be searched at no cost via the Internet and on CD-ROM at many libraries and educational resource centers. To search the ERIC database online, visit <http://www.eric.ed.gov>. If you find that your search is incomplete or you need additional help, ERIC provides free assistance on the Web by the AskERIC service. Go to <http://askeric.org>, go to Ask An ERIC Expert, state your question, and within two business days you will receive an ERIC search.

The ERIC Clearinghouse on Counseling and Student Services (ERIC/CASS)

The ERIC Clearinghouse on Counseling & Student Services (ERIC/CASS) is one of 16 main clearinghouses in the ERIC system. ERIC/CASS plays many diverse but significant roles. ERIC/CASS produces several major publications on counseling by top authorities in the field each year. The clearinghouse works closely with professional organizations such as the American Counseling Association (ACA), the National Board for Certified Counselors (NBCC), the American School Counselor Association (ASCA), and the National Association of School Psychologists (NASP) to name a few. ERIC/CASS also produces many free publications throughout the year such as ERIC Digests (short papers on issues relevant to the counseling field). Along with these hard-copy publications, ERIC/CASS has been at the forefront in utilizing technology and the Internet to bring more information to the people who need it.

ERIC/CASS on the Internet

When looking for counseling information on the Internet, ERIC/CASS should be the first site you turn to. The ERIC/CASS homepage has links to all the necessary resources within the ERIC system for all of your educational needs. The site, which is easy to navigate, provides lots of free, full-text information, access to publications, and methods of improving your professional development and your personal professional standing.

What's New

The ERIC/CASS *What's New* page is regularly updated providing you with a gateway to new materials added to the various ERIC/CASS sites. You do not have to look far to see what is new! ERIC/CASS aims to provide counselor-relevant materials so that will become a one-stop location for counselors to keep up with the counseling field.

Publications

Both free, full-text documents as well as longer monographs can be found in the *Publications* section of the website. ERIC/CASS digests are listed here in full-text by year of publication and title. Digests are excellent "cliffs notes" to current counseling research keeping you in tune with the counseling world. Digests are freely reproducible and make an excellent source for parent handouts in the school or for dissemination to teachers and administrators. Also, the *Publications* page provides a catalog of ERIC/CASS publications, such as *Counseling Underachievers*, *Proven Strategies for Improving Learning & Achievement*, *Leading and Managing Comprehensive School Guidance Programs*, *Addressing School Violence*, *Career Transitions in Turbulent Times*, and *Cybercounseling & Cyberlearning*. A number of highly useful video tapes are also available.

Submitting Documents to ERIC

Increase your professional visibility and highlight your work by submitting your papers and research to ERIC. The ERIC database actively solicits professional contributions in order to constantly grow and represent the breadth of the field. ERIC has selection criteria followed by each clearinghouse. All work accepted by ERIC

is disseminated internationally through the database. Your work will provide information to other counselors (and future counselors) to better prepare themselves for work in the world of counseling. To submit documents, simply send two hard copies of your work and a signed reproduction release to the acquisitions coordinator at the ERIC/CASS office. Visit the *Submitting Documents* page for more information.

Useful Links

Under *Useful Links*, the Counselor Connection is the perfect source to find many relevant counseling organizations and associations you need as a professional. The Counselor Connection also provides links to subject-specific issues in counseling. This comprehensive list of links connects you to the world of counseling.

The Virtual Library

The ERIC/CASS Virtual Library covers twelve school counseling-relevant issues by offering full-text resources, links, and current information on the topic. The twelve topics are: Testing & Assessment; CyberCounseling & CyberLearning; Helping People to Cope with Trauma, Grief, and Stress; School Violence; Student Achievement; Substance Abuse; Depression & Suicide; Conflict Resolution; Cultural Diversity; Career Development; Bullying in Schools; and Youth Gangs. The Virtual Library was designed with counselors in mind, but also aims to provide information for parents, teachers, administrators and higher education students.

Each library has its own homepage with updated material to point to new research and links to news articles of relevance to the topic. You will find each homepage for a Virtual Library topic a good bookmark for your collection of sites to visit often!

Each library is organized into user-driven subcategories where counselors may choose the “counselor” link and find relevant articles. The subcategories are divided into:

Education Level

- Elementary
- Secondary
- Post-Secondary

Practitioner Role

- Administrators
- Counselors
- Teachers

Each collection is also divided into other topic-relevant categories such as special issues, resources for parents, etc. Within each category, a wealth of full-text information can be found.

The original vision of the Virtual Library was to serve parents and counselors but high demand by the wide scope of ERIC/CASS users made it possible to expand the vision to encompass the interest areas of teachers, administrators, the public, and others invested in educational issues. Recently, categories of research information, an area specifically for research by higher education specialists and professional organizations, has been created for many of the collections in order to provide the newest information for graduate students as well as those professionals driven and interested in the latest numbers generated by the field.

International Career Development Library (ICDL)

A database of career development materials for career counselors, school counselors and career practitioners, the ICDL was created to be a primary resource. The ICDL has over 500 free, full-text documents (many of which are essential materials for counselors) organized in a database with a customizable search engine and a catalog list of each document. The ICDL has been praised by many as a source to turn to first for career information. The scope of the ICDL is useful to practitioners from elementary school counselors to college career counselors and private practice counselors as well as students in the field of careers and career development.

The ICDL is constantly being updated with new material. Through ERIC/CASS’s extensive connection to the career development community, a constant flow of new documents enable the ICDL to be a cutting edge, one-of-a-kind library.

CyberCounseling

The Cybercounseling and Cyberlearning web site was designed to be a companion to the *Cybercounseling and Cyberlearning: Strategies and Resources for the Millennium* book produced by John W. Bloom and Garry R. Walz and jointly published by ACA and ERIC/CASS.

The Cybercounseling website provides an online supplement to the book with special chapters and resources that are better suited to being online and available for downloading than adding to the bulk of the printed book. Both the printed and the online sections of the book have been well received and extensively used.

ERIC/CASS has actively worked at the development of the website and it presently far exceeds the original website both in scope and number of entries. It now serves both as an introduction to the use of technology as well as a source of new concepts and resources, e.g. Open Source software.

An important milestone in the website's development was the support extended to ERIC/CASS by ACA and the ACA Foundation. Their support, both professionally and financially, enabled ERIC/CASS to expand the array of features offered by the site. Currently, among its more important functions is that the site serves as a repository for materials generated by the ACA Cyber and Technology Committee.

The Cybercounseling & Cyberlearning Web Site

The web site (<http://cybercounsel.uncg.edu>) utilizes cutting edge graphics, web-related searches, and easy to use menus in order to facilitate document dissemination to counselors. The Cybercounseling and Cyberlearning web site is regularly being modified to reflect new information as that information becomes available.

The Cybercounseling and Cyberlearning home page contains links to all of the resources offered by the site. The homepage is modified on a bimonthly basis to reflect new items of special interest. New hot topics in technology and counseling are also added so that counselors can stay ahead of the curve in the technology field. Along with a wealth of information, the site provides links to the ACA Technology Committee and other ERIC/CASS web sites.

The *What's New* page is updated on a monthly basis. New documents and links are added with direct links for convenience. Also, all other new items can be found on this page.

The *Resource* page is a collection of full-text documents in sub-divided groups to help the user quickly find the information he/she is looking for. The list includes:

1. **Cyberlearning** - All aspects of learning involving the use of the Internet.
2. **Cyberpractices** - Use of the Internet to carry out specific tasks.
3. **Credentialing** - A means used to document a person having received training and/or demonstrated competence in Cybercounseling.
4. **Research** - Obtaining evidence to support the efficacy of a particular program or practice.
5. **Ethics** - What is ethical and incorporates consensual counseling values.
6. **Career** - Career practices involved in Cybercounseling.
7. **Digital Divide** - A separation between sub-populations based on differential access and use of computers.
8. **Hardware/Software** - Information related to physical computer and technological components and the programs (software) used to direct computer functions.
9. **Issues** - Topics that involve matters that persons view differently.

10. Presentations - Power Points and other forms of presentations on Cybercounseling.

The submission page contains all the information needed to submit documents authored by counselors or others interested in having their works published on the web site. Documents submitted to Cybercounseling are also submitted to the ERIC database as a way to help gain exposure for the author and the author's work.

The main help page is for questions and concerns about the web site or other questions that may exist about ERIC/CASS and other aspects of the ERIC system. Links are provided to search the ERIC database or go to the free AskERIC service where help is available for finding relevant information. There are also links to contact the ERIC/CASS staff.

The Open Source Project Web Site

Open Source software is freely distributed and can be freely modified by anyone. This offers many benefits over proprietary software. Among these benefits are quality, speed, cost, verifiability, and freedom.

Most people already use Open Source software, they just may not be aware they are. Netscape is an Open Source product. Another popular and well-known form of Open Source software is Linux. There are several brands of Linux on the market. The most widely known brands of Linux are Red Hat, Caldera, Suse, and Mandrake to name only a very few. There are various others for word processing and presentations, like StarOffice, and Lon-Capa, a free version of software used to put classes on the web much like the popular software Black Board.

Cybercounseling and Cyberlearning endeavor to incorporate technology into the counseling and educational fields. In order to provide these service tools, software and hardware are needed by both the counselor and client or the student and professor. One group of products known as Open Source contains a host of learning, business applications, and other software.

The Open Source Project home page is the place to learn about information relating to Open Source and how it is being used in the counseling and educational fields. There are various links to other Open Source sites, documented results and a place to go and download free software.

The Open Source Links page is your link to free software and free information on the companies who contribute this software.

Resources

Alexa Insider Page (2000). Alexa Insider Side Bar. [Online]. <http://insider.alex.com/insider?cli=10>.

Bloom, John W. and Walz, Garry R. (2000). *Cybercounseling and Cyberlearning: Strategies and Resources for the Millennium*. Caps, Inc. Greensboro.

Dahn, M. (2000, January/February). Counting angels on a pinhead: Critically interpreting web size estimates. *Online*, 35-40.

eTForecasts. (2002, December 3). "USA is #1 in Internet Users with 160M." Retrieved from <http://www.etforecasts.com/pr/pr1202.htm>.

Fox, Susannah. (2002). Pew Internet Project Data Memo. Retrieved September 3, 2002, from the Pew Internet & American Life Project Web site: <http://www.pewinternet.org/reports/toc.asp?Report=64>

Lawrence, Steve and Giles, Lee. (1999). "Accessibility of information on the web." *Nature*, Vol. 400, pp. 107-109.

Mardis, Marcia. (2001). *Uncovering the Hidden Web, Part I: Finding What the Search Engines Don't*. Syracuse, NY: ERIC Clearinghouse on Information & Technology. (ED456863).

- Mardis, Marcia. (2001). *Uncovering the Hidden Web, Part II: Resources for Your Classroom*. Syracuse, NY: ERIC Clearinghouse on Information & Technology. (ED456864).
- Miller, G. A. (1983). Informavores. In F. Machlup & U. Mansfield (Eds.), *The study of information: Interdisciplinary messages* (pp. 111-113). New York: Wiley.
- Nua Internet Surveys. (n.d.). How Many Online? Retrieved September 3, 2002, from http://www.nua.ie/surveys/how_many_online/index.html
- Online Computer Library Center (OCLC). (n.d.). Size and Growth. Retrieved August 26, 2002, from <http://wcp.oclc.org/stats/size.html>
- Sullivan, Danny. (2001a). Internet Top Information Resource, Study Finds. Retrieved September 3, 2002, from The Search Engine Report Web site: <http://searchenginewatch.com/sereport/01/02-keen.html>
- Sullivan, Danny. (2001b). WebTop Search Rage Study. Retrieved September 3, 2002, from The Search Engine Report Web site: <http://searchenginewatch.com/sereport/01/02-searchrage.html>
- UCLA Center for Communication Policy. (2003). *The UCLA Internet Report: Surveying the Digital Future – Year Three*. Los Angeles, CA: UCLA.
<http://www.ccp.ucla.edu/>
- Wysong, Thom. "Introduction to Open Source and Free Software," <http://cybercounsel.uncg.edu/opensource/papers/Introduction%20to%20Open%20Source%20and%20Free%20Software.htm>

Chapter Seven

Technology and the Continuing Education of Professional Counselors

by Pam Leary

Since the beginning of education, the method of disseminating knowledge to the population of practicing professionals has been the conference or convention. Presenting papers and research findings at professional conferences has long been a rite of passage for most professionals. Add to that smaller workshops, training institutes, and seminars and you have the picture of continuing education up until the early 1990's.

The single factor most responsible for changing this picture is the growth of credentialing in our profession. With credentialing has come the need for continuing education hours for re-credentialing. There are now over 32,000 National Certified Counselors (NCCs) in the United States who "all need 100 hours of continuing education in every five-year certification cycle" (Leary, 1998). Add to this number the approximately 55,000 state licensed counselors, most of whom must accrue continuing education to maintain their professional credentials, and you have professional counselors consuming somewhere in the neighborhood of 1,700,000 hours of continuing education every year. Counselors who live in remote areas, have heavy family or work demands, live with chronic or transitory illnesses, or are under financial constraints may find obtaining traditional continuing education a serious challenge.

Realization of these facts has led continuing education providers to develop ways for counselors to make continuing education more accessible and affordable. The number of home study programs approved by NBCC has grown from about 20 in 1992 to over 300 in 2000. Most of these are books or audiotapes with quizzes. There are also videotapes with quizzes and one program that uses a compact disc. Since the late 1970s, live programs were being broadcast to remote locations for teleconferences via satellite or closed circuit television. The most logical next step for continuing education providers was to begin to offer professional development programs over the Internet. Dr. Thomas J. Bacon, Director of the North Carolina Areas Health Education Centers Program states, "technology can increase individualized contact, communication and interaction with our traditional learners. Telecommunications and access to the Internet can also overcome barriers of geographic isolation, helping those in rural and underserved areas access information and education resources when and where they choose" (AHEC Review, Fall 1998).

The Web: A New Source for Continuing Education

NBCC received its first application for approval of an Internet-based continuing education program in early 1997. The company, Distance Learning Network (DLN), is still one of the more unique and specialized sites offering continuing education for counselors. DLN (www.dlnetwork.com) took the idea of the interactive teleconference and adapted it for the Internet. Many others have followed so that now professional counselors have a variety of choices of online continuing education that is approved by NBCC.

The list below represents these approved programs along with other sites worth investigation that have not applied for NBCC approval. There are certainly many more sites available than those on the list. The Associated Press reports that "a study found that search engines Öcover a diminishing fraction of Web pages and take a long time to list new sites" (Greensboro News and Record, July 8, 1999). A similar report on National Public Radio stated that search engines find only about 16% of the Web sites on a particular topic. Therefore, the list appearing in this article should not be thought of as complete but only as a starting place for further exploration.

Continuing Education Sites for Mental Health Professionals

Trance*Sand*Dance Press (www.psychceu.com): NBCC approved.

Behavior OnLine (www.behavior.net): NBCC approved

Distance Learning Network (www.dlnetwork.com) NBCC approved

PsyBC, the Psy Broadcasting Corporation (www.psybc.com): NBCC approved.
Wayne E. Oates Institute (www.oates.org) NBCC approved
InspirAction, Inc. (www.Inspirationweb.com) NBCC approved
Family Information Services (www.familyinfoserv.com) NBCC approved
Hazelden Distance Learning Center for Addiction Studies (www.dlcas.com) NBCC approved
Mental Health InfoSource – MHI - (www.mhsource.com): Awards: LA Times “Times Pick”
American Association of Marriage and Family Therapy (www.aamft.org)
The Institute for Behavioral Healthcare (www.ibh.com)
Internet Guides Press (www.virtualcs.com)
CyberEd (www.isg-cybered.com)
The Institute of Natural Sciences (www.courses.com)
New York University (www.scps.nyu.edu/)

Considerations for the Future

As cyber-technology makes instant communication more common, there are some additional possibilities that continuing education providers and credentialing boards should be considering as we move into the new millennium. These include:

- Methods for online and traditional continuing education providers to send continuing education credit directly to certification and licensing boards
- More interactive courses allowing counselors to dialogue with one another as well as with experts in the field (see www.psybc.com)
- Online record keeping services for counseling professionals who wish to have electronic continuing education credit storage
- More live conferences, seminars and even training programs on the Internet with audio and visual capabilities (see www.dlnetwork.com)
- Internet-based visual and auditory supervision of practicing counselors as well as counseling interns

Recommendations for Continuing Education Providers

For any organization planning to launch an Internet-based continuing education program, the following recommendations are offered:

- Surf the Web thoroughly before making any business decisions. Get help with this, if necessary, so that you have a real picture of what is already being done.
- Contact others who have done similar projects. Most professionals are very willing to share their experiences.
- Make it very clear what organization is the sponsor of the site and how to get in touch with that organization by phone, fax, e-mail and ground mail.
- Make the navigation instructions simple enough for **the most inexperienced user**. The last thing you want is for those counselors who probably already have too much on their plates to feel frustrated by your site.
- If your program is a small part of a very large operation, make it easy to move off of your front page to the program site.
- Unclutter your program site, the cleaner the better. See the *Trance*Sand*Dance* Press site at www.psychceu.com for a good example of a fledgling effort that is both elegant and rich.

It is worth mentioning that the periodical *Association Management* (June, 1996) has an excellent article describing the initial effort of the American Occupational Therapy Association (AOTA) to create an online symposium for their members. Their pointers and cautions are well worth reading before one ventures into the world of online continuing education. One excellent recommendation they had was to “thoroughly test the downloading process” before posting your program or event (Cox, 1996). This is especially important for programs that will feature large text files designed for the user to print.

Suggestions For Organizations Considering Web-Based Services to Counselors:

1. Surf the Web thoroughly to find out if there are other similar services that are competing for the same constituency.
2. Speak to others who have done similar projects to determine how much staff time and funding this project may take over the long term.
3. Compare that information with your current staff, their technological expertise and workload before making the decision to begin such a project.
4. Get some expert advice on the long-term viability of your service. It is important to consider whether or not your service will be antiquated in three years or ten years.

Summary

The counseling profession is at the beginning of a growing trend to utilize computer technology for a widening variety of needs. One of the most important is the delivery of accessible and affordable continuing education. There is a need for more online continuing education programs on a wider variety of topics. Transmission and storage of continuing education credit are also areas of need that are currently not being widely addressed. Guidelines for continuing education providers planning on creating continuing education programs on the Internet include: surfing to determine what is currently being offered, clear identification of sponsor/host, simple instruction and navigation. Guidelines for continuing education services such as credit storage banks include research for similar services, carefully gauging financial and staff resources, and expert advice on future trends. Dr. Thomas Clawson stated in his interview with the author that "there is beginning to be a shift from training for training's sake to training for better job opportunities and higher salary for human service professionals" (Personal Communication). Considering this fact, the world of continuing education in cyberspace can only gain importance in the never-ending effort to make professional counselors respected and competitive in the new millennium.

References

- Bacon, T.J. (1998, Fall). What has AHEC been doing for continuing education? *AHEC Review*, 1-3.
- Cox, John B., CAE, and Chon, Andrew (June, 1996). Continuing education goes online. *Association Management*, p. 51-56.
- Leary, P.S. (1998, October). The changing face of continuing education. *Counseling Today*, 41, 17.
- Search engines lag behind web growth (1999, July 8). *The Greensboro News and Record*, p. A8.

Chapter Eight

Cybercounseling and Empowerment: Bridging the Digital Divide

by Courtland C. Lee

In the United States, the country with the greatest gap in wealth between rich and poor of any industrialized nation, basing the opportunity for quality mental health and educational services on access to the new network technologies is to potentially consign many to marginalization and disenfranchisement. This paper addresses a major issue that must be considered with respect to cybercounseling – ensuring equal access to counseling and related services via network technologies. A troubling scenario as we enter the 21st century is that those with access to computers and other means of technology are positioned to take advantage of cybercounseling and thereby benefit from quality mental health and related services online, while those without such access are at-risk for receiving lesser services. This is underscored by recent data from the U.S. Department of Commerce (1999) which reveal that households with incomes of \$75,000 and higher are twenty times more likely to have access to the Internet than those at the lowest income levels, and more than nine times as likely to have a computer at home. Additionally, Whites are more likely to have access to the Internet from home than Blacks or Hispanics have from any location. Significantly, regardless of income level, Americans living in rural areas are lagging behind in Internet access. Indeed, at the lowest income levels, those in urban areas are more than twice as likely to have Internet access than those earning the same income in rural areas.

Given these data, it is imperative that as cybercounseling continues to evolve as a viable service delivery mode those professionals who have access to and make extensive clinical and educational use of computers act so that network technology becomes a tool of empowerment, not disenfranchisement. Equal access must become an integral part of this mode of service delivery. Guidelines are provided here for ensuring equal access to the technology for cybercounseling.

Cybercounseling and the Promise of Human Empowerment

The potential of technological networking for human empowerment is predicated on the assumption that computer hardware and software is universally accessible. However, this is currently not the case. Social and economic disparity exclude many individuals from access to the important technology that makes cybercounseling a reality. Counselors and related professionals therefore face a challenge – ensuring that cybercounseling does not become a part of the tradition of socioeconomic bias and cultural privilege that have often unequally stratified the scope and quality of mental health and educational services.

Ethical practice dictates that counselors provide for equal access to computer applications in counseling services. To do less would be condoning or engaging in discrimination against those whose social or economic status preclude ready access to computer technology (ACA Code of Ethics and Standards of Practice, 1997). What follows are guidelines for ensuring equal access to the network technologies for cybercounseling.

Guidelines for Cybercounseling: Ensuring Equal Access

The following guidelines are closely linked and focus on the goal of providing equal access to computer applications in counseling and related services.

Community Audit. Counselors should conduct an audit of their community, assessing where the digital divide exists and investigating which individuals or potential client groups have limited or no access to computer technology.

Partnerships. Following an audit, counselors should form consultative relationships with key players in their community that could partner with each other to make technology hardware and software available to those with limited access. These players might include schools, community organizations, and selected businesses. For example, a counselor might consult with a computer firm and work with them on initiatives to make hardware, software, and educational/technical assistance available pro bono to schools, religious institutions, or other centers of community activity in economically disadvantaged areas.

Education. When necessary, and as appropriate, counselors should help clients, and/or potential clients, develop the competencies necessary to take advantage of cybercounseling. The acquisition of the awareness, knowledge and skills for computer literacy should be incorporated into educational or career exploration and planning.

Governmental Advocacy. In order to ensure equal access to computer technology, a supportive policy framework is needed at all levels of government. Legislation and government policies must be sensitive to social and economic inequities with respect to network technologies. Counselors should advocate at all levels of government, therefore, to raise awareness and increase legislative involvement to ensure that crucial network technology is available to all. Socioeconomic status should not automatically exclude people from access to technology that, in large measure, has become basic to a decent quality of life. For example, counselors may need to work to ensure that laws and policies regarding Internet access do not become exclusive to those individuals with the financial resources to take advantage of such services.

Conclusion

As helping professions enter the 21st century and nascent network technologies realize their full potential as therapeutic and educational modalities, it is an ethical and moral imperative that the digital divide be bridged. It is important that those in counseling and related fields take active steps to ensure that cybercounseling is available to all clients regardless of their social or economic status. The issues of access and privilege which have traditionally divided client populations into the “haves” and the “have-nots” must not be allowed to stifle the vast clinical and educational potential of network technology. All people who seek help, regardless of their demographic realities, should be able to find the “on-ramp” to the information superhighway.

References

- American Counseling Association. (1997). *ACA Code of Ethics and Standards of Practice*. Alexandria, VA. Author.
- U.S. Department of Commerce. (1999). *Falling through the net*. Washington, D.C.

Chapter Nine

Life in a Dot.Com World: Preparing Counselors to Work With Technology

by Jacqueline Lewis, Diane Coursol, Lutfu Khan and Annmaree Wilson

Brief Overview

Almost every profession in the United States today has been impacted by technology. Not surprisingly counselors must also work in a technological environment (Lewis, Coursol, Khan & Wilson, 2000). In the counseling field, computer technology is used for word processing, record management and for career and professional development (Sampson, Kolodinsky & Greeno, 1997). Electronic mail and the Internet have greatly extended the application of technology to mental health. These technologies allow for a variety of mental health activities including information dissemination (Stevens & Lundberg, 1998) and cybercounseling (Bloom, 1998; Sampson et al., 1997).

The proliferation of technology in the counseling and related human services fields makes technology proficiency a necessary skill for counselors today (Lewis, et al., 2000; Myers & Gibson, 2000). This requires that counselor education programs provide students with curricular experiences that prepare them to use technology in an effective and ethical manner. In order to offer experiences that will promote technological competence, programs need to identify the skills that students possess and target areas that require attention.

The purpose of this study was to examine the perceptions of the role of technology in counseling and the attitudes towards technology and the use of technology among counselor education students. Specifically, the study investigated the use of the information technologies such as electronic mail and the Internet by students. The results provide baseline data that can assist counselor educators in providing curricular opportunities that promote technological competence among their students and that prepare them to face the challenges of the information age.

Method

Participants

The participants in this study were 83 Master students enrolled in a Counselor Education program at a mid-western institution. The students in this program were in training to become community counselors, school counselors and student affairs professionals. The final sample included 24 men and 59 women. The students ranged in age from 22 to 49 years, with a mean age of 29.23 (SD of 7.21). Seventy-five (90.4%) of the participants were Caucasian. Among the participants 65 (78.3%) were full-time students and 18 (21.7%) were part-time students.

Instrument

The author-constructed survey was designed to investigate three areas including the perceived impact of technology on the profession, attitudes towards technology, and the utilization of information technology among counselor education graduate students. In addition, the survey also investigated access to computers and related technology. The survey was a self-report, forced-choice instrument that required students to rate each item on a Likert scale that ranged from Strongly Disagree (1) to Strongly Agree (5).

Procedure

Counselor education students completed the survey during the 1999 Spring semester. The students were surveyed to provide information about the use and access of technology among students in the program. Students were assured that their responses would be kept anonymous and confidential. Additionally, they were informed that participation was voluntary and would in no way affect their grade.

Results

The means and standard deviations for each of the three areas of perceptions, attitude and use of technology, are included in Table 1. The mean rating for items in the area of perceived impact of technology on the profession ranged from 4.55 to 2.75 with SD ranging from .52 to .97. The mean rating for items in the area of attitudes towards technology ranged from 4.68 to 2.05 with SD ranging from .47 to .96. The mean rating for items in the area of the use of specific technologies ranged from 4.31 to 2.94 with SD ranging from .73 to 1.27.

A total of 82 (98.8%) participants reported having access to computers, 81 (97.6%) reported having access to e-mail and 80 (96.4%) indicated that they had access to the Internet. In addition, 68 (81.9%) students rated themselves as possessing an intermediate level of expertise with computers and related technology. The mean number of hours that students spent per week on computers for assignments was 5.34 hours, for electronic mail 3.23 hours and web surfing was 2.80.

Table I. Means and Standard Deviation for Perception, Attitudes and Use

Items	M	SD
Perceptions		
I believe that I will use computers and related technology on my job.	4.55	.52
I believe that computers & related technology will become an integral part of counseling and student affairs in the future.	4.29	.65
Computers & related technology increase the efficiency of counseling and student affairs professionals.	3.96	.80
Computers enable counseling & student affairs professionals to spend more time providing services to people.	3.84	.79
Computers & related technology depersonalize the work environment.	2.75	.97
Attitudes towards technology		
I think it is important for me to know how to use computers and related technology.	4.69	.47
I am interested in learning how to use computers and related technology.	4.58	.54
Learning to use computers and related technology in graduate school is important for my professional development.	4.39	.66
I am comfortable using computers and related technology.	3.99	.79
Computers are easy to break into.	2.94	.94
I do not have the time to learn about computers and related technology	2.39	.92
I do not trust computers and related technology.	2.05	.96
Specific Technological Applications		
I know how to use e-mail.	4.31	.78
I know how to use the Internet.	4.14	.73
I know how to use library CD-ROMs (Medline, ERIC, PsychLit) to access scholarly information.	3.78	1.06
I know how to use the Internet to conduct my job search.	3.65	1.19
I know how to subscribe to an Internet discussion group	3.21	1.22
I know how to use multimedia programs like PowerPoint or Hyperstudio.	2.94	1.27

Recommended Course of Action

The findings of this study indicated that students believed that technology would impact counseling and related fields and were interested in learning about its application. These findings support recent reports in the literature that counseling professionals recognize the importance of technology in counseling and that there is a readiness to develop technological competence (Myers & Gibson, 2000). This readiness to learn about technology

may reflect changing attitudes towards technology among counselors as more people become accustomed to the new information technologies. The majority of students in this study also indicated that they had access to computers and to the Internet, and used these newer technologies. Thus, it is likely that many students now enter counselor education programs with greater access to computers and with more knowledge of the newer information technologies.

However, with the growing digital divide, the inability to access technology may create circumstances that unnecessarily impede the progress and development of some students. In fact, Myers & Gibson (2000) found that the inability to access computers was a concern for adult and commuter students who felt disadvantaged when course information was on the Web. Thus, it is important for counselor education programs to identify those students who may not have access to technology. Proactive efforts by counselor education programs that make students aware of the campus resources including computer laboratories and workshops on various hardware and software applications, can ensure that all students have access to technology.

Programs can adopt proactive measures that enable students to learn how to use technology to facilitate the counseling process. Such approaches include incorporating assignments that require students to communicate with faculty and other students by electronic mail, subscribe to a professional listserv, or search the Internet on a particular topic as part of their coursework. These activities provide tangible experiences and lead to the development of transferable technology skills that students will need in their professional career.

Technology is evolving exponentially, therefore, one of the most important skills that counselors should develop is the ability to use technology wisely and ethically (Casey, 2000). To ensure appropriate utilization, counselor education programs need to discuss the role of technology in counseling including the strengths and limitations. Counselor education programs also need to address the ethical and legal issues related to technology, the special concerns of the information age including Internet addiction and the impact of the digital divide for the counseling profession. Students are likely to become informed consumers of technology when they are aware of important resources such as the ACA and the NBCC guidelines for cybercounseling that are available online.

A prerequisite for the preparation of technologically competent counselor education students is technologically proficient faculty with the skills and knowledge to prepare students for a digital world. Undoubtedly, there is a need for more professional development opportunities to allow faculty to gain the necessary technological skills (Myers & Gibson, 2000). Faculty can access such web-based resources as the Journal of Technology in Counseling available at <http://jtc.colstate.edu/> and the Cybercounseling web site available at <http://cybercounsel.uncg.edu/>.

Summary and Conclusions

The rapid expansion of technology into the counseling field requires that the profession adopt a proactive approach to research in this area. Future research studies need to investigate how the information technologies, such as electronic mail and the Internet, are used by counselors in various settings such as schools, private practice and in community mental health centers.

The proliferation of technology in counseling is one of the most notable influences on the profession in the 21st century. The newer information technologies, especially the Internet, are challenging the traditional philosophy and values of the counseling profession. Within the framework of an information age, counselor educators must evaluate how they can prepare students who can innovatively and appropriately harness the potential of technology.

References

- Bloom, J. W. (1998). The ethical practice of WebCounseling. *British Journal of Guidance and Counselling*, 26, 53-59.
- Casey, J. A. (2000). Managing technology wisely: a new counselor competency. In J.W. Bloom & G. R. Walz (Eds.), *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 17-28). Alexandria, VA: American Counseling Association/ERIC/CASS.

- Lewis, J., Coursol, D., Khan, L., & Wilson, A. (2000). *Life in a dot.com world: Preparing counselors to work with technology*. Retrieved from the World Wide Web October 15, 2000, <http://cybercounsel.uncg.edu/manuscripts/>
- Myers, J. E. & Gibson, D. M. (2000). *Technology competence in counselor education: Results of a national survey*. Alexandria, VA: American Counseling Association/ERIC/CASS. Retrieved October 20, 2000 from the World Wide Web: <http://cybercounsel.uncg.edu/manuscripts/>
- Sampson, J. P., Jr., Kolodinsky, R. W., & Greeno, B. P. (1997). Counseling on the Information Highway: Future possibilities and potential problems. *Journal of Counseling & Development, 75*, 203-212.

Chapter Ten

How School Counselors Could Benefit From E-Government Solutions: The Case of Paperwork

by Russell A. Sabella

The United States (U.S.) government has tackled many problems which have plagued its effectiveness and efficiency to serve its citizens with technology solutions. Electronic government, or e-Government, is the expression used to describe how the U.S. government attempts to increase productivity and reduce costs by using Internet-based technology. More specifically, e-Government tries to enhance the citizen's access to government information and services, and attempts to provide new ways to increase citizen participation in the democratic process. If government also made available to schools some of the technology solutions used for themselves, valuable benefits to school counselors would result. This article briefly describes one e-Government initiative and the potentially positive impact on school counseling if it were implemented in schools.

The Problem

Historically, governments have required their citizens to interact with them using paper forms, documents and letters. Applying for licenses and permits, filing tax and information returns and requesting government services all require citizens to fill out standard government forms. It is estimated that the U.S. federal government alone has over 6,000 different paper forms that generate over 20 billion responses every year (Jetform, 2000). Governments at all levels are under constant pressure to improve the efficiency of their internal operations. Tightening budgets mean agencies cannot simply staff with additional resources to meet their increased volume of work. Instead, they are forced to become more efficient using new technology.

The Technology Solution

At the federal level, legislation was enacted to eliminate paperwork, mandating that agencies across the board develop procedures to accept electronic documents as they would paper. The Government Paperwork Elimination Act (GPEA, 1998) aims to improve citizen service through the use of information technology and to automate processes that will save government time and money. The GPEA directs government agencies to provide public access to government services and documents and the option to submit government forms electronically. This legislation provides the need and impetus for finding innovative solutions to the challenge of reducing paperwork and accessing data.

To meet this challenge, e-Government requires technology that can easily create electronic forms out of existing paper forms, compliant with all regulatory requirements about layout and data-element validation (i.e., providing security and protecting privacy). It also needs technology that can take data extracted from e-forms as well as from external sources and use it to generate documents in multiple formats — such as print, fax, e-mail or Web — to suit the user's particular needs and preferred channel of communication. For example, software is needed to eliminate manual and paper-based processes by capturing, routing and tracking information electronically. One solution, intelligent e-forms, helps people save money, improves service and increases productivity by reducing printing costs, storage costs and time spent processing data - all of which increase "time-to-market."

With the help of various companies (e.g., Jetform Corporation), many federal and state agencies converted multiple paper forms to e-forms and turned paper processes into e-processes within a standard and secure electronic environment. For example, the U.S. Social Security Administration is able to reduce turn-around times for beneficiaries while saving \$10 million in costs. By implementing automated e-processes in its child-support services, The Commonwealth of Pennsylvania is now able, for the first time, to share information effectively

between counties through a set of standard e-forms. And, in the state of Wisconsin, the Department of Forms Administration has developed a central Web-forms repository and 14 administrative e-processes, ranging from expense and time reporting to federal grant processing, touching over 40 agencies and 25,000 state employees (Jetform Corporation, 2000).

About legal signatures

As the world uses the Internet for an increasing number of communications and transactions that have until now required paper-based documentation, the legal community has raced to create the legal framework to facilitate this shift. The Electronic Signatures in Global and National Commerce Act signed on June 30, 2000 eliminates legal barriers to using electronic technology to form and sign contracts, collect and store documents, and send and receive notices and disclosures. The Act provides that no contract, signature, or record shall be denied legal effect solely because it is in electronic form.

According to Jetform Corporation (2000), there are three independent types of document or transaction security: user authentication (the signer is who he says he is), document authentication (the document has not been modified since it was authored or signed) and non-repudiation (the signer indicates intent or agreement with the document). The relative importance of each of these depends on the transaction or document in question. In a paper world, a signature both authenticates the signer's identity and establishes his intent or agreement. It is also considered very secure because it is hard to forge a handwritten signature, and it is hard to "edit" a signed paper document. In the electronic world, different security approaches offer varying levels of support for these three types. For example, personal information numbers (PINs) and passwords offer a basic level of user authentication, but little in the way of document authentication or non-repudiation. Electronic signature pads can capture a handwritten signature electronically. Fingerprint and retina scans are biometric approaches which provide the highest levels of user authentication and signal intent, supporting non-repudiation as well. Digital signature technology based on public key cryptography (e.g., see www.verisign.com) is a very secure method of both user authentication and document authentication. The public key method uses two keys – one is a public key that you disseminate to anyone from whom you want to receive a message or document. The other is a private key that you use to decrypt messages or documents that you receive.

E-Government Solutions and the School Counselor

School counselors are of great value in serving special education students by providing scheduled counseling and other guidance efforts as part of an individualized educational plan (IEP). However, because of limited resources and the counselor's unique flexible time schedule, many school counselors have been assigned to oversee the entire process which typically includes identification, IEP meeting coordination, evaluation, counseling, re-evaluation, inclusion efforts, and continued parent consultation. This process includes a documentation trail which would humble even a professional archivist. The problem is that the time required for effectively fulfilling such responsibilities is time not spent providing direct services such as individual counseling, group counseling, coordination, and consulting.

If technology were available to automate and streamline these processes, more time could be spent meeting the special needs of all students through face-to-face interventions in the classroom instead of processing forms in the office. As a result, schools would enjoy a cost savings benefit stemming from reduced paper; reduced copying and storage space; and saved time for creating, routing, and searching for records. Further, schools could better afford to pay someone to oversee the processes – someone who does not have, nor need, the advanced training and credentials of school counselors. A special assistant to the counselor (or administration) could, for instance:

1. Provide a teacher or appropriate other with an electronic receipt acknowledging submission of a form which identifies a student who may need special education interventions.
2. Complete repetitive parts of a form such as demographic data by automatically importing such data from a relational database.
3. Route the form based on its content to the appropriate person for processing.
4. Obtain legally binding electronic signatures.
5. Access or update data in databases at the district level.
6. Track the status of requests or processes with real-time reports.

7. Receive automated reports containing “ticklers” or reminders for pending tasks or documentation.

Ultimately, the school counselor could concentrate better on his or her primary responsibilities of advancing personal, social, career, and academic growth among students via direct service while resting assured that appropriate documentation is complete in a secure and confidential manner.

Similar to the deluge of paperwork problems included in the special education process, the paperwork involved in scheduling, tracking, and helping all students to graduate and successfully transition from school to career can also be daunting. Electronic forms processing such as used by various government agencies could conceivably solve for school counselors the problem of managing a great deal of information among a large number of educational stake holders. Further, if a system were in place at the national level, transferring of documentation to other schools for when students move can be completed more quickly and accurately.

Challenges to Incorporating E-forms in Schools

The reality of using E-forms technology in schools is precluded by several realities which will eventually be overcome only by both money and training. For instance, schools would need to:

1. Create the technological infrastructure for the secure routing and processing of forms.
2. Make certain that all necessary users (e.g., school psychologist, nurse, and parents) of an e-forms system have secure access to the system.
3. Accurately import or convert existing records to correctly operate in a new e-forms system.
4. Train counselors, designated support staff, and relevant others to use the e-forms system to process forms and create new ones.
5. At the state or national level, standards of documentation and electronic storage would have to be consistent. One viable solution is to use Electronic Data Interchange or EDI which is best known for the transfer of data between different companies using networks, such as the Internet. The U.S. Department of Education’s National Center for Education Statistics (NCES) is already exploring how to make available the use of EDI with a world-wide web server, nicknamed CHARLOTTE, that is designed to efficiently transfer such educational information as student records. According to the Center (NCES, 1999), “CHARLOTTE is planned as a cost effective means to make EDI available to public and private schools and school districts throughout the nation, without requiring those schools to expend great amounts of money for programming, special software, technical support, and other maintenance costs. The server can potentially make the speed, convenience, accuracy, and efficiency of electronic trading available to a vast majority of school districts in the United States, regardless of their financial and technical resources.”

Because one or more hurdles to e-form processing may not be overcome very quickly, current reality dictates that parts of the documentation process may not be completed by electronic means. Documents which may still be completed manually or transmitted by other means such as fax and postal mail may need to be entered or scanned into the system. However, there exists enough volume of documentation within today’s school systems to make electronic processing a viable and sorely needed alternative to current methods. School counselors and especially the professional associations that represent them need to focus their lobbying efforts to make electronic data interchange and the use of e-forms as useful to educators as it has been to business and government.

References

- Government Paperwork Elimination Act (1998). XVII of P.L. 105-277.[Online]. <http://www.cdt.org/legislation/105th/digsig/govnopaper.html>.
- Jetform Corporation (2000). *E-Process for e-government white paper*. Falls Church, VA: Jetform Corporation. [Online]. <http://www.jetform.com/industrysolutions/formtest/whitepaper.html>.
- NCES (1999). *Status report and draft business plan for building and maintaining electronic data interchange (EDI) processes used for transmitting student transcript information and other education-related processes*. [Online]. <http://nces.ed.gov/edi/EDIBusinessPlan.asp>.
- The Electronic Signatures in Global and National Commerce Act (June 30, 2000). S.761.[Online]. <http://www.ftc.gov/os/2001/02/esignworkshopfrn.htm>.

Chapter Eleven

Career Guidance Services at Michigan Virtual University: Linking Careers and Education Through Virtual Tools – A Lifespan Career Development Model

by Paul M. Stemmer, Jr., Bruce Montgomery, & J.P. Moore

Michigan Virtual University is committed to workforce development using the World Wide Web. We have partnered with a number of institutions to find different ways to promote career development. The most visibility related to career development is currently with job or talent banks such as Monster or Hotjobs.com. The primary function of those sites are to assist people in finding jobs. It's the perfect opportunity to make suggestions to the user to consider more elaborate career development planning. To ask the tougher questions like where am I going? Am I finding my work rewarding? Does it take advantage of my talents, interests, skills and abilities? To find out what new skills might lead me to careers more suited to me - and a plan to get there.

The cornerstone of our career systems are:

<i>Functional areas</i>	<i>The questions</i>
Career Exploration	What kinds of jobs are there? What do they pay? What skills are required?
Assessment and Diagnostics	What skills do I have? What's the gap between my skills and my desired careers? What are my interests?
Education and Training	What kind of training and educational credentials do I need? Where can I get this training or education? Is it available over the Internet?
Job Banks and Job Hunting Skills	How do I write a résumé? What are good interview techniques? How do I negotiate a salary? How do I find good jobs?

These cornerstones are based on the premise that various websites can help provide information to these questions. The assumption is that clients will encounter a broad array of career options and scenarios throughout their lives. In addition to identifying the audiences, we continue to address issues of durability, functionality and usability. We continue to refine the model and address the question of how do we provide information and guidance and where does the need for professional intervention come in to play. How can we help individuals build career guidance awareness and identify when and how to find professional guidance when they need it?

We hope that by sharing our experiences we can assist other state and career-related institutions in our common goal of helping people find and manage their careers. We believe that strategic career development improves our economy.

The power of the World Wide Web has spurred tremendous growth in the number of career information sites – with a broad range in purpose, quality and effectiveness. According to Career Cross Roads(<http://www.careerxroads.com>) there are over 2,500 job and résumé websites. Some of these websites (which include government sources) deliver excellent information for users seeking career information. The Employment and Training Administration (ETA) of the U.S. Department of Labor (DOL) hosts a variety of no-cost career information web sites (<http://www.acinet.org/acinet/default.htm>). Some other career sites of interest from the federal government are:

- The Occupational Outlook Handbook <<http://www.bls.gov/oco/>> (extensive occupational information but fewer occupations than ONET)

- The USDOL youth pages <<http://www.dol.gov/dol/audience/aud-kidsyouth.htm>> (a variety of career development links)
- The O*Net database Online <<http://online.onetcenter.org>> (difficult to navigate)
- The O*NET homepage <<http://www.onetcenter.org>> (general project information) has the Interest Profiler available for download as two PDF documents (the measure and the score sheet).

America's Career Kit has four websites that would be helpful for job information and training options.

- America's Learning Exchange <<http://www.alx.org>> (job training options, nationwide)
- America's Job Bank <<http://www.ajb.org>> (in Michigan the job bank is called the TalentBank)
- America's Career InfoNet <<http://www.acinet.org>> (labor market information, trends, wages, outlook)
- America's Service Locator <<http://www.servicelocator.org>> (coordinated job search services, connects to local labor offices)

The rate of career website growth is accelerating – calling for counselors to learn new skills to take advantage of these sites (Bloom and Walz, 2000).

Experienced Web users have learned that many sites come and go. With vast amounts of information and the fluid nature of the Web, users are often confused about sources. A librarian aptly quipped that the Web is like a library - only the books keep moving on the shelf and the titles keep changing. The Web has created a need to help users find and integrate accurate information across the vast resources of governments, schools and colleges and other sources with the added requirement to be focused on the personal needs of each user.

The state of Michigan under the direction of Governor John Engler began downsizing state government about 10 years ago. This required improved efficiency and methods for integrating and focusing various state information and services.

At the direction of the Michigan Department of Career Development (<http://www.mgcd.org>), director Dr. Barbara Bolin (the nation's first state cabinet level position for career development) approved a grant proposal to the Michigan Virtual University (www.mivu.org) to develop a comprehensive one-stop information kiosk web site to find and develop Michigan talent (www.talentfreeway.org). This site provides integration of career services through generic guidance about career development and a series of links to state government services and agencies. Using this site as the basis for development, Michigan Virtual University began a process of building career tools that are being integrated into a variety of career sites in MVU's career services division.

Michigan Virtual University (MVU) is developing both public information kiosks and personalized portal websites to deliver career development tools. The personalized portal provides a user experience appropriate for personal career development planning.

The MVU career guidance system

Michigan Virtual University (MVU) is a private, not-for-profit Michigan corporation established in 1998 to deliver online education and training opportunities to the Michigan workforce. MVU is divided into three major divisions: Corporate Learning Services, Education Services and Career Services.

The MVU career guidance system uses a modified version of a Lifespan Development Model (Kerka, 1992). MVU systems are based on the theory of empowerment through technology, new ideas about the meaning of careers and exploring different delivery methods (see Johnston and Benson, 2000 for a similar description). MVU has developed a series of websites to serve a variety of career development purposes. Figure One shows the career process flow of MVU sites.

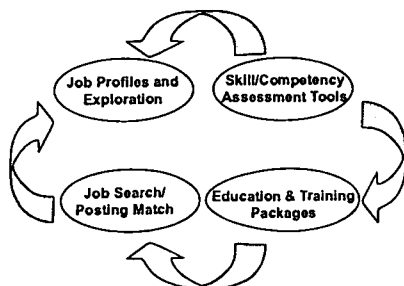


Figure One. MVU Career System Process Flow

Occupational Profiles and Exploration

In this circle, the client is exploring occupational profiles on a variety of characteristics and matching it to their own profiles. These characteristics include the user's interests and abilities matched to the demands of a particular occupational profile (interests, values, skills required, salary range, etc.).

Website Components – The following components may be included in MVU Career Guidance websites:

- O*NET[®] career search engine. ETA provides a website for public use (www.online.onetcenter.org). While it is a useful site by itself, MVU has obtained the database for customized use in its sites.
- Career Biographies. The career biographies are developed by MVU and consist of about a written page's worth of information about an individual and his/her specific skills and interests and daily activities on a specific job. These are mapped to the O*NET[®] occupations. They are meant to give the user a human understanding of the specific occupation.

Skill/Competency Assessment Tools

Tools in this area help the user compare his or her own skills and competencies with those in the occupational profile(s) he or she selected to explore. Many formal and informal assessment tools are now being offered online. This stage concludes with a skill gap analysis to find a prescription for those areas where the client needs to increase his or her skills in order to be competitive or qualified for that job.

Website Components –

- Holland code searches mapped to O*NET[®] occupations. Many assessment instruments use the factors identified by John Holland (such as Realistic, Investigative, Artistic, Social, Enterprising, Conventional)
- ACT work keys. We have a process ongoing to map the ACT work keys profile to the O*NET[®] codes.
- Other assessment instrument mapping is being considered
- Skill Gap Analysis and Prescriptive Paths. This system provides a method for identifying the skill profile for a given job and mapping them to an analysis of the level of training required to meet the job profile skill level. Two instruments under consideration for doing this are:
www.tipinteractive.com
www.softskills.com

Education & Training Packages

Specific occupational profiles may require formal degrees or certifications. All occupations and jobs require a series of skill sets. Based on a prescription from the user's assessment results - a plan of obtaining the skills and degrees can be developed and deployed. These "packages" of education and training can be delivered through a variety of delivery systems, which increasingly include online methods.

Website Components –

- Many of our systems use a Learning Management System (LMS). The system we are using is: www.learnframe.com. There are many good ones to choose from.
- IPEDS. Integrated Post-secondary Education Data System contains over 9,000 colleges, universities and training institutions maintained by the U.S. Department of Education. Just as O*net, the site has useful information (<http://nces.ed.gov/ipeds/cool/>) but MVU has taken the database and customized the interface..
- EDP. An Educational Development Plan is created from program standards from the Michigan Department of Career Development. It contains a student's occupational and education and training plans.

Job Search and Posting Match

The successful candidate has the educational degrees and specific skills sets to enter the job market to find the job they have matched in the profile process. These job-hunting skills include job finding, rÈsumÈ writing, interviewing, and negotiating skills.

Website Components –

- Many of these job-matching systems are increasingly online (<http://www.monster.com>, <http://www.hotjobs.com>, <http://www.ajb.org>, and others).
- The Michigan Internships program is included in this area as well. In Michigan we link to the Michigan Talentbank (<http://www.michworks.org>).

The dynamic nature of the career guidance system allows users to enter and exit the system at any stage desired. Some users may know (or at least think they know) their occupational profiles and skill gaps and will elect to proceed to charting their education and training plans. Other users (apparently most) will want to proceed directly to the job searching area, but may find that they are unsure of their career goals or qualifications and can then re-enter the system at another stage. The system is designed for continuous examination and exploration over the lifespan. It also designed for use with or without a counselor or advisor, although there are advantages to the user who engages with experts at various stages of development.

Translating the guidance system process into practical websites

In the span of one year's time, MVU has developed six career guidance websites. These sites are specific to certain ages, professional roles and government agencies:

- **Talentfreeway** – the original site for the state of Michigan — a public, one-stop center for all ages from youth to retirees and for employees, new workers, and employers.

This one-stop website integrates existing online state tools to enable Michigan residents to explore, plan careers and educational paths, and search for jobs. Employers can find information and access the Michigan TalentBank. There are over 75,000-100,000 unique visitors per month and over 1.5-1.9 million page images are hit each month. TalentFreeway is supported through a grant by the Michigan Department of Career Development.

Discussion. We continue to find it challenging to get our one-stop agencies to take advantage of this web site. We are pleased with our first year usage patterns but we think the usage should be much higher. The most obvious advantage to the use of this site is because it is on the Web, it can be used in the one-stops and once learned, clients can use the site at libraries, Internet cafés and private homes. But this innovation is evolving more slowly than we would like. Some of this resistance is from:

- counselors uncomfortable with the technology
 - counselors not fully trained
 - Internet website availability at the one-stops
 - Fear that the sites could become “too” popular, generating a dependency on the web site as well as not having enough computers
- **myDreamExplorer** – a personalized career development system for middle and high school students. The core of the system is a personal educational development plan. This is an online systematic approach to career development. MyDreamExplorer is a personalized portal system for middle and high school students. It is currently licensed (by a nominal fee) to 1,281 institutions such as middle schools, high schools, libraries, colleges and correctional facilities. MyDream has about 7,000-10,000 visitors per month. It includes several occupational databases, education and training databases and personal information. The core of the system is that all information can be saved in an Educational Development Plan consisting of 107 different pieces of information on each user which is totally accessible through the Internet. Site administrators can view data and reports.

Discussion. Many schools take advantage and use the IPEDS and O*NET websites that are made available to the public at no charge. This website centers around the student's educational development plan and integrates exploration and educational program planning. There is great demand for training and support for this site. To maximize use for this site, counselors need to be trained and comfortable with this technology. Many schools have problems getting enough computers connected to the Internet with competing uses for computer programming and the

Michigan Virtual High School. The biggest lesson we have learned on this site in the first year is the need to simplify the site and to identify the most basic needs and deliver those services well instead of providing “too much” information. We need to work very closely with counselors to plan new features.

- **BeeFreeway** – is an information and training source for Very Small Enterprises (a business with 25 full time employees or less) in Michigan. This is the Business e-Education Freeway, which offers prepaid training and career advice for Michigan’s small businesses of 25 or fewer employees. This website launched on January 22, 2002. Michigan’s 715,000 small business employees can access over 1,300 online learning modules in information technology and personal management, leadership, and teamwork skills. Career advice and tools are presented for employers and employees. It is supported by a grant from the Michigan Department of Career Development.

Discussion. Small businesses in Michigan don’t realize that they have access to over a thousand high quality training programs. Since most small businesses have not had the resources for training, this training opportunity is not in the typical culture. Many of these businesses also don’t have (or until now - didn’t see) a need for an Internet connection. Given that these businesses also don’t have the luxury of allowing their employees a lot of time for training, it is difficult for them to adopt this new technology. We believe through training and seminars and model projects, we will be able to attract more businesses.

- **MiInternship** – Michigan internship site is designed to be similar to a job matching profile system, only for college internships. The Michigan Internships site is a place for employers to post their internships and for Michigan college students to search, apply online and get internships. It is expected to improve the selection process across the state and benefit Michigan companies and Michigan college students. A new feature is being developed to have “smart” internships where companies will guarantee an internship to students that qualify through special training. This site is supported by the Michigan Economic Development Corporation.

Discussion. Our biggest lesson we have learned is how difficult it is to collect internship data. What we have discovered is that many Michigan businesses either are comfortable with the old tried and true method of individual instructors working with specific businesses or they have their internships posted on their websites and do not want to take up an employee’s time to enter the data into a foreign and common database. We are beginning to see this trend regarding the desire by these companies to resist spending resources on sending their data to a variety of sites. We are working on alternative methods to find and display this data.

- **IT Career Center** – through a grant from SBC Ameritech, MVU provides specialized career information and services focused on Information Technology. This site will provide a set of tools specialized to managing or finding a career in information technology in Michigan. The IT Career Center is a personalized portal and was launched in February, 2002. It is sponsored by SBC Ameritech.

Discussion. This site is our first attempt to create a specialized career area for information technology. We are examining how to create better links between this site and our general sites, Talentfreeway and MyDreamExplorer, so that clients and students can begin to find more detailed information related to specific careers. This site focuses on certification assessment with practice tests and advice.

- **eArmyU educational advisory services** – career planning services for the new eArmyUniversity program in partnership with PricewaterhouseCoopers. MVU is providing both educational advisory services and a distance learners’ orientation tool to help learners succeed in the U.S. Army’s online university system. This project is in a pilot phase with three U.S. camps and is projected to reach over 80,000 Army soldiers within the next five years when it is launched worldwide.

Discussion. How important is it for students who are spread throughout the world and linked to potentially hundreds of college campuses to hear a consistent message about career development? This is our primary question for this web site. Can students keep their “eye on the ball,” addressing the question, “Why am I getting a college education?” How much can the website do this how much assistance do the students need from counselors?

Lessons Learned

In this next year, we are expanding our services to college and corporate university sites. In addition we will be improving the existing sites.

Complexity of the Web Site and Technological Capability and Support

There is a trade-off between more interesting websites, fancy graphics and functions and the speed at which a web site loads and the additional plug-ins required. Even with simplified websites there is a tremendous need for additional support and training to counselors (and counselor support personnel such as career development facilitators) in the area of basic technology skills and specific use and application of web-based career tools. Considerably more research is needed on how clients and counselors use career sites to improve career planning and development.

Longevity of Web Sites and Information

The other lesson is the long-term stability or lack thereof of web sites. As referenced at the beginning of this paper, web sites are built on electronic media and can be unplugged at a moment's notice. Sites that are sponsored by a state or federal agency are subject to the political changes of our elected leaders. Sites constructed and maintained by private companies can be sold to another company or acquired through mergers or simply discontinued, often affecting existing users' access and service. Public entities such as schools and colleges may have longer term stability but at the price of serving a limited population (their own staff, alumni, and students) with information limited to parochial career opportunities and doing so with limited and exposed budgets.

Free vs. Fee

There is a great debate about whether career sites should be free. MVU has free sites and fee sites. The Michigan Occupational Information System started as a National Science Foundation Grant in the late 60's. For the first 20 years the system was free. Many very good World Wide Web sites are also free to the consumer. The point is, they are not a free lunch – there are no free sites. Either advertisers or corporations are paying for your use of the web site, or the government is. There seems to be economic phenomena, though debatable, that things that are given away for free have little (or zero) value while things that are charged for are more valued. Since MyDreamExplorer is a fee-based site, there is some controversy between these two extremes. The “free” site proponents argue that this information should be freely available as we make education a free and civil right. The fee proponents argue that government sites are subject to the whims of the current legislature and their interest (and appropriations) waxes and wanes. Many of the free sites are not updated frequently and they lack a professional look. The argument for a fee-based site is that the money collected is used for training, research and development, and the consumers can vote with their feet. The market place is self-correcting. MyDreamExplorer also faces competition from other fee-based companies that have some very fine products. By requiring a fee and setting up an ongoing research and development process, MVU will be able to provide information about career development outcomes in ways that haven't been possible.

Career and Technical Education vs. College Prep and General Education

Educators have failed to break the artificial barrier between career and technical education and college or general education. This creates a strain on the use of the career system in high schools and colleges. While this argument is beyond the scope of this document, resolving this issue in a compatible new paradigm would greatly improve education.

Technological Trends

Broadband and wireless technologies are greatly changing the ease of delivering sophisticated and personalized web sites. While it is difficult to keep up, as these technologies become available, more methods

need to be incorporated into the career websites (such as video stored and live media events). There remains a dilemma for those that have not yet crossed the digital divide (<http://www.digitaldividenetwork.org>) in how to ensure they get good and solid information as well.

Human Interaction and Simplification

We continue to get better at identifying what information needs to be delivered by a human (counselor) and what information can be delivered by the Web. The best solution is an intelligent use of both. Therefore, as we build the web site training is critical – we need to identify the best practices and share those with the users. What appears to be clear is that the counselor-to-student ratio in typical Michigan schools does not allow the students enough time, exposure, and information on career planning. It is hoped that with the use of MyDreamExplorer, we will be able to optimize the counselors' time, while ensuring that all students receive adequate career preparation planning.

Summary

The cornerstone of online career guidance systems rests with their degree of durability, functionality, usability, and applicability over time and across a broad array of career options and scenarios. Students, counselors, employers, employees, and other prospective users must ascertain and experience value and performance from the sites and ancillary services relevant to their own specific career and personal/professional goals and desires. MVU has begun to assemble career systems that meet many of these criteria. The next step is to begin to assemble systems with built-in evidentiary measures that will allow us to evaluate the relevant effectiveness and efficiencies of such systems on the target audiences.

References

- Bloom, J.W. & Walz, G. R. editors. (2000). *Cybercounseling and Cyberlearning: Strategies and Resources for the Millennium*. Washington D. C.: American Counseling Association.
- Kerka, Sandra. (1992). *Life Cycles and Career Development: New Models*. ERIC Digest No. 119. (ERIC Document Reproduction Service No. ED346316).
- Johnston, J.A. (2000). The University of Missouri Career Center in the 21st Century. *Career Planning and Adult Development Journal*; 16(1), 25-29.

Chapter Twelve

Expanding Professions Globally: The United States as a Marketplace for Global Credentialing and Cyberapplications

by Thomas W. Clawson

Americans usually assume that globalization means to take our ideas, values, services and products to the international marketplace. While this could mean profitable sales, in professions such global offering is more likely to mean expanding the human capital interested in the discipline of the profession.

For a variety of reasons, the most important being the United State's longitudinally strong economic status, we maintain a trade imbalance of more imports than exports. For this reason, it is logical to predict that the U.S.'s attempt to globalize professions may well result in the same "trade deficit" that now exists with tangible goods such as automobiles or coffee. With this prediction assumed true, this chapter will explore how the U.S. may become a marketplace for offshore credentialing.

Because the author is quite versed in the U.S. profession of counseling, it will be this discipline that is most often cited for the purposes of this collection of chapters. And, because counseling lends itself, for better or worse, to cyber applications, perhaps this scenario will be a wake up call and a new way of thinking for the helping professions.

In a speech I presented to the sixth annual international conference of the Center for Quality Assurance in International Education (QA) (<http://www.cqaie.org/>) in Washington, D.C., May 1998, I outlined some ideas I have formed regarding the process of bringing service, organizations and even new disciplines into the U.S. mainstream. The advent of the World Wide Web has made this feasible since professional organizations are historically low budget operations. Now, the large population of the U.S. with its large number of Internet users is more a market *for* the world than *to* the world.

In the monograph, *The Foundations of Globalization of Higher Education and the Professions* (Lenn & Miller, 1999), I wrote about this subject. QA is quite interested in the effects of cyber communication upon higher education and the professions. QA has graciously allowed me to excerpt many ideas from my May 1998 speech as recorded in *The Foundations of Globalization in Higher Education and the Professions*.

The Center for Quality Assurance in International Education was founded as a collaborative activity of the U.S. self regulatory community through its participating associations and recognized accrediting and competency assurance bodies. Established in 1991 and located in the National Center for Higher Education, the Center is a focal point for discussion and collaboration both within the United States and between the United States and other country associations concerned with issues of quality and fairness in the international mobility of students, scholars and professionals, credentialing and recognition of programs, and international educational linkages. It facilitates the comparative study of national quality assurance mechanisms in higher education in order to strengthen and improve efforts with each country and promote mobility between national systems. The Center's services and program fall essentially into four categories: (1) providing strategic planning and assistance with the development and implementation of accrediting, licensing and certification programs outside the U.S.; (2) assisting other countries in the development of quality assurance systems for higher education and the professions; (3) monitoring quality issues relative to the globalization of U.S. higher education and the professional sectors; and (4) serving as secretariat for the Global Alliance for Transnational Education (GATE) (www.edugate.org).

In 1998 a sign of financial mergers of the 1980s taking on a global perspective of immense proportions was reported: Daimler-Benz & Chrysler Announce The World's Largest Merger!

In an age of so many corporate mergers and acquisitions, we take this news with resignation that if it's not good—at least it's the general nature of business today. Yet in 1979, Chrysler was near bankruptcy, and a tax-supported loan from the U.S. bailed out Chrysler (and Chairman Lee Iacocca) to become a renewed national commodity. This was in an era of "Buy American" and "don't let Japan and Europe put our workers out of business."

In 1980, merger of Daimler-Benz and Chrysler would have been thwarted or stopped by public outcry and/or government intervention. Recently, reporters have noted that there has been neither a U.S. government nor popular response—Why? Because globalization is now a forgone conclusion.

I would like to introduce an idea that may be unique to readers. That is, as we look at the world of professions and the globalization of professions, we often realize that Americans play a role in taking their professions abroad. I would agree, but suggest that for a variety of reasons, Americans have not excelled in globalizing professions. Certainly, they have their strong points in law, accounting, architecture, nursing, engineering and others, but they lag behind many countries as exporters of services. The reason America is not an exporter has many facets.

Be assured this is not America bashing. Some of my best friends are American, but since we Americans have a habit of talking about ourselves, I thought I'd relate some secrets that could put us in our proper place, that is, in the proper place in the world community of professions. So, while pointing out an opportunity for other nations' professionals to flourish here in the U.S., I think that American professionals will benefit from bringing professions here. And, I think that for all the expertise we own here, we must first understand professions around the world, before we can successfully integrate and later export our ideas productively.

Following are some historical reasons why American professions on the whole need education and planned action from those who could make vast gains by establishing their professions in the U.S. While they are not complete, they are meant to stimulate their ideas that may lead to bringing professions to the United States.

- We teach once we have expertise, once the cycle of being expert begins, then it is hard to be a student. It can give us a bad reputation for one-sided thinking.
- We have been called upon after wars to “export expertise.” It's a habit to respond; we are not as good at spreading our word when not asked.
- There is a natural recalcitrance toward the U.S. that levels the playing field. Suspicion of U.S. imperialism, as faulty as the idea is in professions, gives other countries an advantage of early trust.
- We are weak at languages because of our history of mass immigration and educational priorities.
- Our economy has been so good the past forty years that we look to the home front, not to foreign expansion.
- Our professional workforce is university-based, and U.S. universities don't export much. In fact, they compete.
- We have a market available to cultivate, yet we haven't seen ourselves as a “developing nation.”

I propose that now is the time for offshore professions to come to the U.S. with aspirations of introducing their style of education, professional practice, professional societies, and regulatory practices.

Why would such a scheme work?

- Americans are especially intrigued with foreigners and foreign language because we don't travel widely. And, when we do, we do it briefly and without much cultural immersion. Further, we don't emigrate. Very few Americans need to emigrate, nor do we seek change offshore. And, as a whole we shy from language development. It simply is not a priority. Therefore, as a country, we think that multi-lingual people must be more clever than we are.
- Importation of professional societies and their trappings would have little resistance because it has not been a threat—while the U.S. is resisted elsewhere.
- The Internet, satellites and travel make it easy to avoid regulation.
- Education is available for export to the U.S. Foreign degrees are recognized and often sought.
- We have 23,000 associations and room for more. Foreign professional associations could be a niche market.
- Association management companies can alleviate corporation problems; foreign associations could be managed by U.S.-based entities.
- Many credentials are being created globally with a small-to-large market here in the U.S.
- American economy has two waves of professionals:
 1. The “Baby Boomers” who are ready to spend and are having crises of aging. Baby Boomers are so named from the boom, explosion, of births after World War II.

2. “Generation X” and “Boomer Echoes” will be the next wave.

These are the next two generations. Both groups are susceptible/receptive to new ideas.

- Foreign contact raises the chance of foreign travel and living. Therefore, professionals, especially those who are maturing, will see foreign associations as a way to explore the world in the safety of like-minded professionals.

I recently spoke at a conference of the (U.S. based) National Organization for Competency Assurance (NOCA) with an audience of some 300 people from 170 professional certifying bodies. I asked them how many were currently practicing or considering near future global expansion. Ninety percent gave positive responses. However, with further investigation, I found few succeeding and few with viable plans. My conclusion is that the world need not be preparing itself for an onslaught of U.S. professional expansion.

Customizing Globalization to Professions

My interest in global credentialing began in 1981 when I started an eight-year odyssey of teaching in and administering a Boston University Graduate program in Germany, Great Britain, Belgium, Italy and Spain. While ninety-five percent of my students were Americans associated with the military or diplomatic missions, the remaining five percent were nationals of European countries who presented a new challenge—credential review and explaining the U.S. system. Articulating degrees was then and is now a major obstacle in cross-cultural education.

I found that merely working in the U.S. environment does not prepare us for “translating” what we do and how we are trained. To this end, I recently completed a document for the United States Information Agency, discussing the problems that professionals face when they attempt to bring their expertise from a foreign country to the United States. Among the areas I covered for those professionals to review were education, experience and transferring skills. I started by defining terms for those not familiar with our systems; e.g., certification, credential, accreditation, licensure, registry, federal, national.

In helping foreign emigrants, I suggest checking to see if their profession is properly listed in the *Occupational Outlook Handbook* and with the *Bureau of Labor Statistics*. I also suggest contacting any government’s embassy to find out where their labor statistics are kept. Also, the immense resources of the World Wide Web should become a staple of international movement of professions.

Living and working in Europe for eight years and working in five countries, I got to know lots of professionals and talked to many about moving to all points in the world. Little did I know that their wrestle with our maze of credentials was met with equal consternation from the agencies who would later be befuddled by their potpourri of degrees, diplomas, and credentials. Now we all have our share of needs to master confounding issues of international credentialing of professionals no matter where we are from. As professionals with global expertise, we have two mandates:

1. *Instructing our members of professions with strategies for finding regulations and proper credentials in foreign countries—and, in the same view—knowing who we, as professionals, should turn to as foreign counterparts. For example:*

- U.S. Chamber of Commerce is one place where professionals from all countries go around the world to convene and interact.
- Embassy and Consulates of Nations—Most have a series of trade-related programming.
- International Corporations—Most have programs to help with offshore transition.

2. *Instructing foreign applicants in how to translate their portfolios into meaningful host-style applications.* At the same time, we face the problem of being able to understand foreign equivalency, even when materials are translated to our language. For example, a professional friend was chagrined once when a British student showed up at his university for a “course.” When he realized she had moved (with furniture) to the United States to take a “course” he found that her British concept of a “course” is an entire “course” of study or master’s degree—not a class. If we can’t translate well in the same language, imagine the avenues of possible error with the scores of languages we will soon face.

A Checklist for Customizing Globalization to a Profession

Answer the following three questions with these thoughts in mind:

- Are global regions considered?
- What education and training is needed in your profession?
- What Trade/Service/Industry is affected at home and abroad?

What does your profession have to offer:

- To new countries?
- To other professionals?
- To similar professions?
- To a world community?

What can your profession expect to gain by going global:

- Prestige?
- Financial benefit?
- Higher service to populations?
- Guild gains?

What can your profession (in your country) lose with globalization:

- Local prestige?
- Change of education/training norms?
- Financial risk of exploring offshore markets?
- Loss of time in exploring regulatory restrictions?

Predicting the Future

Of course, there is no way to guess correctly what will happen with the globalization of professions, but I will make some assumptions. First is that travel and communications have changed the course of history so drastically that watching the effect on product industries should give rise to a pattern that service (professional) industries will take. Knowledge is the most flexible commodity to transfer globally. A hundred years ago, professional conferences were necessary because there was no way to quickly get information to many in the same profession. Now, conferences are not necessary, but they are important in connecting real people to ideas. The international nature of conferences, of information exchange and of service professionals' mobility points toward constant widening of linkages among professionals.

At the same time, the widening impact of Internet use will no doubt affect professional movements. The positive affect is, of course, the instant exchange of information. The negative affect could be the disintermediation of service providers. That is, the change or elimination of intermediate suppliers of services like hospitals and architecture firms to direct market access for anyone with Internet access. Professionals may be put in a position of direct marketing all services.

Immigration and emigration of professionals will continue to grow, not just with the rise of international mergers, but also with the idea that the world is a smaller, more easily accessed place. There will be more comfort and ease seen in crossing borders as professionals.

The increase in global product trade will pull service (professional) trade along with it. And, the opening of new markets in China, Africa, South America and other places will increase demands for trade. While it may not be fortunate, it is evident that developing nations will model education and training after current schemes. That will take more professionals abroad to exchange education, and it will unify professional ideologies. This alone could be the most influential part of unifying professions. For as countries develop professions, surely international ties will abound. Surely the Internet or World Wide Web will be a most viable and stimulating force for globalization of all professions.

References

- Gorlin, Rena. 1994. *Codes of Professional Responsibility (3rd Ed)*. Washington, D.C.: Bureau of National Affairs.
- National Organization for Competency Assurance. 1996. *Certification: a NOCA Handbook*. Washington, D.C.: NOCA.
- United States Department of Labor. 1994. *Occupational Outlook Handbook, (1997-98 Edition)*. Washington, D.C.: U.S. Government Printing Office

Chapter Thirteen

Evaluation Software in Counseling

by Russell A. Sabella

Pea (1985) wrote that we can think of technology in two ways: as a set of tools that amplify or extend what we currently do (make it better, faster and stronger), or as something with the potential to radically change what we do and how we do it. For example, the technology of a better saddle allowed riders to travel further and longer, but the technology of a car completely revolutionized the way we even conceive of travel. Similarly, we can think of how high-tech tools influence our work in counseling by extending what we currently do or changing the landscape of how we practice. Chances are good that when thinking of how technology assists us in our work, you envision various types of software that you use, or would like to use more. You may think of software such as word processors, spreadsheets, data bases, desktop publishing, e-mail clients, internet browsers, or your favorite MP3 player. Thinking further, you think about how your software applications help you to manage, organize, and collect information, or possibly deliver counseling services to your clients and other stake holders. Although it is computer hardware (e.g., central processing units, memory, and storage devices) that has become exponentially more powerful and massive over a short time, it is the software that brings the machine and all of its parts to life.

Software programs are a series of written computer instructions that determine how numerous electronic switches and calculations are performed. It is the sophistication and quality of the software that allows people to operate machines in useful ways – everything from a counselor who uses a personal information management system to keep him/herself on track to an ophthalmologist who uses a computer guided laser to perform surgery on someone's eyes. Every time you tap a key, click the mouse, talk into a computer microphone, or otherwise input data, it is the software that determines what happens next, if anything. Some software is designed to interact with the computer at a very basic level, often times in the background unknown to the user, such as in the case of operating systems, networks, utilities, and compilers. Applications software (also called end-user programs) is said to "sit on top" of systems software because they are unable to run without the operating system and system utilities (Webopedia, 2001). The combination of systems and application software make possible the electronic tools that help us collaborate, communicate, make decisions based on real-time data, share resources, and much more.

The number of systems software to choose from is small and is usually not a problem because computers come with such software already installed. On the other hand, the legion of differing applications software available to counselors in today's market is truly amazing. Not understanding one's options can make navigating the labyrinth of software selection a consternating task. The remainder of this article intends to advance the counselor's knowledge and considerations about the various aspects of application software.

What Kind of Software Do You Want?

To best decide what kind of software you want, you should have an idea of how you want to use technology in your work. In counseling, software applications typically helps us to (a) manage our work (computer managed counselor or CMC); (b) assist us in our work (computer assisted counseling; CAC); or (c) actually do our work (cybercounseling). Bleuer and Walz (1983) noted that CMC is when software applications help counselors with the clerical and administrative tasks associated with their work, tasks that frequently inhibit their ability to undertake meaningful counselor interactions. Practical applications of CMC include, for example, software to help manage client-student records, counseling activity logs, scheduling of individuals and groups, correspondence with families and agencies; resource files for the counselor's personal use, and general word processing. Examples of computer assisted counseling include using a software program to help administer a career development inventory, draw a picture, go through a "virtual" learning experience, or create an activity sheet by using a desktop publisher. The last category of software applications in counseling is new and quite controversial. It is

intended to supplant the counseling office or classroom and allow the counselor to work with his or her clients over the Internet. Software that supports cybercounseling allows counselors to access the Internet, send and receive e-mail, design a website, conduct chats, video conference, engage in instant messaging, administer tests, and edit video, all over the Internet. Some software packages contain a suite of various programs which provide support for conducting two or more kinds of counseling applications.

With what kinds of management or assistive types of tasks do you want software to help you? Do you want a program that will help you collect and organize student data? Do you want a program that will help you make decisions about who is a good candidate for small group counseling? Or do you want software that will help you to manage several groups of peer helpers to effectively assist in a comprehensive conflict resolution program? Maybe you want software that will help you design a website that helps you to overcome barriers of time and space to better reach out to your stake holders. Your first step in effectively evaluating software is to determine what you would like your software to help you accomplish.

Researching your Prospective Program

After determining your software needs, you are ready to begin researching and comparing numerous software titles and their respective features. Following are three sources of information that will help you review a software product and make the best possible purchasing decision:

1. **Asking others who already use the software.** Find others, especially counselors, who have experience using the software, and interview them about the nature of their experience. Ask them about how effective the software has been for its intended purpose (i.e., managing, assisting, and/or cybercounseling). To best find others using a certain kind of software application, you might post a message on a counseling listserv or online community such as the International Counselor Network (listserv.utk.edu/archives/icn.html).
2. **Consult online product reviews.** Many magazine publishers conduct comprehensive and sophisticated laboratory testing of new software and maintain an archive of the results on their websites (e.g., find the "product reviews" link on sites such as www.zdnet.com, cnet.com, www.familypc.co, and www.superkids.com).
3. **"Kick the tires."** Software manufacturers usually allow you to try a software program by allowing you to access an evaluation or trial version. These versions may offer the full functionality of a purchased copy of the software although may expire and become inaccessible after a set time period. Some trial versions do not expire although they only provide the user with a sample of the capabilities of the full version. Yet others, mostly individuals and smaller companies, make available shareware versions of their programs (see the section on Cost below for more about shareware).

As you research the available software for your particular application needs, you will want to be aware of several features for effective comparison. Consider the following:

Cost

One of the first things you should know about the cost of software is that it typically includes more than just the sticker price on the package. One must also account for the cost of any extra hardware that would be needed (e.g., extra memory) to efficiently operate the program. Also, you need to consider the cost of updating or upgrading the program. For instance, antivirus programs need to be updated quite frequently, perhaps every day. Many manufacturers of antivirus programs include in the price of purchase one year of updates which allows the program to detect and delete new viruses as they are recognized. After a year, you would need to subscribe to an updating service for a fee. Other programs such as word processors may not need such critical updates. In this case, updates to the program in the form of "fixes" or "patches" (actual pieces of code inserted into a program's file that serve to fix a detected problem or security vulnerability) are provided for free over the Internet. Some programs can be set up to check for newly available fixes or patches every time the program is launched.

Different than updating, all software needs to be upgraded from time to time. Upgrades are actually newer versions of a software (or hardware) product designed to replace an older version of the same product. Typically,

software companies sell upgrades at a discount to prevent users from switching to a competitor's product. In most cases, you must prove you own an older version of the product to qualify for the discount price. In addition, the installation routines for upgrades often check to make sure that an older version is already installed on your computer; if not, you cannot install the upgrade. Recently, some software companies began offering competitive upgrades, which means that you can buy a program at a discount if you can prove that you own a competing program (Webopedia, 2001). Purchasing an upgrade solely because the product is newer is not a good reason to spend the money to replace a product that works well. Counselors should be convinced that the cost of an upgrade is worth the new or advanced features that the upgrade makes available.

Another cost factor includes the cost of human resources and training. Will installing and maintaining the software necessitate technology experts who will bill for their services? Most programs today are highly automated and sometimes use technology that intuitively detects and automatically corrects any problems. At the very least, many software programs include a step-by-step guide for correcting problems that may be detected. Oftentimes, software manufacturers maintain sophisticated help databases, usually referred to as a Knowledge Base, on their web sites which can help with frequently asked questions (FAQ). Access to these help features should be included in the price of the software. Also, a human resource cost may present itself in the form of needed training which facilitates the effective use of the software. Will the user need to purchase training manuals to supplement an inadequate product manual? Or worse, is the software so difficult to use and/or so poorly documented that a user needs to attend a costly workshop? Product reviews or your own review of a program should help determine that a program is "user-friendly."

Another factor to consider is that there may be available an alternative brand of a software product at a much lower cost. You will want to research whether there is available a free (freeware) or low-cost (shareware) software program that performs adequately as compared to a more well-known version. For instance, StarOffice 5.2, available from Sun Microsystems (www.sun.com/staroffice) is a free productivity suite which includes word processing, spreadsheet, and presentation applications. It is reported to be interoperable with other desktop productivity suites, including Microsoft Office, the most comparable and pervasive productivity software suite currently in use. Shareware is software distributed on the basis of an honor system. Most shareware is delivered free of charge, but the author usually requests that you pay a small fee if you like the program and use it regularly. By sending the small fee, you become registered with the author so that you can legally use the software, receive service assistance, and be notified of updates. You can copy shareware and pass it along to friends and colleagues, but they too are expected to pay a fee if they use the product. Shareware is inexpensive because it is usually produced by a single programmer and is offered directly to customers. Thus, there are practically no packaging or advertising expenses. Of course, because shareware is copyrighted, you cannot sell a shareware product as your own (Webopedia, 2001). Both freeware and shareware warehouses that allow you to search for, briefly review, and download different programs can be found on the internet (e.g., www.hotfiles.com, www.shareware.com, www.jumbo.com, and www.tucows.com to name a very few). Note that you should always be careful about downloading programs by first making sure that they have been checked for viruses.

Lastly, counselors should consider that they (or their children or students) may qualify for steep educational discounts when purchasing software. You might check with the software's manufacturer or contact a distributor that specializes in serving educators (e.g., www.journeyed.com, www.schoolworld.com, www.creationengine.com, and www.edtech-cps.com). Typically, the distributor will ask that you provide one or two pieces of evidence that you are staff, student, or faculty with an educational institution.

Hardware Requirements

Hardware refers to objects that you can actually touch, such as disks, disk drives, display screens, keyboards, printers, boards, and chips. Minimum hardware requirements necessary for a software program are usually specified on the box and include specifications for storage capacity, memory, processing speed, and any needed special devices (e.g., joystick, speakers, camera). Using software with only minimum hardware requirements may, however, lead to a frustrating experience because operations may be slow. Also, using the program while running other programs may result in your computer freezing or crashing. Having more than the minimum requirements (sometimes indicated as the recommended requirements) will allow you to use a given software program with desirable speed and while simultaneously using other applications. The good news is that software manufacturers typically design software that only requires hardware specifications which can be easily handled by computers (or other peripherals) made in the last couple of years.

Compatibility

Two areas of compatibility need to be considered – compatibility with one’s operating system software and other applications software. The operating system performs basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers. Microsoft Corporation is responsible for the operating system that resides in the majority of today’s computers and currently includes Windows 95, 98, 2000, ME, NT, and XP. Other prevalent operating systems include DOS, OS/2, Linux, Unix, and Mac OS X (for Macintosh computers). Compatibility with your operating system is critical and will determine whether you will probably be able to even install your new software or not.

When two or more counselors need to collaborate on a project or share in important decision making, it is important that the data they use be shared in a manner that maintains the data’s integrity. For instance, if I wanted to collect and analyze a set of outcome data with other counselors across the hall (or across the country for that matter), it is important that we input, view, manipulate, and process the data with tools that treat the data in the same or at least very similar ways. Before purchasing a particular software, you will want to know how compatible the software is with the software of your colleagues or others with whom you will need to share data. If your software is not 100% compatible, and you still wish to consider it, you should ask yourself, “How well will the program convert the files of a competitor’s software and will this be sufficient for effective file sharing (i.e. importing data)?” Relatedly, you will want to know how well your program can save a file in another format (i.e., export data) in such a way that it can be used by a different software application. An application that can effectively export data can create a file in a format that another application understands, enabling the two programs to share the same data. The two programs might be different brands of the same application such as two kinds of word processors. Or, the two programs might be two very different programs such as a word processor and a database management system.

Customization

When you get into your car, you sit in the same exact type of seat that are fitted in the thousands of other cars of the same model and year. However, you can adjust the seat’s position, headrest, temperature, or other aspects of the seat to maximize comfort. In the same way, a good software program should allow you to adjust many aspects of how it operates to meet your individual needs of comfort, familiarity, and performance requirements. You should be able to include or delete certain buttons on the various tool bars and otherwise change the software’s settings. A software program might also allow you to customize your keyboard settings so that you can set a certain key or keystroke combination to perform a particular operation. For example, because I write my e-mail address so often, I have my word processor’s keyboard settings adjusted so that when I press CTRL-E, my e-mail address is automatically typed in my document.

Interface

A program’s interface is the bridge between you and the machine. A program that uses a graphical user interface (GUI) takes advantage of the computer’s graphics capabilities to make the program easier to use. Well-designed GUIs can free users from learning complex command languages and allow them to simply point and click on symbols (icons) that represent common objects. When programs share common GUI’s such as in a program suite, they can easily share data by simply dragging and dropping the data from one application to the next. An interface should be laid out in a way that makes sense so that a program is simple to use, easy to navigate, and aesthetically pleasing.

Support

Besides cost, support for a software program is generally the most valued aspect among consumers. It is the level of software literacy that will usually make the difference between not using the software at all, using a very small percentage of a program’s capabilities, or conversely, pushing the software’s capability to perform in areas outside its intended purpose. Counselors will want to know if the software comes with a toll-free telephone number for talking to a support expert and what the average wait time is to speak with him or her. Also, does the software manufacturer maintain a web site with support material? Does the site have helpful tutorials and extra downloads to help the user best take advantage of the software’s capabilities? In the case of software designed to help you conduct counseling, especially large group guidance and small group counseling, does the software

manufacturer make available supplemental learning materials that go with the program?

Networkability

Some programs are meant to be used by more than one person at the same time. They are written to specifically operate on a network, perhaps over a school or district, so that multiple users can access the program and all of its parts. Some programs are designed to run only on a network while others can run on a single computer, a network, or both. The advantage of using networked software is that (a) it is often cheaper to purchase one networkable program and make it accessible to multiple people as compared to purchasing many copies of the same program for each individual; (b) a single networked program may be easier to troubleshoot than doing the same for multiple copies across different computers; (c) similar to troubleshooting, updating and/or upgrading the program is easier over a network; (d) having individuals use the same program over a network insures 100% compatibility; and (e) schools can more easily manage the hardware requirements of various users knowing that they are using the same software. Disadvantages include that (a) software running over a network is often times visibly slower than running the same software on an individual computer; (b) some users may not prefer to use the networked software; and (c) if the network is temporarily inoperable, multiple people will not have access to the needed software (as is sometimes the case with e-mail, for instance).

Security and Safety

Because counselors often deal with highly sensitive and confidential information, another software concern should be how well it protects or secures information from others. Does the software allow for password protection of individual files? How robust is the encryption methods for securing the data? If the data resides over a network, can the files be hidden from other users? What happens if I forget a password? The answers to these questions are important to know for it is how we assure confidentiality and resulting trust in our counseling relationships.

Become the Resident Expert

Everyone can use a hammer although it takes time and effort to become a good carpenter. Professionals in any given field are experts at using the tools of their trades. Software applications are a counselor's newest tools that require experience, training, and practice. Once you decide on a specific application, it is up to you to advance your level of expertise by engaging in both informal and formal training opportunities. Informally, review the software's tutorials, manuals, and online help topics. Second, you might join an online user group which is a type of support group for users of a particular software program. Via e-mail, electronic bulletin boards, web content, and electronic newsletters, online user groups such as those located at groups.yahoo.com and www.topica.com help members to exchange tips and tricks, troubleshoot problems, and recommend helpful resources. Third, you will learn the finer points of your software application with consistent and persistent use. In spite of feeling awkward, practice using your new high-tech tools by continually experimenting with all the features. Formally, you should incorporate technology training, both live and online, as part of your professional development plan and continuing education efforts.

After gaining significant expertise using your program, you might go beyond the software's capabilities by using third party plug-ins. A plug-in is a software module that adds or enhances a specific feature or service to a software program. For instance, there exists various plug-ins for internet browsers designed to augment the navigating experience such as by adding the ability to see sophisticated animation or sound. Numerous plug-ins exist for adding new levels of manipulation for graphics and video editing software. The greater a software application's popularity, the more numerous the available plug-ins for it that become available.

The tools of our trade influence, in large part, the value and quality of our work. Investing in one's own software literacy will help to ensure legal and ethical practice by remaining competent in a high-tech world. With careful planning, the tools of the new millennium will also assist counselors in staying productive and focused in a seemingly chaotic world that competes for more time and resources than we have to offer. Carefully choosing and learning appropriate software applications will better help us more effectively reach larger numbers of people, provide more targeted interventions, and focus energy where it is most required.

References

- Bleuer, J. C., & Walz, G. R. (1983). *Counselors and computers*. Ann Arbor: ERIC/CAPS. The University of Michigan.
- Pea, R.D. 1985. Beyond amplification: Using the computer to reorganize mental functioning. *Educational Psychologist*, 20(4), 167-182.
- Webopedia (2001). Available online [<http://www.webopedia.com/>].

Chapter Fourteen

Cybersupervision: Conducting Supervision on the Information Superhighway

by Diane Coursol

Brief Overview

The internship experience is an integral part of the graduate program for counselor education students. The ACA Code of Ethics and Standards of Practice and the ACPA code of ethics require that students receive regular supervision from site and faculty supervisors during the practicum and internship experiences. However, when student counselors are at distant locations the provision of adequate supervision is a challenge. In such instances student counselors and supervisors attempt to maintain contact through such mediums as the telephone and more recently, e-mail (Casey, Bloom & Moan, 1994).

The purpose of this article is to introduce a new form of distance supervision, cybersupervision. Cybersupervision utilizes Internet videoconferencing to facilitate the counselor supervision process. This article describes the concept of cybersupervision, details technological requirements and discusses advantages and limitations of this form of supervision.

Discussion

Cybersupervision utilizes Internet videoconferencing to enhance the supervision of student counselors. Internet videoconferencing allows supervisors and student counselors to see and talk to each other in real time from the convenience of their desktops (Fetterman, 1996). Cybersupervision is particularly useful when supervising student counselors at remote sites or when student counselors are in a broadly dispersed geographical area.

Basic hardware requirements include a computer with at least 10 megabytes (MB) of hard drive space, a modem with a bandwidth of 28.8 kbps or higher, and a point-to-point protocol (PPP) for dial-up connection. An Internet connection with an Internet Provider (IP) address is necessary for participants at both ends of the communication process. Additionally, a camera is required for all sites participating in cybersupervision. Software requirements include appropriate videoconferencing software that is H.323 compliant. A variety of H.323 compliant videoconferencing software packages are now available including SmithMicro/Video Link Pro, White Pine/CU-SeeMe, and Microsoft /NetMeeting.

Cybersupervision has a variety of applications for the counseling supervision process. It can be used for individual supervision, group supervision, case conferencing, consultation and case management. E-mail has made the supervisory process easier as it allows for regular contact between clinical supervisors and counselor educators (Casey et al, 1994). Cybersupervision enhances this process as it offers the additional benefits of voice, text and image.

Supervisors can use cybersupervision for both individual and group supervision. Student counselors at remote sites can now attend the practicum and internship class with their peers. The flexibility of this technology allows group participants to either share their communication with the whole group or privately with another group participant without involving the whole group (Fetterman, 1996). Meanwhile, group participants can simultaneously communicate with each other through written text format.

Apart from enhancing the direct supervisory process, cybersupervision enables the faculty supervisor to conduct site visits in real time with the student counselors and their site supervisors. Prior to cybersupervision, interactions were limited by geographical distance and usually involved unidimensional formats such as the telephone or e-mail (Casey et. al, 1994).

Another important use of cybersupervision is consultation. Through cybersupervision student counselors can consult in real time with their faculty supervisor on challenging client cases. The audio-visual format provides faculty supervisors with a better sense of the student counselors' concerns as they can observe both verbal and

nonverbal behavior. Thus, cybersupervision affords faculty supervisors a clearer understanding of the counseling skills and capabilities of their student counselors.

Recommended Course of Action

Before student counselors leave for their practicums/internships they should be trained to use the technology appropriately (Fetterman, 1996). Student counselors should practice installing and using the audio and text features of this technology before they attempt to use it at their remote site. Through these practice simulations, student counselors can become proficient with videoconferencing procedures and if necessary, can troubleshoot effectively.

An ideal on-campus training scenario requires students to install software, and simulate a cybersupervision communication exchange with their peers. Departments can develop a handout describing the cybersupervision process for student counselors that contains information about equipment requirements, installation instructions, and frequently asked questions (FAQs). This handout can also be shared with the site supervisors so that they are also familiar with the process.

Communication is facilitated when student counselors are trained in the communication protocols of cybersupervision. These communication protocols include appropriate timing between communication exchanges and communicating with text when necessary (Fetterman, 1996). Students can practice such communication protocols in the classroom prior to the beginning of their on-site experiences.

With changing student demographics and needs, cybersupervision offers several advantages for student counselors and faculty. Cybersupervision, with its audio-visual capability, provides a more interactive alternative to the unidimensional format of e-mail or the telephone for student counselors and supervisors separated by geographical distances.

Cybersupervision allows student counselors to participate fully in their practicum or internship class. Though student counselors may be separated physically by distance, they can “virtually” attend class. Pedagogically, the student receives the benefits of learning from peers and receiving peer feedback as well as the opportunity to develop the skills of peer consultation and collegiality.

Cybersupervision allows faculty supervisors to “cybercommute” over the information superhighway to meet with their student counselors in real time. These “cybercommutes” allow faculty to spend less time on the road and more time productively consulting with the student counselors and their site supervisors.

With cybersupervision, counseling departments can encourage students to seek practicum and internship opportunities at more distant locations across the country and indeed the world. With cybersupervision, student counselors are only as far as the click of a mouse. This expands the pool of internship opportunities for student counselors.

Cybersupervision is particularly helpful when student counselors require additional support. Fetterman (1996) noted that the effectiveness of electronic communication increases when verbal and nonverbal cues are available. The visual contact provided through cybersupervision gives student counselors a greater sense of security and support, thus enhancing communication between student counselors and their supervisors.

Finally, cybersupervision offers a solution to the dearth of qualified supervisors in the field (Sampson, Kolodinsky & Greeno, 1997). Counselors, who require supervision for licensure, certification or other reasons, would have access to qualified supervisors at distant locations when local supervisory services are not readily available.

Cybersupervision is not without limitations. The National Board of Certified Counselors (NBCC) and the American Counseling Association (ACA) have delineated standards for the ethical practice of clinical supervision that must be incorporated into the practice of cybersupervision. Welfel (1998) cautions counselors to consider the potential ethical issues related to the use of technology in the practice of counseling and supervision. Some of the major limitations include informed consent, confidentiality, client welfare, supervisee welfare, and emergency response procedures. It is important to recognize that these issues are equally paramount in the standard face-to-face clinical practice and supervision.

In line with standard clinical supervision procedures, clients and student counselors should be informed that their confidentiality will be protected and be aware of the procedures used to ensure confidentiality. Additionally, clients and student counselors should be informed about the length of time and the documentation procedures of cybersupervisory sessions. Student counselors must be assured that their information is secure so

that they are willing to discuss issues critical to their professional development.

To ensure privacy and confidentiality, counselor educators are advised to train students in appropriate procedures and protocols to ensure client privacy and confidentiality. Such protocols include selecting a confidential location for cybersupervision and avoiding the use of identifying client information during the cybersupervision process. Supervisors and student counselors can use ID numbers instead of client names. The protocol for handling crises should also be clearly established and shared with student counselors.

Summary and Conclusions

Technology will continue to play a more significant role in the counseling profession thereby revolutionizing the counseling supervision process. Cybersupervision adapts an emerging technology to facilitate the counseling supervision process. It is a cost-effective means for reaching a large number of student counselors at remote sites.

For faculty supervisors, cybersupervision provides a real, dynamic and interactive connection to student counselors at remote practicum and internship sites. As this technological innovation becomes more commonplace, supervisors will continue to find more creative uses to improve the quality of counselor supervision. While the initial benefits of cybersupervision are clear, its full potential has yet to be realized.

References

- Casey, J. A., Bloom, J. W. & Moan, E. R. (1994). *Use of technology in Counselor Supervision*.
- ERIC Clearinghouse on Counseling and Student Services. (ERIC Document Reproduction Service No. ED372357).
- Coursol, D. H. & Lewis, J. (2000). Cybersupervision: Guidelines and Procedures for Conducting *Supervision on the Information Superhighway*. [Online]. <http://cybercounsel.uncg.edu>.
- Fetterman, D. M. (1996). Videoconferencing on-line: Enhancing communication over the Internet. *Educational Researcher*, 25, 23-27.
- Sampson, J. P., Jr., Kolodinsky, R. W., & Greeno, B. P. (1997). Counseling on the Information Highway: Future possibilities and potential problems. *Journal of Counseling & Development*, 75, 203-212.
- Welfel, E.R. (1998). *Can supervision be ethical if not face-to-face?* Columbia, SC: Association for Counselor Education and Supervision Spectrum Newsletter.

Chapter Fifteen

Current Practices & Future Implications for Internet Counseling

by William C. Attridge

The Internet has altered the landscape of our world-wide community, bridging people, cultures, societies and nations together as never before. The Internet has changed our style of relating to one another, not only in terms of technique, but also in terms of expression, language, and social exchange. The Internet is the portal through which we step to negotiate distance, time, and information. It transcends our imagination and seemingly takes on a life of its very own. It is oftentimes a peculiar place, filled with new and exciting ideas just around every corner. It is instantaneous, ever-present and practically breathes. However, in reality, the Internet is a tool, a revolutionary tool to be sure, but a tool nonetheless.

Forty years ago, Walz and Johnston (1963) were first to explore the utility of employing video tape as an aspect of counselor training. As a revolutionary “new” technological tool, the use of video within the margins of practicum must have been a daunting experience for all, no doubt, replete with its own share of critics. Yet, 40 years later, it is unimaginable to think of training counselors without video technology. Today, counselors are confronted with another “new” technological tool, which by comparison, is equally intimidating – The Internet.

In the counseling profession the use of this innovative tool is a novel phenomenon and one that is continuing to attract and demand our attention. There are those who advocate on its behalf, while others scrutinize it with disapproval. However, our profession has both a duty and an ethical obligation to meet the needs and demands of the society we serve. We are obligated to continually challenge our beliefs and acknowledge ever-changing social requirements through professional education, advanced academic instruction and continued empirical study. Our failure or inability as a profession to fully recognize the importance of the Internet as a communication method and counseling medium would be analogous to dismissing Edison and his light bulb simply because it wasn’t bright enough.

In his book *Future Shock*, Toffler (1972) writes: “The illiterate of the twenty-first century will not be those who cannot read or write, but those who cannot learn, unlearn, and relearn.” Although the notion of performing “counseling” within the confines of the Internet may seem contradictory to our training, the advent of forthcoming technologies promise to make Internet-based counseling attainable and realistic.

Internet counseling in its current state is an imperfect process. This is indisputable. But, the implications for future application are mutually astounding and bold. Imagine two Internets, three, five, or even twenty-five. This notion may not be as unbelievable as it might initially sound. It is in fact, just simply a matter of time.

Overview of the Internet

The launch of Sputnik in 1957 compelled the United States to form the Advanced Research Projects Agency (ARPA) within the Department of Defense to link computers together with the single-minded purpose of sharing information. A global network was first proposed in 1962 and by 1969 the Internet, then known as ARPANET, first went online (Hamman, 2002).

ARPA extended its reach by linking with other computers at four major research universities in the southwestern United States: The University of California at Los Angeles, Stanford Research Institute, The University of California at San Bernardino, and the University of Utah. While the number of sites on the Internet was initially small, additional universities and government organizations quickly came online, making Internet traffic much more difficult to monitor (Hamman, 2002).

The Internet entered its adolescence in the 1970’s as the result of Transmission Control Protocol/Internet Protocol (TCP/IP) architecture. This architecture was adopted by the Department of Defense in 1980 and became universally accepted in 1983. The international “Because It’s Time Network” (BITNET) began in the spring of 1981 and eventually reached across the United States, and was joined later with its European counterpart, the

European Academic and Research Network (EARN) in 1982. Other cooperating international networks joined over time, to make BITNET a worldwide network (Corporation for Research and Educational Networking, 2002).

BITNET networks connected mainframe computers within the educational community in order to provide communication services by using an electronic mail mechanism called a "listserv" to distribute information. Sending a message to a BITNET list resulted in the message being replicated and sent to all of the subscribers on that list. Persons could subscribe or unsubscribe to a list automatically by sending a message to a particular e-mail address. These listservs and other forms of e-mail discussion groups fashioned another major advancement for the early community of computer users that was beginning to emerge (Thomas, 1995).

In 1986, the National Science Foundation (NSF) designated NSFnet as the official data transfer backbone for the Internet. The NSF maintained this position for nearly a decade and was responsible for establishing the early conventions for Internet applications. Since the Internet was funded by the government, it was strictly limited to research, education and government use, with commercial applications prohibited. This policy continued until the early 1990's when commercial networks began to emerge and it became possible to transfer data traffic from one commercial site to another without passing through the government-funded NSFnet (National Science Foundation, 2002).

In 1989, the European Laboratory for Particle Physics developed a new method for information distribution. This scheme was based upon hypertext, which utilized embedded links within text to unite other textual material. In 1993, hypertext protocol received its greatest popularity as a result of the graphical browser. Mosaic was the first commercial graphical browser to utilize this new technology, with both Microsoft and Netscape quickly developing companion products (Berners-Lee, 1999).

By 1992, the Internet had one million host computers, ARPANET had ceased to exist, personal computers were nine times faster and network bandwidth had become 20 million times greater (Computer Museum History Center, 2002). Today's Internet is composed of millions of interconnected networks and systems that collectively provide a backbone for the transmission of network traffic.

Today, roughly 45% of American's have access to the Internet, representing over 120 million people online, with the average Internet user spending 7.6 hours online per week (Wright, 2000). Chorp (2000) estimated that nearly half of all American households are connected to the Internet each hour. By the year 2006, predictions suggest there will be over 900 million Internet users worldwide with growth expected to exceed 30% per year. Most experts predict a high-capacity information infrastructure connecting the developed nations and major metropolitan areas of many developing countries will be complete by 2015 (Hines, 1997).

A Wireless World?

It is often suggested we live in a "wireless world." The truth of the matter is there is nothing further from the truth. In fact, in the year 2000 alone, enough cable was installed worldwide to reach to the moon and back well over 100 times with cable manufacturers reportedly spending more than \$2.5 billion in 2001 to expand production facilities to meet the increasing demand (Carter, 2001). The need for insulated wire and cable in the United States will likely increase by over 5% annually through 2004 to approximately \$22.7 billion according to a study conducted by the Freedomia Group (Cleveland, 2000). The interesting paradox is that cable products support the development and sustenance of the entire wireless network infrastructure and, despite the onset of wireless products, technology will continue to use wire and cable due to its wide range of applications.

Early Telecommunications

In 1956, the first transatlantic copper wire cable allowed simultaneous transmission of 36 telephone conversations. Other cables soon followed and by the early 1960's overseas telephone calls had reached 5 million per year. Satellite communications arrived in the mid 1960's and by 1980 the telephone system carried in excess of 200 million overseas calls per year. As demands on the telecommunication system continued to increase, the limitations of technology became apparent. During the late 1980's, efforts to harness light itself as a communication method were first realized (Hecht, 1999).

Fiber-Optic Cable

Perhaps the most fundamental law of physics is that nothing can accelerate faster than the speed of light.

Light travels at 186,000 miles per second and in fiber-optic cable transmission the medium is optical rather than metallic. Hair-thin, fiber-optic strands within a cable reflect the light that passes through them back inward toward the fiber so light cannot escape the cable, making it theoretically possible to send 400 gigabits per second over a single strand of fiber, the equivalent of sending the text of more than 10,000 volumes of an encyclopedia in one second (Lucent Technologies, 2002).

As electronic signals are fed into tiny semiconductor lasers, the lasers produce pulses of light that travel through the fiber, and at the receiving end, photo-detectors convert the incoming signals back into electricity (Pope, 1994). In spite of the popular perception that satellites are the primary carriers of global communications, the reality is that undersea fiber-optic cables carry approximately 10 times more traffic (Petit, 1999).

Satellite Communications

A satellite is an object that orbits another object due to gravity. For example, the earth is a satellite of the sun, while the moon is a satellite of the earth. Many artificial satellites have been designed and launched for the sole purpose of telecommunications. When a satellite is launched, it is positioned into a certain orbital pattern where it is held in place by the earth's gravitational force (Montgomery, 1997). A satellite receives a microwave signal from a ground station on earth (uplink), then amplifies and re-transmits the signal back to a receiving station at a different frequency (downlink).

There are three predominant orbital positions in space where satellites are typically fixed. The first position is Low Earth Orbit (LEO). This array is located 100 to 300 miles above the earth's surface where satellites travel at a speed of 17,500 miles per hour and circle the entire planet in an hour and a half. The second orbital position is Medium Earth Orbit (MEO), which journey in an oval pattern above the north and south poles at a height of 6,000 to 12,000 miles above the planet. The third common orbital pattern is Geostationary Earth Orbit (GEO). A satellite in a geosynchronous orbit circles the entire earth in 24 hours – the same amount of time it takes for one earth rotation. If GEO satellites are positioned over the equator and travel in the same direction as the earth's rotation they appear "fixed" with respect to a given position on the planet. Satellites in geostationary orbit are positioned 22,282 miles above the earth, where they are always able to "see" the receiving station below, and their signals can span a majority of the planet at once. Three GEO satellites can cover the entire globe with the exception of the north and south poles (Boeing Satellite Systems, 2002).

To launch a satellite is costly; each one, regardless of technology, country of origin or design intent has associated mission costs that range from tens to hundreds of millions of dollars. Satellite rocketry was originally developed as a branch of artillery. Proponents of various reusable launch technologies argue that as long as an "artillery-like" model is maintained, affordable launches will never be possible. Moreover, as launch costs remain excessive, only governments and the very largest of corporations are postured to afford them (Technology Research Report, 1993). Configuring a satellite is complicated and takes considerable time, especially to a variety of orbital inclinations, with most existing spaceports unequipped to handle both equatorial and polar launches (Ordway & Sharpe, 1999).

Unlike cable, satellite Internet service is generally available anywhere in the United States that offers an unobstructed view of the southern sky, making the option appear attractive to consumers who are unable to be accommodated by land-based, broadband Internet service providers. However, satellite dish costs, installation charges, and monthly subscription fees can often make this prospect an expensive venture.

Wireless Technology

Wireless technology enables short-range links between mobile computers, mobile phones, portable handheld devices, and Internet connectivity. The security requirements for wireless applications vary depending upon the sensitivity of the information involved and the specific needs of the user. Although early wireless applications and products took considerable time to appear and often spoke incompatible dialects, wireless is coming of age. Once price stability is attained, truly wireless, inter-equipment communication should become commonplace.

What is Internet Counseling?

Counseling and human development professionals have variously recognized this process within the literature as Internet Counseling, Internet Therapy, CyberCounseling, CyberTherapy, CyberPsychology, e-Therapy, e-Counseling, NetCounseling, WebCounseling and Online Counseling, among others. However, the various monikers associated with the process are far less important than the process itself. In 1995, the National Board for Certified Counselors (NBCC) was first to ethically address the practice of counseling via the Internet. In November of 2001, NBCC adopted a revised statement of principles for guiding the evolving system of Internet counseling, and defined the practice as “asynchronous and synchronous distance interaction among counselors and clients using e-mail, chat, and videoconferencing features of the Internet to communicate” (NBCC, 2001).

Similarly, in October of 1999, the American Counseling Association’s Governing Council approved the *Ethical Standards for Internet Online Counseling*. These guidelines established standards for use of electronic communications over the Internet to provide Internet counseling services and are used in conjunction with the *ACA Code of Ethics and Standards of Practice*. The set of standards developed by ACA differ somewhat from the NBCC standards in that the NBCC encouraged providers to inform clients of encryption methods to ensure security of communications, whereas the code set forth by the ACA imposed a much stricter standard by mandating the encryption of all online communications with the exception of general web site information. According to Holmes (2000), “They represent the strictest standards yet adopted concerning mental health interactions on the Internet.”

Advantages of Internet Counseling

When evaluating incentives to Internet counseling we discover that many of them are principally client-centered. A 1999 Harris poll found that 60 million people searched the Internet for health information and four of the top 10 most searched health topics were mental health related (Walker, 2000).

The Internet is a particularly useful means for providing services to underserved populations such as clients who may reside in remote or isolated areas, or those who may be homebound as a result of disability or chronic illness.

Certain clients may be actively involved in a traditional counseling relationship and suddenly find themselves relocating to another geographic region but still desire to retain the services of their current counselor. Other clients may experience scheduling difficulties that preclude their ability to engage in traditional office-based counseling and may find this medium more suitable to a fast-paced lifestyle, unusual employment hours or other matters of time conflict.

Some clients may simply convey themselves more expressively in a narrative or distance format, and as such, are more comfortable sharing their feelings through this medium. Other clients may experience initial apprehension or embarrassment about their need for mental health services and could find Internet counseling formats appealing, engaging and non-threatening. These types of encounters would at the very least suggest a client has made a conscious decision to effect a change and is contemplating resolution, making the Internet counselor a valuable “front-line” asset.

For the counselor, Internet counseling may offer cost-containment benefits, provide alternative forums to attract and secure additional clients, evaluate and serve more clients per day, offer scheduling flexibility, enable interaction among experts and peers from other locations and provide new venues for supervisory functions.

Technical Limitations of Internet Counseling

Great efforts have been made to generate and recreate a realistic counseling experience through videoconferencing hardware and software technologies. However, an often overlooked consideration is hardware and software compatibility between the counselor and client. This matter is one of “interface.” Interface, in this instance, refers to one computer’s ability to interact and coordinate harmoniously with another remote computer. Given the diverse nature of computer systems, satisfactory interface among users is oftentimes difficult to attain without a great deal of prior manipulation, frequently negating the time and effort required. For example, about 20% of all personal computers in use today are Macintosh, compared to approximately 80% who utilize PC’s (MAC Facts, 2002). As of 2001, the Macintosh community was over five million strong, making it the biggest

selling personal computer of all time with a new Macintosh sold every nine seconds (MAC Facts, 2002). To achieve any degree of compatibility between these two diverse computing systems is an annoying experience even for the most sophisticated user, with disparity growing ever-wider. Another matter of interface exists even among compatible systems. For instance, a counselor using a state-of-the-art, high-end, videoconferencing system, with others who may only possess lower-quality, desktop systems, will find the quality of their mutual video interaction only to be as good as the worst system, suggesting the counselor either personally provide each client with compatible equipment, or remain content with the more restraining technology.

Limitations to the Professional Relationship

Many existing impediments to Internet counseling are now due in large part to the lack of interactivity normally exchanged between the client and the counselor in the traditional face-to-face office arrangement. When considering the advantages and limitations of dispensing online counseling services, the practitioner should fully examine the ramifications within the context of the professional relationship and a specific theoretical orientation.

One of the questions regarding professional affiliation online is the counselor's ability to foster and maintain trust in the relationship, which is deemed a critical and essential element for effective client outcome. Those who consider Internet counseling impractical call the concept of "rapport" into question. Sussman (1998) suggests this loss of the immediate dialectical process impedes the ability of the counselor to fully and effectively engage their personal style within the online environment.

Others contend that a number of Internet delivery mediums such as e-mail, listservs, bulletin boards and instant messaging systems inhibit certain therapeutic techniques or processes. For example, the processes of "here and now" immediacy, reflecting, questioning, encouraging and maintaining the client "in the therapeutic moment" may not convert soundly within certain online mediums when the counselor is deprived of any verbal or visual cues. However, even with this generalized lack of immediacy compensatory clues are frequently interjected within online communications through the use of "emoticons" and acronyms, which can be very helpful tools for clients to articulate and describe their emotional states (Haas, 2000).

Ethical and Legal Considerations

With Internet counseling there are multiple issues with legal and ethical dilemmas that may seriously place the client or counselor in a position of heightened risk. Great concern has been related to security and confidentiality of private communications and the potential for unauthorized access by Internet service provider (ISP) personnel, co-workers, or prying family members. But, limits to confidentiality exist online as much as they do in the real world (Grohol, 1999). Verifying validity and reliability of client information is another uneasy realm. While there is little doubt that an Internet counselor should secure accurate information, the question really becomes – How? Since anonymity online is a relatively easy feat for most experienced computer users the challenge presented for the Internet counselor is developing solid methods for confirming identity and securing accurate, legitimate, verifiable information.

Internet counselors frequently neglect to fully address the concepts of "informed consent," which is far more critical online than in the office. This generalized failure to adequately furnish all pertinent information germane to the online counseling format includes a failure to clarify the nature and scope of services offered by the provider, disclosure of professional credentials augmented with supplemental information outlining grievance procedures and contact information, descriptive information indicating the provider's preferred theoretical orientation and treatment methods, explanations of limitations to client confidentiality, identifying and fully describing all potential risks and associated benefits of assessment and/or treatment, supplemental referral pathways, full disclosure of service fees, descriptive procedures detailing emergency or crisis assistance and procedures addressing technological failures, equipment malfunctions and technical predicaments. In addition, the NBCC ethical standards for Internet counseling stipulate: "Internet counselors are aware that some clients may communicate in different languages, live in different time zones, and have unique cultural perspectives. Internet counselors are also aware that local conditions and events may impact the client" (NBCC, 2001). Counseling professionals should not only possess an awareness of unique multicultural dimensions, but should further be able to provide evidence and demonstrate how they came to possess such awareness. It is essential for

Internet counselors to make efforts beyond minimum professional standards and obtain documented training when working with clients from varied backgrounds.

Crossing Boundaries

The question of whether the practice of Internet counseling is legal when considering state licensure still remains vague and ambiguous, with most licensing bodies largely remaining silent on the subject. Several states do allow for the practice of counseling across state boundaries even when one is not in possession of a license from that state, and hold the counselor responsible to the laws and regulations of their home jurisdiction. Some states require the counselor to establish a face-to-face relationship prior to developing an online counseling association, while some states have stipulated Internet-based counseling services may not be the practitioner's primary or sole method of practice.

In light of influential and attractive recruitment efforts from corporate counseling entities seeking qualified counseling professionals to provide services for a national or international client base, counselors must be particularly mindful of their state regulations to ensure they are functioning within their boundary of practice. Therapists who counsel people online may be playing Russian roulette with their licenses and insurance. Most mental health professionals are licensed only by the state in which they practice; counseling an online patient who resides elsewhere might be construed as practicing without a license. And while malpractice insurance providers do not specifically ban online therapy, their coverage is contingent on adherence to state licensing laws (Hamilton, 1999).

Electronic Records

Electronic case notes, e-mail communications, treatment information, assessment materials, and archived audio and video data all present a unique common difficulty. The growing movement toward electronic records will fuel the need for electronic privacy (Holmes, 1998). This privacy challenge led to the formulation of *The Standards for Privacy of Individually Identifiable Health Information* which became law in April of 2001. Required by the *Health Insurance Portability and Accountability Act* (HIPAA), the Privacy Rule covers health plans, health care clearinghouses and health care providers who conduct financial and administrative transactions electronically. The Privacy Rule generated a national standard to protect individual health information, and provides clients with additional rights and increased access to their personal medical information.

Suicide, Homicide and Duty to Warn

Suicidal clients present extraordinary difficulties in the online environment. Holmes (1997) notes "an attempt must be made to notify someone who might be in a position to prevent a person from taking his or her own life." This is possible only to the extent that accurate identifying information had been adequately secured and verified. Homicidal threats are a less frequent occurrence in this setting and several state courts, but not all, have ruled that mental health professionals do have a duty to protect someone who has been threatened by either directly warning them of the threat or making the threat known to law enforcement personnel.

Internet Counseling ~ Current Practices

ACES Technology Interest Network

In 1999, the Association for Counselor Education and Supervision (ACES) Technology Interest Network developed a core set of technological competencies for counselor education programs as recommended guidelines for program development. The technological competencies embraced by ACES represent the achievement standards counseling students should obtain through professional academic training. To date, most counseling programs have not required additional coursework in technology that speaks directly to these recommended guidelines, but rather, have elected to integrate supplementary technological functions into course curricula. The ACES technological competencies are outlined as follows:

At the completion of a counselor education program students should:

1. Be able to use productivity software to develop web pages, group presentations, letters, and reports.
2. Be able to use such audio-visual equipment as video recorders, audio recorders, projection equipment, videoconferencing equipment and playback units.
3. Be able to use computerized statistical packages.
4. Be able to use computerized testing, diagnostic and career decision-making programs with clients.
5. Be able to use e-mail.
6. Be able to help clients search for various types of counseling-related information via the Internet, including information about careers, employment opportunities, educational and training opportunities, financial assistance/scholarships, treatment procedures, and social and personal information.
7. Be able to subscribe, participate in and sign off counseling-related listservs.
8. Be able to access and use counseling related CD-ROM databases.
9. Be knowledgeable of the legal and ethical codes which relate to counseling services via the Internet.
10. Be knowledgeable of the strengths and weaknesses of counseling services provided via the Internet.
11. Be able to use the Internet for finding and using continuing education opportunities in counseling.
12. Be able to evaluate the quality of Internet information.

The rationale for integrating technological competency into counselor education programs makes sense as tomorrow's counselor will be driven online by third party payers, public school systems, academic institutions and private employers. These core technological competencies represent a solid platform from which additional technological competence may be pursued and achieved. All counselors should obtain technological expertise beyond these core skills, with advanced proficiencies acquired through continuing education efforts, advanced graduate training and supervised experience.

Internet Service Delivery

Sussman (1998) suggests there are three primary Internet delivery methods used most often today: e-mail, text-based chat and videoconferencing. Even though the bulk of Internet counseling efforts are still accomplished through e-mail correspondence, text-based chat and videoconferencing are gaining greater popularity as improvements to these mediums evolve. Although broadband Internet service providers are more prevalent now than in years past, there still remain many users who do not employ this technology, either as a result of additional costs associated with broadband subscription or a perceived lack of need for enhanced bandwidth.

E-mail Communication

E-mail was first adapted for ARPANET by Ray Tomlinson in 1972, and it was he who selected the "@" symbol on his teletype to link the username and address (Campbell, 1998). By the end of 1999, there were over 335 million established e-mail accounts, which represented a 73% increase from the previous year (Irvine, 2000). E-mail counseling processes involve "asynchronous distance interaction between the counselor and client using what is read via text to communicate" (NBCC, 2001). Typically an e-mail message will go through many points on its path from one computer to another, leaving many wondering about the security and confidentiality of client information. Clients who may happen to use a computer at work are further subject to corporate scrutiny, with company policies generally allowing for access beyond the original recipient.

Text-Based Messaging

Bulletin boards, chat rooms, and other forms of text-based messaging allow people to connect and exchange messages with other individuals who are interested in a particular topic or for more personalized individual communication. Cowles and Singh (2002) indicate more than 41 million people or 40% of the active home Internet population used Instant Messaging (IM) applications in May, 2002. For office users, the number for this

same time period was 12.6 million, or 31% of the total active Internet work population. The most popular IM application for home users was America Online (AOL) Instant Messenger with 22 million unique users, followed by Microsoft's MSN Messenger with 15.7 million users. Multimedia messaging is predicted to surpass text-based messaging technology by 2005. Cowles and Singh (2002) further speculate the number of instant messages sent will peak at approximately 168 million in 2003 and then begin to show a steady decline in future years as a result of advanced video deployment.

Desktop Videoconferencing

Desktop videoconferencing through the Internet may be an effective counseling medium for both the counselor and the client. As with other technologies, its usefulness is directly related to the participants' understanding of the benefits, limitations and utilization strategies.

Desktop videoconferencing is a system that uses a personal computer in conjunction with a desktop video camera and videoconferencing software. These systems are much less expensive than traditional high-end videoconferencing components, but are often more restrictive, with smaller visual viewing areas and lower-quality audio capabilities. Either party may observe "ghost images" when rapid movement occurs, which may detract from the counseling experience. With the advent of dedicated cable, DSL and ISDN systems, Internet counseling through the medium of videoconferencing becomes a more user-friendly platform because the enhanced bandwidth offered provides additional clarity and speed. However, even with increased broadband capability most computer systems are still not functionally sophisticated enough to simulate a truly realistic counseling experience as a result of hardware and software limitations.

Questions regarding the utility of archiving video sessions remain largely unanswered at this time. Clearly, digitally archived videos of client sessions may have utility for purposes of supervision, following client progress or retaining an exact record of treatment. But, the larger issue is one of control.

When viewed in the context of ever-increasing malpractice claims, a full-transcript approach might prove detrimental to a counselor. Archived video is often considered an extension of the treatment record, and in many states clients may have legal access to every aspect of their records.

Online Security and Privacy

Anyone who has spent any significant amount of time online has experienced some assault on their privacy. This occurs so frequently that we often begin to consider these invasions as routine, and subsequently, begin minimizing the impact these intrusions cause.

For example, in 1998, "Free-PC.com" announced an offer that thoroughly excited half a million potential users while making privacy advocates furious. The users were expected to supply the company with personal data such as age, income, marital status, etc., and in return they would receive a free computer with Internet access, an e-mail account and a constant barrage of advertising. However, the company maintained the absolute right to monitor the users' online whereabouts at all times.

Over the years Microsoft has had one of the most dismal records of all with respect to computer security. When it was learned that in every copy of the Windows platform sold Microsoft had installed a "back door" for the National Security Agency, essentially providing the U.S. government with access to each and every computer containing the Windows operating system, the public was outraged (Kettman, 1999). Considering the number of operating systems Microsoft has sold in this country and abroad, one is left to wonder what the implications for the counseling profession are under circumstances where security and client confidentiality is the primary concern.

More often than not, these intrusions are built-in to a software or hardware product as a matter of course without our knowledge or consent and are generally stumbled upon by some watchful eyes that are both skeptical and concerned about our ability to trust those who are charged with our personal and professional online security. Whether the deceit is covert as in the Microsoft case, or intentionally overt, as in the example of FreePC, users should expect a right to informed choice and control.

E-mail Security

America has depended upon the United States Postal Service to keep the mail moving since 1775, and since September 11th, 2001, the post office has done an admirable job of moving the nation's communications by delivering over 20 billion pieces of mail since the tragedy, while maintaining the highest priority on employee and customer safety after a number of isolated incidents involving mail tainted with anthrax (United States Postal Service, 2002). E-mail is much like typical postal mail in that it is highly unlikely that anyone else would have any particular interest in it, but, as we learned after the tragedy of September 11th we never really know.

E-mail can offer its own unique set of security problems. For instance, consider how someone once utilized Delta Airlines' massive computer system to send out junk mailings to more than 50,000 people at a time (Clothier, 1998). Or, the attack on the FBI's Internet site where a flood of 600,000 requests per minute paralyzed their host computer (Taylor, 1999). Within a week of the NSA disclosure, McCullagh and Glave (1999) reported on two separate security breaches occurring on Hotmail, Microsoft's Internet-based e-mail system, where system hackers were allowing anyone to log into any user account without typing a password. We have all heard of these "online temper tantrums" before, and although most of us may never experience difficulty with our routine e-mail service, there are certain key issues that should be considered along the way. The best way to keep unintended eyes from prying into private e-mail communication is to utilize encryption software that is capable of scrambling the message from anyone except for whom it was originally intended. A second point worthy of mention is e-mail rarely just goes away; it is almost always captured somewhere else even if one thinks it has been deleted. According to Stackpole (1999), "E-mail has become the most requested form of evidence during legal discovery."

Identity Theft

From January to the end of April 2001, the U.S. Treasury's Financial Crimes Enforcement Network received 332 reports of identity theft, compared with 637 cases during the year 2000, with only 267 cases in 1999 (Pappas, 2001).

Personal privacy on the Internet has not become a major epidemic as of yet. However, as Internet thieves develop more sophisticated tools this could quickly change. By instituting simple precautions now one can protect an online privacy invasion in the future.

Digital Certificates & Electronic Signatures

In 2000, the 106th Congress passed the *Electronic Signatures in National and Global Commerce Act*, enabling important documents to become legally binding with the use of a digital signature. Digital certificates are at the heart of a public key infrastructure (PKI). A PKI includes organizations called "certification authorities" that issue, manage and revoke digital certificates. Entities known as "relying parties" use these certificates as authentication, while "clients" are those who request, manage and use the certificates. VeriSign is an example of a well-known, commercial provider which issues digital identifications and enables authenticated, 128-bit encryption for secure online payments (VeriSign, 2002).

A digital signature is yet another method of ensuring e-mail authenticity and assures the recipient content has not been altered in any way by anyone other than the document originator. This method of authentication is currently employed when logging on to member-only sites, making credit card purchases, brokerage trading, and voting (Lomangino, 1999).

Privacy Organizations

Every new advance in Internet technology generates one or more new security threats. Thankfully, there are both online and offline organizations constantly monitoring computer security.

EPIC is a public interest research center in Washington, D.C. It was established in 1994 to focus public attention on emerging civil liberties issues and to protect privacy, the First Amendment and constitutional values. *EPIC* is a project of *Fund for Constitutional Government*, and works in association with *Privacy International*

(an international human rights group based in London, UK), *Global Internet Liberty Campaign*, *the Internet Free Expression Alliance*, *the Internet Privacy Coalition* and the *Trans Atlantic Consumer Dialogue* (TACD).

The *Electronic Frontier Foundation* (EFF) is a non-profit, non-partisan organization working in the public interest to protect fundamental civil liberties, including privacy and freedom of expression in the arena of computers and the Internet. EFF was founded in 1990, and is based in San Francisco, California, with offices in Washington, D.C., and New York City.

TRUSTe is an initiative that was initially formed in 1996, and utilizes the “trustmark” symbol as an online branded seal for display on member sites. The “trustmark” seal is awarded only to those Internet sites which adhere to the pre-established privacy principles and agree to comply with ongoing TRUSTe oversight and consumer resolution procedures.

The *Better Business Bureau Online* is a wholly owned subsidiary of the Council of Better Business Bureau. The BBB’s online mission is to promote trust and confidence on the Internet through their “online reliability” and “privacy seal” programs. The BBB’s Internet site seal programs allow companies to display the BBB seals after evaluation and confirmation they have met program requirements. It confirms a company stands behind its online privacy policy, and has met the program requirements pertaining to methods of personal information collection and dissemination.

The *Health On the Net Foundation* was formed in 1996 in response to consumer need for accurate and reliable health care information on the Internet. The uncertainty of medical information provided by many Internet sites was the impetus for the development of the HONcode system. The program is a self-regulating, voluntary certification system, again, based upon an “active seal” concept. While primarily intended for health care, the blue-and-red HONcode seal on subscribing Internet sites also helps users identify alternative sources of reliable information.

Internet Counseling - Future Implications

Electrical Numerical Integrator and Computer (ENIAC) ~ A Look Back

ENIAC was the world’s first electronic digital computer and was developed by Army Ordnance to compute World War II ballistic firing tables (Weik, 1961). The ENIAC was the prototype from which modern computers have evolved and it embodied almost all of the components and concepts of today’s high-speed, electronic digital computers. The ENIAC computer was positioned at the Moore School of Electrical Engineering at the University of Pennsylvania, piece by piece, with final assembly taking place in the fall of 1945.

By today’s standards, ENIAC was an enormous piece of machinery. It weighed over thirty tons, contained 18,000 vacuum tubes and 1,500 relays, with hundreds of thousands of resistors, capacitors, and inductors, and took up a space of 16, 200 square feet. ENIAC was a forerunner in the computer field during the period of 1949 through 1952 when it served as the main computational workhorse for the country. Ultimately, as years and technology advanced, it became evident ENIAC was no longer as cost-efficient as some of its more recent counterparts, and work loads were gradually shifted to other computers. At 11:45 p.m., on October 2nd 1955, the power to ENIAC was disconnected (Weik, 1961).

The Future of Today

There is growing recognition the Internet will continue to expand at a phenomenal rate. It is also understood that with each major enhancement will come modifications to our styles of access, patterns of engagement and methods of interaction. This section is dedicated to a review of sophisticated innovations that are gaining our attention now and will strongly influence our future interactions.

Spaceway Satellites

Spaceway is a next-generation satellite system designed by Hughes Electronic Corporation. Spaceway will begin satellite launches in 2003, with commercial service to North America scheduled for 2004. These satellites will provide high-speed, bandwidth-on-demand telecommunications, and operate in the globally assigned Ka-band spectrum. The satellites’ unique architecture will allow individuals to communicate directly without connecting through a central server. Bandwidth-on-demand means users will pay only for the bandwidth their applications require (Dore, 2002).

Internet2

Internet2 is a not-for-profit consortium, led by over 190 universities who are developing and deploying advanced network applications and technology such as virtual laboratories, digital libraries and independent distance learning applications. With participation by over 60 leading companies the key goals of this effort will be to accelerate the dissemination of advanced Internet technology. Internet2 is not a separate physical network and will not replace the traditional Internet, but rather, brings together institutions and resources from academia, industry and government to develop new technologies and capabilities that can then be deployed to the global Internet. Internet2 will also benefit non-university members of the educational community, especially K-12 and public libraries, by bringing resources to the fore that have previously been reserved only for advanced institutions.

The National Tele-Immersion Initiative (NTII)

One of the most promising and exciting technologies to emerge from the Internet2 project for the counseling profession is Tele-Immersion. The National Tele-Immersion Initiative (NTII) is a government-sponsored effort dedicated to the research and development of a real-time, three-dimensional environment which provides a sense of shared presence with distant individuals. This research project began over five years ago as a companion project of Internet2. Jaron Lanier, a computer scientist often described as "the father of virtual reality," is now guiding the attempt to validate the Internet of tomorrow with this innovative technology. Lanier sees Tele-Immersive techniques as building blocks for the office of tomorrow, where users from across the world might collaborate as if they were all in the same physical room. With mobile rather than stationary camera arrays, viewers can establish a Tele-presence in remote or hazardous areas. Lanier expects Tele-Immersion to fundamentally change how we view both our real and virtual worlds (Lanier, 2001).

In a Tele-Immersive environment computers recognize the presence and movements of individuals and objects, track those images, and then allow them to be projected onto realistic, stereo-immersive surfaces (Lanier, 2001). †Tele-Immersion is achieved through the use of a Telecubicle, which is a virtual office that can appear to become one quadrant in a larger shared virtual office space. A Telecubicle has a stereo-immersive desk surface with at least two stereo-immersive walls. These three display surfaces meet in the formation of a desk against a corner. When a Telecubicle is linked to others on the Internet the walls appear to be transparent passages to the other cubicles. Four Telecubicles can be joined in virtual space at once so that each forms a quadrant of a larger virtual whole. There is no formal beginning or ending to a Tele-Immersion session, one simply sits down and starts to work with others who are present at their own location.

Current participants in the NTII include:

- Advanced Network and Services
- Brown University
- University of North Carolina at Chapel Hill
- The University of Pennsylvania
- Naval Postgraduate School
- Carnegie Mellon University
- Columbia University
- The University of Illinois at Chicago
- The University of Southern California

Implementation of this new technology could effectively eliminate many of the known barriers to Internet counseling. This innovation would offer clients and counselors alike unprecedented access to services, assessment, consultation and supervision. This technology serves to eliminate the complexities associated with immediacy, theoretical integration, and many other areas of practical, ethical, and legal concern that now prove challenging for the Internet practitioner.

Next Generation Internet (NGI)

The Next Generation Internet (NGI) initiative is a multi-agency Federal research and development program that is designing advanced networking technologies and demonstrating these capabilities on test beds that are 100 to 1,000 times faster than today's Internet. Internet2 and the federally-led NGI are parallel and complementary initiatives that are working together in many areas. For example, through participation in a NGI program, over 150 Internet2 universities have received competitively awarded grants to support connections to advanced backbone networks such as Abilene.

The NGI program focus includes:

1. Advanced infrastructure development (networks that perform at much greater levels than today's commercial Internet).
2. Advanced applications development.
3. Research into technologies that will enable advances in infrastructure and applications.

Biometric Identification

Biometrics, already utilized to a limited degree today, will take another major step in the future. As security concerns continue to mount, biometrics could prove more useful and reliable than identification cards, personal identification numbers (PINs) and passwords typically employed today. There are seven basic ways biometrics is utilized to identify a person: fingerprint, hand, facial, voice, iris, retinal, and signature scan, with fingerprint scanning considered the most popular. The barriers to wide-spread use of this technology are high costs associated with hardware, but affordability is forthcoming. In addition, Compaq and Acer have both released laptop PC's with finger scanning devices and built-in software, while Microsoft is incorporating biometric capabilities into future versions of the Windows operating platform.

Voice Recognition Systems

Although voice recognition systems are available today, they are not widely used because of their unacceptable level of accuracy. These systems currently have significant difficulty understanding different human syntaxes and continually require adjustments so users may issue commands to accurately open files and menus. Improvement to this technology is also on the horizon, providing the counselor with abilities to transcribe entire sessions through voice recognition. As the accuracy and reliability of these systems improve they will further offer the ability to convert video materials into various narrative formats as routine transcription records.

Microsoft is integrating speech and handwriting recognition more deeply into the Windows operating platform and Tablet PC's may be among the first devices to transform the way users take notes and use computers. Microsoft's natural-language processing group is also developing artificial intelligence capabilities for the PC that could enable speech translations into many different languages (Jensen, Heidorn & Richardson, 1993).

The Wireless Workplace

Powered by improvements and increased adoption of wireless technologies such as Bluetooth wireless products and General Packet Radio Service (GPRS), wired connections in the workplace will become a thing of the past. Bluetooth technology will spearhead increased connectivity between PC's, handhelds, printers and other peripheral devices. High-capacity, wireless devices will become more affordable and available to users, enabling counselors to make network and Internet connections while traveling or working from home. Advanced wireless communications will significantly improve the transmission of video and data across networks, and as a result, tablet computers, handhelds, wireless videoconferencing terminals and videophones will proliferate. Personal Digital Assistants (PDAs) doubling as cell phones are now being introduced and represent the genesis of hardware equipment dedicated toward the wireless workplace.

BlueSpace

BlueSpace is an interactive office system under development by IBM and office furniture manufacturer Steelcase. The features of this office structure include a touch screen that resides next to the computer monitor that allow users to adjust room temperature, air flow, and lighting, as well as instant calendar planning and co-worker communication. The system further offers video projector displays which can cast images on walls, floors, desktops and other surfaces with wireless sensors that allow a user's finger to act as a cursor. This arrangement also provides a moving rail with a work surface that rotates in a complete circle and enables the user to shift work space as needed. BlueSpace is intended to increase employee collaboration, utilize existing space more efficiently and attract and retain workers (IBM, 2002). This technology appears to be an early forerunner of Tele-Immersion under development by Internet2. Together, these and related wireless technologies will enable the counselor to fully integrate the technology toward truly realistic counseling experiences on the Internet.

The Future of Technology

Most experts agree that by the year 2020 the silicon microchip will have reached the absolute physical limits of performance, and further improvement will be impossible. In 1965, just after the integrated circuit was first discovered, Gordon Moore, semi-conductor engineer and co-founder of the Intel Corporation, first observed the amount of information storable on a given amount of silicon roughly doubled every year since the technology was invented. This relationship, called "Moore's Law," held true until the late 1970's at which point the doubling effect time frame slowed down to approximately every eighteen months (Webopedia, 2002).

Researchers are currently exploring a variety of methods to keep the technological revolution moving forward toward the post-silicon age. These research agendas include nanoscale computers using organic chemicals, quantum principles, light and deoxyribonucleic acid (DNA).

It is too early to speculate with any certainty which of these new technologies, if any, will serve as the preferred information processing method of the future. However, current research holds great promise among many of these new possibilities.

Quantum Computing

Quantum behavior acts as a wave at a subatomic level. Quantum devices would provide a new type of logic and could compute huge numbers in a matter of minutes that would take years for today's most powerful supercomputer. Beyond the ordinary binary "on" (represented by the number 1) and "off" (represented by 0), quantum computing has a third state that is both 1 and 0 at the same time.

A qubit is a quantum-bit, that is, a bit of information that can be both zero and one at the same time.†Thus, a computer working on a qubit rather than a standard bit can make calculations using both values simultaneously.†A qubyte, being made up of eight qubits, can be all values from zero to 255 simultaneously.†Extending this concept to multi-qubyte systems, it can be seen that there is potential for computational efficiency beyond anything possible with today's computers (Qubyte, 2002). To date, scientists have constructed machines with up to seven qubits, but scaling the machines to usable sizes is still many years away (MSNBC, 2000).

Holographic Optical Data Storage

Optical data storage has evolved from several past generations of optical recording systems including the CD and DVD. Holographic storage mediums break through the density limits of conventional storage by going beyond recording on the surface of a disk to recording through the full depth of the medium.

Unlike other technologies that record one data bit at a time, holographic storage allows a million bits of data to be written and read in a single flash of light. This enables transfer rates significantly higher than current optical storage devices. Combining higher storage densities, faster transfer rates, with more durable, reliable, low cost media, poises holographic storage as a compelling choice for the next generation (Coufal, Psaltis, & Sincerbox, 2000).

DNA Computing

Just like a string of binary data is encoded with ones and zeros, a strand of DNA is encoded with four bases represented by the letters A, T, C, and G. Researchers are using these strands of DNA by assigning the four nucleic acids instead of the binary ones and zeros.

A molecular computer using this type of technology could be 100 billion times faster than today's fastest personal computers while stored in approximately 1 trillionth the space. Although real-world applications are probably at least a decade away, this research is a major step in the effort to build the supercomputer of the future (Ryu, 2002).

Conclusion

Although there are no foregone conclusions, it would appear that Internet counseling will one day emerge as a viable method of service delivery as we become increasingly accustomed to improved methods of online interaction which offer secure, reliable processes for embracing human relationships.

Internet counseling may never, and most probably, should never, fully replace customary or traditional forms of counseling. But, as a technological adjunct to conventional methods, Internet counseling may offer utility for enhanced assessment, care, treatment, follow-up, and assorted new counseling functions.

Today, there remain many unanswered questions. As this territory is explored, further apprehensions will naturally evolve.

Developers and researchers seeking to infuse new technological life into our existence often fail to consider fundamental human behavior. Our contribution to this process should be to continually evaluate, research, and report the suitability of emergent technologies as they relate to our professional requirements. A passive approach will not serve to stimulate advancements in a direction that sustains Internet counseling, but rather, will only slow and frustrate the progression.

As we recall our struggles with new "tools" of the past we are reminded of the importance of patience and understanding. Until such time as new technologies are realized and established methods for this paradigm become known we would be wise to proceed with awareness, retain our optimism, and always look toward the future.

References

- Association for Counselor Education and Supervision. (1999). *Technical competencies for counselor education students*. Alexandria, VA: Author. Retrieved August 1, 2002, from <http://filebox.vt.edu/users/thohen/competencies.htm>
- Berners-Lee, T. (1999). *Weaving the Web: The original design and ultimate destiny of the World Wide Web by its inventor*. Harper Publishing: San Francisco, CA.
- Boeing Satellite Systems. (2002). *What is a satellite?* Retrieved December 12, 2001, from <http://www.boeing.com/defense-space/space/bss/sat101.html>
- Campbell, T. (1998). *The first e-mail message*. Retrieved June 4, 2002, from <http://www.pretext.com/mar98/features/story2.htm>
- Carter, R. (2001). Making the connection. *Engineering and Mining Journal*, 202(3), 28-34.
- Charp, S. (2000). The role of the Internet: Editorial. *Technological Horizons in Education Journal*. 27(8), March, 8-9.
- Cleveland, O. (2000). Wire, cable growth driven by fiber-optics. *Control Engineering*, 47(9). 12.

- Clothier, M. (1998). *Don't leave your e-mail account susceptible to Internet interlopers*. Atlanta Journal and Constitution, (October 18, 1998).
- Computer Museum History Center. (2002). *History of the Internet*. Retrieved May 12, 2002, from <http://www.computerhistory.org/index.page>
- Corporation for Research and Educational Networking. (2002). *CREN history and future*. Retrieved June 6, 2002, from <http://www.cren.net/cren/cren-hist-fut.html>
- Coufal, H. J., Psaltis, D., & Sincerbox, G. (2000). *Holographic data storage*. Springer-Verlag Publishers: Berlin.
- Cowles, R., & Singh, M. (2002). *Internet privacy issues: How should they be resolved?* Retrieved August 3, 2002, from <http://www.dataquest.com>
- Dore, R. (2002). *Spaceway satellite to debut in 2003*. Hughes Electronics, Inc., Retrieved January 12, 2002, from <http://www.hughes.com/home/default.xml>
- Grohol, J. M. (1999). *Best practices in e-therapy: Confidentiality and privacy*. Retrieved March 24, 2000, from <http://www.ismho.org/issues/9901.htm>
- Haas, C. (2000). Online counseling presents challenges for mental health experts. *Counseling Today*, 42(8), 18.
- Hamilton, A. (1999). On the virtual couch. *Time magazine*, 153(20), 71.
- Hamman, R. (2002). *History of the Internet, WWW, IRC, and MUDS*. Retrieved June 6, 2002, from <http://www.socio.demon.co.uk/history.html>
- Hecht, J. (1999). *City of light: The story of fiber-optics*. Oxford University Press: New York, NY.
- Hines, A. (1997). Wiring the globe. *The Futurist*, 31(6), 11.
- Holmes, L. (1997). *Suicide on the Internet*. Retrieved February 10, 2000, from <http://mentalhealth.about.com/health/mentalhealth/library/weekly/aa101397.htm>
- Holmes, L. (1998). *Online psychoanalyst opens shop*. Retrieved February 10, 2000, from <http://mentalhealth.about.com/health/mentalhealth/library/weekly/aa120798.htm>
- Holmes, L. (2000). *A stricter standard for online counseling*. Retrieved March 24, 2000, from <http://mentalhealth.about.com/health/mentalhealth/library/weekly/aa032000a.htm>
- International Business Machines, Inc. (2002). *IBM and Steelcase create "office of the future."* Retrieved August 3, 2002, from <http://www.ibm.com/news/us/2002/01/143.html>
- Irvine, M. (2000). *E-mailers delete the rules of writing*. Retrieved March 29, 2000, from <http://www.msnbc.com/news/388509.asp>
- Jensen, K., Heidorn, G. E., & Richardson, S. D. (1993). *Natural language processing*. Kluwer Academic Publishers: Boston, MA.
- Kettman, S. (1999, October 3). MS denies Windows "spy key." *Wired News*. Retrieved October 3, 1999, from <http://www.wired.com/news/technology/0,1282,21577,00.html>

- Lanier, J. (2001). Virtually there: Three-dimensional tele-immersion may eventually bring the world to your desk. *Scientific American*, 4(1), Retrieved May 10, 2001, from <http://www.sciam.com/2001/0401issue/0401lanier.html>
- Lomangino, K. (1999). Digital signatures protect against fraud. *Internet Medicine*, 4(7), 2-5. Retrieved February 12, 2000, from <http://services.medscape.com/LWW/IM/1999/v04.n07/im0407.04.html>
- Lucent Technologies, Inc. (2002). *Scientists find the glass ceiling*. Retrieved June 3, 2002, from <http://www.bell-labs.com/project/feature/archives/glassceiling/>
- McCullagh, D., & Glave, J. (1999, January 10). Hotmail accounts exposed to all. *Wired News*. Retrieved January 10, 2001, from <http://www.wired.com/news/print/0,1294,21490,00.html>
- MAC Facts. (2002). *MAC Facts*. Retrieved July 10, 2002, from <http://www.13idol.com/mac/macfacts.html>
- Montgomery, J. (1997). *The orbiting Internet: Fiber in the sky*. Byte. Retrieved January 4, 1999, from <http://www.byte.com/art/9711/sec5/art1.htm>
- MSNBC. (2000, May 24). Huge leap for quantum computers. *MSNBC*. Retrieved May 24, 2000, from <http://zdnet.com.com/2100-11-521030.html?legacy=zdn>
- National Board for Certified Counselors. (2001). *The practice of Internet counseling*. Retrieved March 10, 2002, from <http://www.nbcc.org/ethics/webethics.htm>
- National Science Foundation. (2002). *An overview of the first fifty years*. Retrieved July 18, 2002, from http://www.nsf.gov/od/lpa/nsf50/nsfoutreach/htm/hist_z2/hist_stc.htm
- Ordway, F.I., & Sharpe, M.R. (1999). *The Rocket Team*. Cambridge Mass: MIT Press.
- Pappas, C. (2001). *Are you who you say you are? Identity theft more than doubling*. Reuters News Service. Retrieved October 22, 2001, from <http://cma.zdnet.com/taxis/techinfobase/techinfobase>
- Petit, C. (1999). Spaghetti under the sea. *U. S. News and World Report*, 127(8), 56.
- Pope, G. T. (1994). Bytes in the fast lane. *Discover*, 15(1), 93-95.
- Qubyte. (2002). *Quantum computers and Moore's law*. Retrieved July 10, 2002, from <http://www.qubyte.com/>
- Ryu, W. (2002). *DNA computing: A primer*. Retrieved December 11, 2001, from <http://www.arstechnica.com/reviews/2q00/dna/dna-1.html>
- Stackpole, K. (1999). *Frontlines*. Retrieved December 15, 2000, from http://www.opengroup.org/comm/the_message/magazine/mmv5n4/front.htm
- Sussman, R. J. (1998, May 1). Counseling online. *CTOnline*. Retrieved December 26, 1999, from <http://www.counseling.org/ctonline/sr598/sussman.htm>
- Taylor, C. (1999). Geeks vs. g-men. *Time*, 153(23), 64.
- Technology Research Report. (1993, August 12) Edition 6.9, *Bear Stearns and Co. Inc.*: New York, NY.

- Thomas, E. (1995). *The history of listserv*. Retrieved July 11, 2002, from <http://www.lsoft.com/products/default.asp?item=listserv-history>
- Toffler, A. (1972). *Future shock*. Bantam-Dell Publishing Group: New York, NY.
- United States Postal Service. (2002). *Postal service in the United States*. Retrieved July 11, 2002, from <http://www.usps.com/welcome.htm>
- VeriSign. (2002). *Secure your critical communications*. Retrieved December 10, 2001, from <http://www.verisign.com/>
- Walker, D. (2000, March 31). Surfing for peace of mind. *CBS News Online*. Retrieved March 31, 2000, from <http://www.cbsnews.com/stories/2000/03/20/tech/main174167.shtml>
- Walz, G. R., & Johnston, J. A. (1963). Counselors look at themselves on video tape. *Journal of Counseling Psychology*, 10(3), 232-236.
- Webopedia. (2002). *Moore's law*. Retrieved July 29, 2002, from http://www.webopedia.com/TERM/M/Moores_Law.html
- Weik, M. H. (1961). The ENIAC story. *The Journal of the American Ordnance Association*. 12(1), 7-16.
- Wright, R. (2000). Will we ever log-off? *Time magazine*, 155(7), 56-108.

Chapter Sixteen

Women's Internet Behavior: Providing Psychotherapy Offline and Online for Cyber-Infidelity

by Marlene M. Maheu

Abstract

As women are using the Internet in increasing numbers, a variety of behaviors worthy of psychological study are emerging. Cyber-infidelity is examined as one such disorder, and observations are drawn from several Internet-related surveys chosen to glimpse the changing world of women empowered by the Internet. A typology of cyber-infidelity is offered. More importantly, how the psychological community might prepare to offer ethical, feminist treatment of such new disorders both on and off the Internet is also discussed.

Introduction

Equipped with a computer, modem, and telephone line, women not only participate, but now also rival men in Internet use. Demographic studies of Internet usage patterns suggest that 92 million adults are reportedly on the Internet; women comprise nearly 50% of users; and women had an 80% increase in making online purchases in 1998 (NUA, 1998). While information regarding the spending habits of women are easy to obtain online, it is more difficult to assess other types of women's Internet-related behaviors of interest to feminist psychologists.

The Internet can be an efficient tool for either self-improvement or self-harm. Savvy users can acquire tidbits of knowledge to full medical journals with a minimal amount of effort. For others, the Internet meets the need for instant, even constant, companionship. It creates a forum where individuals can gain the online admiration of others with intellectual prowess and/or creativity, regardless of their true position in reality. Surfing the Net can allow people to establish relationships that ward off isolation or loneliness instantaneously, freeing them from the unsavory demands and challenges of traditional friendship. It also leaves them open to a variety of unexpected emotions, such as when their secrets are revealed to their online communities, when they are duped financially, or betrayed in love. The Internet offers both glorious freedoms and hidden dangers to those who frequent its cyberwaves.

In an effort to bring some degree of specificity to an area that is fraught with ambiguity, cyber-infidelity is the issue to be examined in this paper. Cyber-infidelity and cyber-affairs will be discussed both as potentially problematic behaviors evolving from women's involvement with technology, as well as the resulting issues raised for the feminist psychological community when considering treatment options, both "off and online." This paper then will describe the behaviors associated with cyber-infidelity and the issues facing practitioners who attempt to ethically approach treatment in face-to-face or virtual environments.

Cyber-infidelity

Fueled by the Triple A engine of "accessibility, affordability, and anonymity" (Cooper, 1998) the Internet population seems to be exploring sexuality in ways that are unprecedented. As women build and tend relationships online, they are experimenting with discovering new sides of themselves, freed from many physical limitations and restrictive social roles. As they read the morning news, build networks of friends and family through e-mail, and mount websites to advance their businesses and their personal missions, they are shaping as well as being shaped by the Internet.

Women are exploring new ways of interacting: they are engaging in e-mail discussion lists, newsgroups,

and websites that foster community building - and asserting themselves, initiating bold conversations, experimenting with anger and other previously unacceptable emotions, involving themselves in furtive love affairs, having cybersex within minutes of making an online acquaintance, and quickly ending liaisons that don't meet their needs. Women of all sizes, shapes, and complexions are attracting sexual attention from not only one partner, but also an unlimited number of individuals. Turkle believes we have only begun to see the types of changes in how people behave with new technology (1995). People are just learning to find what they seek some are struggling with how to make sense of what they find.

With romance and sexuality available to Internet users from the comfort and privacy of their homes and offices, it is not surprising that marital infidelity is also made more convenient to those seeking alternatives to their existing offline relationships. It is no small wonder that the electrical charge of love and romance can be heightened and intensified by the supercharged Internet. While the idea of sensual human electricity transmitted around the world is mind boggling, it is also intriguing, and often riveting. When paired with anonymity, it can become a playground for the unconscious, for unexpressed desires, emotions, and needs.

Definition of Cyber-infidelity

Cyber-infidelity is defined as the act of engaging in acts of a romantic or sexual nature with an individual or individuals through electronic or virtual communities, i.e., as established through dating websites, e-mail discussion lists, interactive games, chat rooms or newsgroups. Cyber-infidelity can easily lead to a cyber-affair, which involves the emotional investment of time and energy into an individual, group, or community

Empowered with the varied tools of the Internet, potential lovers are able to easily and inexpensively create any environment they desire in e-mail or other text-based environments - a winter wonderland, steamy Chicago blues bar, or sweet and sweaty tropical paradise. They can experience the entire spectrum of a relationship online - from furtive glances across a chat room to wedding and divorce before their virtual friends and family. For those limited in real life by physical abilities, finances, or social skills, the Internet allows them to explore their inner drives with others who are admittedly doing the same.

For people who are in a committed and monogamous marriage offline, having an affair online can provide "extra romance" and "enriched" sexual experiences, but all too often, create the same threats to a committed relationship that exist in offline affairs (Turkle, 1997). Cyber-infidelity has already led to reports of family complications, strife, and divorce (Quittner, 1997; Shaw, 1997).

What then, is cyber-infidelity? As demonstrated by the Clinton scandal of 1998, even definitions of in-person sex are unclear, so remote infidelity as mediated by technology is yet more ambiguous. Semantic parsing aside, most Americans would probably agree that flirtation becomes infidelity when someone in a committed, monogamous relationship has erotic physical contact with someone other than his or her mate. Yet the throb of extra-marital attraction beats on - over the cyberwaves, with or without definition. The beginnings of cyber-affairs on the Internet can be compared to what happens over backyard fences, at local pubs, and in health clubs, and while not physical, certainly can become very emotionally distracting from committed relationships offline. Attempts at definition range from those who claim there are different levels of infidelity, with live video interactions being more closely problematic than an e-mail lover, to those who claim that having an affair, including cybersex, with an unseen lover doesn't count.

Essential questions appear more rapidly than their answers. Does propositioning someone online for cybersex count as emotional infidelity? If you enter a chat room, engage with a few people, and masturbate yourself to orgasm, are you cheating on your spouse? Does calling that person on the telephone and bringing each other to mutual orgasm count as infidelity? If not, what *are* you doing? Would you be comfortable seeking that answer when your Minister or Rabbi stops in for dinner this weekend? Technology is clearly escaping our ability to use traditional values to formulate answers, while dragging our hearts and souls behind.

On the other hand, you cannot legally prove adultery unless there is actual sex (Peterson & Miller, 1996, February 2). Nonetheless, many other questions remain. Has technology simply created an opportunity for those who do not have the courage to have a "real" affair? What percentage of people goes to the "next level"? What are the personality characteristics of those individuals who have cyber-affairs when compared to those who have offline affairs?

Obviously, an official definition of infidelity via cyberspace is not yet formulated. Nonetheless, there seems to be agreement that cyber-affairs are damaging to the core issues of trust and integrity in a relationship.

Cyber-affairs involve fantasy, secrecy, preoccupation and a high sexual charge, paired with denial and rationalization (Leiblum, 1997; Shaw, 1997; Turkle, 1996). Each of these aspects of cyber-infidelity has implications for the feminist psychotherapist who brings traditional psychological understanding of relationships to the world of online romance. For example, the role of fantasy on the Internet has been discussed in many ways (Turkle, 1995). Schnarch believes (1997) that people avoid really knowing themselves or their partners when they substitute fantasy sex online for sex-in-the-flesh. When people accept responsibility for loving and being loved, they understand the power of completely exposing themselves to their loved one. When individuals have the courage to take that ultimate risk of exposure and still manage to receive a whole-hearted loving response from their partners, fantasy sex online only pales in comparison.

The question for psychotherapists examining and treating the problems associated with cyber-infidelity, is thus: how many women know true intimacy, practice it with their mates, and consider its ramifications when exploring the intriguing world of cyber-romance? How are women accepting or avoiding responsibility for their fantasy lives in cyberspace? These questions have been broached by only a few theoreticians or researchers, and the information offered below will hopefully help to further elucidate some of these intriguing issues with particular attention to women.

The Nature of a Cyber-affair

Cyber-affairs can range from direct sexual encounters within minutes of meeting, to years of romance and courtship. Anything goes. It seems common that people online find it is a lot easier to ask and answer blatantly direct questions, without the fear that someone's jaw will drop, eyebrows will raise, or that they will be slapped. Consequences for asking deeply personal questions and discussing deeply personal sexual practices are minimal on the Internet. There is minimal threat to physical safety, embarrassment, or public humiliation. Fantasy is often used to fill in the gaps and keep the activity focused on a variety of goals - from flirtation to orgasm.

Online foreplay can often be minimal. The very nature of some online environments are sexual, implying a moral tradition that makes it seem normal and thereby acceptable. Most dating and sex related areas announce their interest overtly. There are chat rooms for people who are "cheaters" or "married but sinful." Interested parties know exactly where to go and what do upon arrival. Early reports of difficulty with cyber-affairs come from people who have shared very personal details of their lives, including sexual preferences and problems, as well as those of their partners. An online "love" survey, conducted by iVillage (1999), reports that many people engage in such activities out of curiosity, for the experience of orgasm, or to relieve loneliness.

One thing is certain: suspicion of infidelity can seriously damage trust in relationship. Therefore, for our purposes, we'll use the word "infidelity" to describe the repeatedly taking of sexual energy outside of a committed, monogamous relationship through action intentionally leading to sexual arousal with an identified person, place, or thing. Secretive and deceptive behavior, denying suspicions when expressed by those who notice something amiss, and withdrawing emotional and sexual energy from their partner is common to both online and offline infidelity.

Specific Types of Cyber-affairs

Whatever one chooses to call it, specific types of people engaging in cyber-affairs seem to be emerging. Several other surveys and discussion forums affiliated with SelfhelpMagazine.com have elicited numerous comments and submissions regarding the various types of cyber-affairs that appear to be common on the Net. While scientific research into this area is clearly needed to delineate a definitive typology, these observations are offered for discussion:

- Covert Cyber-affairs - this is the furtive, secret, and clandestine love affair communicated electronically rather than face-to-face;
- Overt Cyber-affairs - one partner in a relationship knows of the other's cyber-affair, but doesn't voice a desire for it to stop;
- Menage-a-Trois Cyber-affairs - couples engage with another specific person or persons in a cyber-affair;
- Group Cyber-affairs - people meet in a virtual community with the intent of having an erotic exchange.

Covert Cyber-affairs.

Centuries of tradition have imbued routine affairs with expected levels of secrecy, motive, and result - with technology or without it. Technology has improved certain aspects, making it more convenient, more varied, and physically safer. But the seduction of satisfying one's sexual appetite with a few online nibbles before going for the real thing is simply a manifestation of people doing what they want to do, only doing it more easily with the tools of technology.

Overt Cyber-affairs

This type of affair can involve partners who either approve or disapprove of the affair. For couples who agree that one or both can participate in cyber-affairs, there are still many variations that can take place between a couple. Of course, there is always the subgroup of people that has come to accept a mate's affair because he or she sees no alternative after learning of the partner's cyber-affair...

- **With Partner Approval:** For those who are in a committed and monogamous marriage offline, having an affair online can provide extra romance and enriched sexual experiences, reportedly without endangering a marriage (Turkle, 1997).
- **Without Partner Approval:** When the affair continues without partner approval, it can wreak havoc in a relationship, and has already led to many divorces (Leiblum, 1997; Shaw, 1997).

Menage`a trois. For those who share their messages with their spouses, when the activities are performed with the partner's approval or participation, there can even be added stimulation in their offline lovemaking. For these people, the exchanges are reportedly considered a "turn on" for the spouse of the person having the affair. For them, it is added fuel for sexual contact with their offline and, sometimes, online partners. The long-term effects of these experiments upon the stability of committed offline relationships have not yet been examined, however. Leiblum mentions the existence but relative infrequency of such arrangements (Leiblum, 1997).

Covert Group Cyber-affairs— The Lurker. This group is on the fringe of the infidelity camp, perhaps developing a predilection for one particular virtual community, or one type of virtual community (S&M, or simply one particular dating site). This member's object of desire, then, might be to participate in the community itself, or follow the behavior of specific members of the community. Some of these members might be "lurkers," who participate passively. In what might be considered "cyber-voyeurism," they might watch the exchanges of other people, and never make their presence known. Voyeurism is easily enabled by technology and culminates in anonymous servers posting to anonymous websites where anything goes.

What of the individual who lurks because of extreme shyness, loneliness, and/or desperation, working up the courage to venture forth occasionally and finding that no one responds? Lurkers might be likely to leave a forum first when discomfort arises, taking feelings with them that might be their own painful fabrications, just as others may leave with emotions that are their romanticized fabrications. Research is clearly needed to identify the characteristics of this group in particular. The lurker might be the most fascinating type of individual to study over the next decade, simply because their very existence is predicated on technology that makes them invisible to those being watched.

These individuals are likely to seek sexual arousal or masturbate upon recognizing one of their favorite people actively participating in group cybersex, or following discussions about stimulating topics. Whether this type of cyber-infidelity meets the criteria of infidelity in the traditional sense of the word, or is on par with reading pornographic magazines is to be debated. Certainly, factors such as repeated exposure, allegiance to one group versus another, attempts to seek contact with group members outside of the group, pre-occupation with the group experience when interacting with one's real face-to-face partner, and frequency of engagement with the group are all elements that will enter into the debate.

Repercussions of Cyber-affairs

Just as research is needed to delineate various types of behaviors that can be expected by psychologists when treating individuals who struggle with disorders related to the Internet (Young, 1997, 1998a, 1998b, 1999), psychologists need to concern themselves with understanding and developing treatment strategies for patients

whose cyber-infidelities lead to unexpected strife. Early sex theorists are already speculating on these issues.

Damage to the Self. Several early theorists are observing that, just as with offline affairs, integrity and self-esteem are also vulnerable to cyber-affairs. How does someone live with oneself when accepting a carefully prepared meal with one hand, while hiding a steamy, graphic description of sexual fantasy fulfilled by a few clicks of the mouse on the other hand? While some people may not experience guilt over such inconsistency in behavior, many will. They may not understand it, but it may damage their intimacy the next time they try to feel connected to their spouse or partner. It may weigh on them, costing them valuable emotional energy, which could otherwise be available for deepening a face-to-face relationship that has grown stale. Affairs are a betrayal of the self. Shaw states, "Internet infidelity might indicate that an individual is developed enough emotionally to find a partner but not developed enough to be openly, compassionately *oneself* in relationship with that partner" (1997, p. 30-31).

Deception. Deception is generally recognized as one of the most destructive elements of infidelity. When discussing deception in cyber-affairs, the Vaughans (1996) conclude, "In fact, most people whose partners have a sexual affair find that they recover from the fact that their partner had sex with someone else before they recover from the fact that they were deceived".

Lies of omission related to an affair are violations of monogamy. The difficulty with deception related to any type of affair is that it typically creates emotional distance and ultimately severs trust, the cornerstone of all agreements. "This is not the same as reading Playboy," said Sherry Turkle as quoted in Time by Toufexis, "There really is another person there, and that person can touch you and move you in various ways, emotionally and sexually" (1996, p. 53).

Proximity as Heightened Betrayal. One feature of these relationships heightening a partner's sense of betrayal is that access to another love interest can literally occur from one's own living room, den, or even family room - without the knowledge of the partner whose trust is being violated. Some people not only report outrage that infidelity was happening right in their own homes, under their very noses, but that they were naïve enough to be bringing meals, refreshments, or other services to the offending partner at the computer.

While such behavior is often experienced by the faithful partner as a new peak of betrayal and callousness, the proximity of access to an online lover is often reported as heightening arousal in those who are having the affair. The ease with which naughty behaviors can happen in one's home or office may add intrigue and titillation for some people who pursue these activities, but may heighten the sense of mistrust once the betrayal has been revealed to the faithful partner.

Research Supporting Gender Differences in Internet Behavior

Albeit self-report and field research, the slowly growing body of literature regarding gender differences on the Internet is suggesting differences between men and women. A tendency for women toward seeking relationships is suggested by the MSNBC study, completed during March and April of 1998 at the MSNBC website (Cooper, Scherer, Boise & Gordon, 1999). Women favored sexual chat rooms more than twice as much as men (49% vs. 23%), while men preferred web sites featuring visual erotica more than twice as much as women (50% vs. 23%).

The SHPM Cyber-affair Survey (Maheu, 1999a), conducted since 1996 at SelfhelpMagazine.com, indicates that almost half of the respondents believe that those engaging in cyber-affairs are also engaging in "real sex." These findings are in accordance with the behaviors commonly observed in many dating websites, for example. Sexuality in the form of arousing exchange culminating in self-masturbation is common. Cyber-infidelity, then, is often not simply the exchange of romantic correspondence, but rather, often involves direct sexuality.

Furthermore, 66% of the SHPM survey respondents claimed to be in favor of cyber-affairs, yet 70% thought cyber-affairs pose a threat to traditional relationships.

These findings are worthy of note. While they indicate values that are held by a significant majority of respondents, the group is self-selected, and may be biased. However, these items point to values that can be considered contradictory to traditional marital relationships. Since the sample was 64% female, these trends may be reflective of the changing values of women on the Internet. It is clear that social research in this area is warranted to elucidate the possibility that given the new-found freedoms of invisibility and anonymity offered by technology, women are choosing to behave in ways that are contradictory to their own beliefs.

Discussion

Where will technology allow us to go? How will our definitions of monogamy change as a result? As scientists, we have not only to keep an eye on what is happening today, but given the rapid proliferation of technology and its ever-reaching capabilities, we also need to be mindful of future trends when examining its impact upon relationships and fidelity.

The Future of Cyber-infidelity and Hepatics. Hepatics is the science of transmitting a sense of touch with the purpose of creating a real experience in the virtual world. The future will bring the use of full-immersion sex suits, transmitting sensory information back and forth between partners. And because the exchange will simply be digitized information, it too will be modifiable, in essence, "tailored" to the user's discretion to reflect preferences and other specially desired effects (Dertouzos, 1997). Participants might, for example, make themselves a different weight, height, attractiveness, gender, or conceivably even add extra limbs or appendages to their bodies. The possibilities are endless. Examples of such tailoring might include: young woman pretends to be a man with an erection, an elderly person pretends to be a virgin teenager, or a doctor pretends to be a macho construction worker with five muscled arms.

Thus equipped with pressure and movement sensitive bodysuits, augmented with large screen monitors or high tech goggles, our next generation of "wired" individuals can be virtually sexual in new and very powerful ways. This kind of virtual sex is not likely to replace "fleshmeet" but will most certainly augment it. Discussing the primal draw of face-to-face contact, Dertouzos offers a theory for its continued appeal:

We know that if the long-distance relationships of pen pals are not nourished by some form of physical closeness, they will wither.... Most of us think we're unique and in control of our behavior. Yet we carry the features and mannerisms of our ancestors as well as our common reflexes and human patterns acquired through evolution. The fear, love, anger, greed, and sadness that we feel today are rooted in the caves that we inhabited thousands of years ago. It was in the ancient setting that the predator's growl and the enemy's attack defined primal fear. It was there, too, that our other primal feelings became reinforced - protecting our children, enjoying the pleasure of physical contact with our mate, relying on our fellow tribes people, and so on. These are the forces of the cave. And they haven't left us... Yet, the fact of the matter is that these forces are probably the most important forces of our lives; they are the magical forces that bind parents and children, healers and patients, close associates, siblings, spouses, lovers, good friends... and bitter enemies. (Dertouzos, 1997, p. 300)

The future will increasingly allow users to see and hear their virtual sex partner as if they are in the same room, while also offering the possibility of interacting with this partner through imaginary identities. Sexual gamers will take on added capabilities, with combinations of experiences simulated by the technology for the individual interested in static masturbation as well as with interactive playmates. The world of cyber-infidelity is just beginning, and we as psychotherapists must not only be aware of it, but also must be prepared for problems that will arise because of it. With these formative factors unleashed through the Internet, how will we develop appropriate treatment protocols and interventions for Internet-distressed women and their relationships?

Professional Roles

How are professionals to address issues such as cyber-infidelity? Two scenarios are now possible: face-to-face and through telEhealth equipment. Since most psychotherapists are familiar with face-to-face interventions, only a brief outline of relevant cyber-infidelity topics will be discussed below. Since many psychotherapists are starting to wonder how services might be offered through telEhealth equipment, and the Internet in particular, information related to the ethics of offering psychotherapy via e-mail will also be outlined below. For information regarding how to offer psychotherapy using videoconferencing equipment, see Maheu (1999b).

Face-to-face Psychotherapeutic Issues for Cyber-infidelity . In general, the therapist working with a patient seeking treatment for issues related to cyber-infidelity would do well to help the patient clarify current domestic partner arrangements and agreements, as well as the advantages and disadvantages of proceeding with self-gratification via the Internet. In doing so, a thorough history of all infidelity-related behaviors would be in

order. More specifically, a thorough inventory of all Internet-based cyber-infidelity behaviors might be examined. For example, various types of services used, frequency, duration, screen names, personalities portrayed, types of partners of interest online, drug/alcohol use, paraphilias experienced, and self-imposed limits by patients ought to be explored by the clinician. Overall, clinicians would also do well to learn the details of their patient's interactive style if they present such issues in treatment. The current state of face-to-face, monogamous relationships is also critical to understanding the appeal of the Internet world. Clinical inquiry may uncover other aspects of romance and sexuality related to personality style, and give valuable clues to psychotherapists as well as researchers, who have a new arena within which to examine personality structure, commitment and sexuality.

As with more generalized Internet compulsions, cyber-infidelity may be part of both the problem and the solution. Individuals suffering from the effects of cyber-infidelity may soon be approaching psychologists for help. They may conceivably approach psychologists through either the Internet and request e-mail consultation, telephone consultation, videophone or other videoconferencing consultation, as well as, or in addition to traditional face-to-face consultation (Maheu & Gordon, in preparation).

Treatment of Cyber-infidelity Issues in E-mail. Some of the more serious ethical questions arise when patients want to obtain treatment in e-mail. Until broadband services are available through the Internet2 (Next Generation Internet Initiative, 1999; University Corporation for Advanced Internet Development, 1999), therapists face a number of challenges when attempting to comply with the ethics code, and deliver psychotherapy through the Internet (Maheu, 1996, 1997a, 1997b, 1998a, 1998b).

For the sake of brevity, only a sample of the key treatment issues are discussed here, but the reader is referred to the following documents for more general guidelines regarding ethics (APA, 1985, 1986, 1992, 1993a, 1993b, 1997a). For the precise wording of each principle discussed below, see the American Psychological Association's Ethical Principles of Psychotherapists and Code of Conduct (1992). Numbers and titles of principles are provided for your convenience.

This paper examines only selected standards among those identified as relevant by the American Psychological Association Ethics Committee's document entitled *Services by Telephone, Teleconferencing, and Internet* (APA, 1997b). Questions and issues are noted after each of the ethics standards numbered and titled for the reader's convenience, and are preliminary questions offered as a sample of the types of challenges we might face with regard to ethics when delivering psychotherapy over the existing form of the Internet.

1.03 Professional and Scientific Relationship. If delivering services via the existing Internet, precisely how will we define a "professional relationship" between a psychologist and patient struggling with cyber-infidelity? For example, if the patient contracts for education, but regularly sends e-mail questions - how many e-mail posts will it take before the relationship moves from educational to psychotherapeutic? Or once Internet2 is in place, with it's capacity for two-way videoconferencing, will a single web-based video session legitimately constitute education, while several sessions will be needed to constitute psychotherapy? How will third party carriers differentiate which services will be reimbursable and which won't?

What if a patient contracts for education, but writes regularly and wants to include their spouse or cyber-lover in the therapy? Is that legitimate use of psychotherapy and technology? Surely, these questions only scratch the surface of the types of professional issues to be raised by telEhealth tools, and e-mail exchanges in particular, in the next five to ten years.

1.04 Boundaries of Competence. How much training should be required for psychotherapy with cyber-infidels, their cyber-lovers and/or spouses over the Internet? Who will offer this training? A second issue is whether we are subjecting our patients to harm if we are just learning how to use technology and/or have never met the patient face-to-face prior to meeting via technology. Who is to say that face-to-face visits are required, ever? If they are, how many prior or concurrent face-to-face meetings will legitimize later e-mail services?

Internet connections literally span the globe. Other complicated issues include the need to respect cultural diversity in a medium where geographic distance is rendered irrelevant. Without full disclosure by the patient, or testing of the patient, the professional could easily be uninformed of critical socioeconomic issues, educational, cultural or geographic issues that could influence the response set of the patient. For example, how much assessment through websites is responsible vs. feasible? Which instruments are to be used, when most standard assessment

instruments haven't been normed on international web-based populations? How honest will patients be in answering web-based forms when seeking e-mail or video contact from a professional?

Which instruments should be used with women in particular? More specifically, what ought a therapist know of a woman making contact through a website and requesting assistance for a cyber-affair? How can the therapist best discover facts such as local events, family events, or other situational events assumed to be irrelevant to the patient, but nonetheless, potentially important to the therapy? For example, how will the psychotherapist know of natural disasters, family deaths, or emergency backup services in the patient's community when responding to a website request for e-mail, chatroom, or videophone intervention for a cyber-affair?

Moreover, could the issue of competence as a telEhealth professional be related to the choice of technology? How proficient at various technologies ought a practitioner be before offering professional services to consumers claiming to suffer from a cyber-affair in e-mail, chat rooms, IRCs, MOOs, or MUDs? How many practitioners even know what these technologies are, and what they are capable of creating for the patient? If using an interpreter in any of these modalities, how would the professional be assured of competence in dealing with an interpreter?

Transference and countertransference will undoubtedly find new forms of expression. In treating disorders related to cyber-infidelity, how might a practitioner delivering e-mail treatment for cyber-infidelity know if interactive discussion about a patient's specific problem is serving more as active sexual stimuli than as treatment? Upon learning that previous treatment has been misused in this way, what does the practitioner do? Terminate? Would the practitioner then be liable for abandonment? If termination isn't acceptable, what might proper procedure dictate? Will videoconferencing be an accepted alternative treatment vehicle? If yes, under which circumstances will it acceptable or unacceptable?

1.06 Basis for Scientific and Professional Judgments. Given the lack of scientific knowledge in the area of using the advanced technology of the Internet to deliver assessment and treatment, are website disclaimers adequate to limit misunderstanding related to services being offered? Although some practitioners have already begun using disclaimers to qualify their services, the rigors of research have not yet been applied to test the effectiveness of these disclaimers.

Furthermore, research is just beginning to appear regarding the effectiveness of various forms of media, including e-mail, audio-stream, and video-mediated communication (O'Conaill & Whitaker, 1977; Whittaker & O'Conaill, 1977). Nonetheless, research is beginning to reflect the benefits of these types of services in dealing with the treatment of women in general, and cyber-infidelity in particular (Cooper, 1998; Shaw, 1997).

1.07a Describing the Nature and Results of Psychological Services. When dealing with "informed consent," just how informed of risks and benefits will our patients be when it comes to treatment through technology, when many of us barely know, or want to know, the inner workings of the human mind as mediated through technology? For example, issues such as the reading level of the unseen e-mail-based patient are critical if we are to provide interventions in a manner understandable to the patient, as dictated by this ethical principle. The professional may be at a loss for how to best correct a miscommunication if the unseen, unheard patient cannot be relied upon to understand a web-based consent form, e-mail interpretations or assignments given.

Moreover, the necessity for gathering demographic data, such as telephone number and street address, or how to best inform the client of mandated reporting laws are still undefined when the consumer is "simply asking a question about a cyber-affair." Problems with this ethics principle become particularly apparent if someone were to reveal the details of abuse or a Tarasoff situation prior to any type of response from the psychologist.

1.14 Avoiding Harm. While the overall focus of the ethical principles is to protect consumer welfare, this principle is more precisely focused upon specific ways in which harm can and needs to be avoided by the professional. Several key concerns arise in treating any mental health issue in a technology-based environment. For example, the ease of impersonation facilitated by e-mail exchange may create specific dilemmas for a well-intentioned therapist. Especially in the online sexual arena, where impersonation, exaggeration and minimization are commonplace, problems may arise for the unwitting therapist. For example, if engaging a teenager pretending to be an adult struggling with a cyber-affair, how much liability does a practitioner assume for giving explicit information? The central factor related to this principle is that in text-based environments, i.e., e-mail or chat rooms, the psychologist lacks the visual and auditory cues used in professional training and supervision to

diagnose and treat patients.

Other issues must also be considered. For example, time differences in the formulation and delivery of e-mail may also cause discrepancies in the understanding of the professional, as well as the patient. The frequency of equipment failure in various electronic media, including e-mail, chat rooms, and video connections can further complicate the relationship between practitioner and patient.

Moreover, e-mail contact with patients may make psychologists vulnerable to formal complaints, if the e-mail exchange is taken out of context, or used as a verbatim record of services rendered. This problem surfaces most clearly in situations related to emergencies, for example. Since e-mail and video-mediated services can occur wherever phone lines reach people, a practitioner in Boise may easily be working with a patient in Boston. How obligated is the practitioner to know and communicate state laws to the Boston resident? Reporting laws related to child abuse, for example, vary from state to state, and a practitioner is not likely to be aware of ramifications of specific instructions given to patients in e-mail.

Some state laws prohibit practice out of state for professionals operating in specific environments. For example, in California, practitioners are prohibited from offering video-mediated service to out-of-state patients, but can communicate in e-mail without sanctions (CA-1997). Details of telEhealth laws in various states are available (Center for Telemedicine Law, 1997; Department of Commerce, 1997). Some professions have developed their own viewpoints regarding interstate licensure and confidentiality (National Council of State Boards of Nursing, 1998). More precise definitions of psychotherapy will be needed if such exchanges start occurring with regularity in psychology, and particularly in the treatment of problems associated with a cyber-affair as treated through telEhealth technologies.

Nonetheless, professionals in the health community are already successfully using regular e-mail contact with patients (Borowitz & Wyatt, 1998; Eysenbach & Diepgen, 1998; Ferguson, 1998; Spielberg, 1998). The simple truth is that electronic media may prove to be more helpful than face-to-face contact for some people. Indeed, refusing e-mail contact from an otherwise isolated and desperate patient suffering from a cyber-affair, for example, could be harmful to the patient requesting help, as well as to potential victims. So the question becomes: precisely what is our obligation to respond to such queries for assistance?

2.01 Evaluation, Diagnosis, and Interventions. Computer-mediated communication technologies already has an extensive literature (Booth-Kewley, Edwards & Rosenfeld, 1992; Browndyke, 1996; Browndyke, Santa Maria, Pinkston & Gouvier, 1998; Burke & Normand, 1987; Dubrovsky, Kiesler & Sethna, 1991; Fawcett & Buhle, 1995; Federico, 1992; Gaydosh 1996; George, Lankford & Wilson 1992; Gressard & Loyd, 1986; Hewson, Laurent & Vogel, 1996; Honaker, 1988; Johnson & White, 1980; Kieley, 1996; Kiesler & Sproull, 1986; King, 1996; Koson, Kitchen, Kochen & Stodolosky, 1970; Liefeld, 1988; Makulowich, 1995; Mazzeo & Harvey, 1988; Mead & Drasgow, 1993; Mehta & Sivadas 1995; Moreland, 1985; Sampson, 1983; Sampson, Kolodinsky & Greeno, 1997; Skinner & Allen, 1983; Smith & Leigh, 1996; Space, 1981; Sproull, 1986; Stern & Faber, 1996; Thomas, 1996; Walsh, Kiesler, Sproull, & Hesse, 1992; Waskul & Douglass, 1996; Webster & Campeau, 1996). While guidelines are provided for practitioners in several APA documents related to computer-based tests and interpretations (1986) and standards for educational and psychological testing (1985), more guidance is needed for applying these principles to behavioral telEhealth, and more specifically, for applying these guidelines to the treatment of cyber-affairs. Another area needing focused attention is that of how technology impacts communication (Cukor et. al., 1998; O'Conaill & Whittaker, 1997; Whittaker & O'Conaill, 1997).

5.02 Maintaining Confidentiality. While various aspects of the Internet are secured for some purposes, much of it is quite vulnerable to breaches of confidentiality.

One of the most pressing issues needing examination is that related to the electronic patient record. Centralized electronic medical records are being developed into a single, multi-user database in the United States (Computer-based Patient Record Institute, 1999). Theoreticians and researchers in both psychology (Maheu, 1996, 1998d; Maheu, Whitten & Allen, in press; Maheu, Callan & Nagy, in press; Nickelson, 1998b; Stamm, 1998) and medicine (Carroll, Wright & Zakoworotny, 1998; Spielberg, 1998; Waller & Alcantara, 1998) as well as professionals from other countries (Mitka, 1998) are discussing the protection of patient information.

Meanwhile, laws are being developed that will also define the future of telEhealth and confidentiality. On August 1, 1996, the Health Insurance Portability and Accountability Act (Public Law 104-191), otherwise known

as the Kennedy-Kassenbaum Act, was introduced in Congress. The Health Insurance Portability and Accountability Act (HIPAA) called for protections for the privacy of medical information. It is an attempt to improve the portability and continuity of health insurance coverage through administrative simplification by Congress and the Department of Health and Human Services (DHHS).

HIPAA includes provisions to address the need for security and electronic signature standards. These standards will reduce unauthorized access and alteration of confidential health records by implementing universal security, integrity, and authentication standards, and will be enforced through harsh penalties for those responsible for their violation. The standards will apply to all electronic health data transmitted by health care providers, health care clearinghouses, and health plans, that is in transit or resides in a practitioner's data system, or in other information depositories (Gilbert, 1999). Compliance with this law was required by February 2002.

Meanwhile, input is being sought by various governmental agencies to aid with applicability and compliance to this law. Therefore, psychologists have an opportunity to shape the development of broad-sweeping and precedent-setting legislation if they get involved immediately. The content and electronic transmission of mental health records should be defined by psychologists, and not other professional groups or insurance companies. Patients should also be given a voice in determining the fate of their medical records (Maheu, 1997b, 1998c).

In conclusion, for many ethical reasons, e-mail interventions are inefficient for psychotherapy when used in the absence of other treatment modalities, e.g., face-to-face and videoconferencing. Alternatives are quickly appearing, however. Videoconferencing allows us to use the visual and auditory cues we are trained to use in diagnosing and treating patients, and therefore, is a more adequate technology to use when delivering psychotherapy. Newer technologies and increased experimentation with these electronic tools will undoubtedly show which telEhealth technologies are best used with which patients, at which point in time, and by which practitioners.

As the Global Community proliferates, it provides us with an arena for creating new problems as well as providing new solutions. Trained as social scientists and practitioners, psychologists are in an optimal position to study these evolving behaviors and develop effective treatment protocols in both the face-to-face and electronic worlds.

References

- American Psychological Association. (1985). *Standards for educational and psychological testing*. Prepared by the Committee to Develop Standards for Educational and Psychological Testing of the American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. Washington D.C.: American Psychological Association.
- American Psychological Association. (1986). *Guidelines for computer based tests and interpretations*. Washington, D.C.: American Psychological Association.
- American Psychological Association. (1992). Ethical principals of psychologists and code of conduct. *American Psychologist*, 47 (12), 1597-1611.
- American Psychological Association. (1993a). Guidelines for providers of psychological services to ethnic, linguistic, and culturally diverse populations. *American Psychologist*, 48 (1), 45-48.
- American Psychological Association. (1993b). Record keeping guidelines. *American Psychologist*, 48(9), 984-986.
- American Psychological Association. (1997a). Official home page of the American Psychological Association. Retrieved January 8, 1999 from the World Wide Web: <http://www.apa.org>
- American Psychological Association. (1997b). *Services by telephone, teleconferencing, and Internet*. [A statement by the ethics committee of the American Psychological Association]. Retrieved November 18, 1998 from the World Wide Web: <http://www.apa.org/ethics/stmnt01.html>

- Booth-Kewley, S., Edwards, J.E., & Rosenfeld, P. (1992). Impression management, social desirability, and computer administration of attitude questionnaires: Does the computer make a difference? *Journal of Applied Psychology, 77*, 562-566.
- Borowitz, S. M. & Wyatt, J. C. (1998). The origin, content, and workload of e-mail consultations. *The Journal of the American Medical Association, 280*(15), 1321-1324.
- Browndyke, J.N. (1996). Online Neuropsychology Project. Retrieved July 13, 1996 from the World Wide Web: <http://www.premier.net/~cogito/project/onp.html>
- Browndyke, J.N, Santa Maria, M.P., Pinkston, J.B., & Gouvier, W.D. (1998). Online neuropsychology project: A survey of general head injury and prevention knowledge between professionals and non-professionals. *Archives of Clinical Neuropsychology, 13*(1), 133.
- Burke, M.J., & Normand, J. (1987). Computerized psychological testing: Overview and critique. *Professional Psychology: Research and Practice, 18*, 42-51.
- Carroll, E. T., Wright, S., & Zakoworotny, C. (1998). Securely implementing remote access within health information management. *Journal of American Health Information Management Association, 69*(3), 46-49.
- Center for Telemedicine Law. (1997). Telemedicine and interstate licensure: Findings and recommendations of the CTL licensure task force. *North Dakota Law Review, 73*(1), 109-130.
- Computer-based Patient Record Institute. (1999). *CPRI Toolkit: Managing information security in health care*. Bethesda, MD: Author.
- Cooper, A. (1998). Sexuality and the Internet: Surfing into the new millennium. *Cyberpsychology and Behavior, 1*, 181-187.
- Cooper, A., Scherer, C., Boise, S. & Gordon, B. (1999). Sexuality on the Internet: From sexual exploration to pathological expression. *Professional Psychology: Research and Practice, 30* (2), 154-164. Retrieved August 15, 1999 from the World Wide Web: <http://www.apa.org/journals/pro/pro302154.html>
- Cukor P., Baer L., Willis B.S., Leahy L, O'Laughlen J., Murphy M.E., Withers M., and Martin, E. (1998). Use of videophones and low-cost standard telephone lines to provide a social presence in telepsychiatry. *Telemedicine Journal, 4*(4) 313-21.
- Department of Commerce. (1997). *Telemedicine Report to Congress*. Retrieved January 8, 1999 from the World Wide Web: <http://www.ntia.doc.gov>
- Dertouzos, M. (1997). *What will be: how the new world of information will change our lives* (pp. 300). New York: HarperCollins.
- Dubrovsky, V.J., Kiesler, S., & Sethna, B.N. (1991). The equalization phenomenon: Status effects in computer-mediated and face-to-face decision-making groups. *Human Computer Interaction, 6*, 119-146.
- Eysenbach, G., & Dieppen, T. L. (1998). Responses to unsolicited patient e-mail requests for medical advice on the World Wide Web. *The Journal of the American Medical Association, 280*, 1333-1335.
- Fawcett, J., & Buhle, E. (1995). Using the Internet for data-collection: An innovative electronic strategy. *Computers in Nursing, 13*(6), 273-9.

- Federico, P. (1992). Assessing semantic knowledge using computer-based and paper-based media. *Computers in Human Behavior*, 8, 169-181.
- Ferguson, T. (1998). Digital Doctoring - Opportunities and Challenges in Electronic Patient-Physician Communication. *The Journal of the American Medical Association*, 280, 1361-1362.
- Gaydosh, C.N. (1996). Using the internet for triple-blind psychological research studies. Paper presented at the 1996 Society for Computers in Psychology Conference. Chicago, IL.
- George, C.E., Lankford, J.S., & Wilson, S.E. (1992). The effects of computerized versus paper-and-pencil administration on measures of negative affect. *Computers in Human Behavior*, 8, 203-209.
- Gilbert, F. (1999). *HIPAA and the Electronic Record. Comprehensive Guide to Electronic Health Records*. Washington, DC: Author.
- Gressard, C.P., & Loyd, B.H. (1986). The nature and correlates of computer anxiety in college students. *Journal of Human Behavior & Learning*, 3, 28-33.
- Hewson, C.M., Laurent, D., & Vogel, C.M. (1996). Proper methodologies for psychological and sociological studies conducted via the internet. *Behavior Research Methods, Instruments, and Computers*, 28, 186-191.
- Honaker, L.M. (1988). The equivalency of computerized and conventional MMPI administration: A critical review. *Clinical Psychology Review*, 8, 561-577.
- Johnson, D.F., & White, C.B. (1980). Effects of training on computerized test performance in the elderly. *Journal of Applied Psychology*, 65, 357-358.
- Kieley, J.M. (1996). CGI scripts: Gateways to world-wide-web power. *Behavior Research Methods, Instruments, and Computers*, 28, 165-169.
- Kiesler, S., & Sproull L.S. (1986). Response effects in the electronic survey. *Public Opinion Quarterly*, 50, 402-413.
- King, S. (1996). Researching Internet communities: Proposed ethical guidelines for the reporting of results. *The Information Society*, 12(2).
- Koson, D. Kitchen, C. Kochen, M. & Stodolosky, D. (1970). Psychological testing by computer: Effect on response bias. *Educational & Psychological Measurement*, 30, 803-810.
- Leiblum, S. (1997). Sex and the Net: Clinical implications. *Journal of Sex Education and Therapy*, 22(1), 23.
- Liefeld, J.P. (1988). Response effects in computer-administered questioning. *Journal of Marketing Research*, 25, 405-409.
- Maheu, M. & Gordon, B. (in preparation). Survey of mental health practitioners on the Internet. *Professional Psychology: Research and Practice*.
- Maheu, M. (1996, August). Online ethics and risk management. Symposium conducted at the Albert Einstein School of Medicine Department of Psychiatry, 17th Cape Cod Institute.
- Maheu, M. (1997a, April). Ethics of Online Psychology. Symposium conducted at the California Psychological Association, San Jose, California.

- Maheu, M. (1997b). Will online services for consumer self-help improve behavioral healthcare? *Behavioral Healthcare Tomorrow Journal*, 6(6), San Francisco: Centralink.
- Maheu, M. (1998a, March). Issues and Opportunities in Behavioral Telehealth. Symposium conducted at the meeting of the California Psychological Association, Pasadena, California.
- Maheu, M. (1998b, March). Ethics of Practicing Psychology Online. Symposium conducted at the meeting of the California Psychological Association, Pasadena, California.
- Maheu, M. (1998c, March). How online & other telehealth services for consumers & their families impact behavioral healthcare. Symposium conducted at the meeting of the Behavioral Informatics Tomorrow, San Antonio, Texas.
- Maheu, M. (1998d). Telehealth - A call to action. American Association of Behavior Therapists. *The Behavior Therapist*, 21, (6).
- Maheu, M. (1999a). SHPM cyber-affairs survey results. Retrieved from the World Wide Web Thursday, August 12, 1999. http://www.selfhelpmagazine.com/cgi-bin/cyber_survey.cgi?results=go&start=go
- Maheu, M. (1999b). Risk management in the re-tooling of healthcare. Retrieved from the World Wide Web Thursday, August 12, 1999. <http://telehealth.net/articles/riskman3.html>
- Maheu, M., Callan, J., & Nagy, T. (in press). Call to Action: Ethical and legal issues for behavioral telehealth including online psychological services. In S. Bucky (Ed.), *Comprehensive Textbook of Ethics and Law on the Practice of Psychology*. New York: Plenum Publishers.
- Maheu, M., Whitten, P. & Allen, A. (in preparation). *The telehealth primer & resource guide*. New York: Jossey-Bass.
- Makulowich, J.S. (1995). Labs online: research on the Internet. *Environmental Health Perspectives*, 103(2), 148-50.
- Mazzeo, J. & Harvey, A.L. (1988). The equivalence of scores from automated and conventional educational and psychological tests: A review of the literature (College Board Rep. No. 88-8).
- Mitka, M. (1998). Developing countries find telemedicine forges links to more care and research. *The Journal of the American Medical Association*, 280(15), 1295-1296.
- Mead, A.D., & Drasgow, F. (1993). Equivalence of computerized and paper-and-pencil cognitive ability test: A meta-analysis. *Psychological Bulletin*, 114, 449-458.
- Mehta, R., & Sivadas, E. (1995). Comparing response rates and response content in mail versus electronic mail surveys. *Journal of the Market Research Society*, 37, 429-439.
- Moreland, K. L. (1985). Computer-assisted psychological assessment in 1986: A practical guide. Special Issue: Computer assessment and interpretation: Prospects, promise and pitfalls. *Computers in Human Behavior*, 1, 221-233.
- National Council of State Boards of Nursing. (1998, April). Boards of nursing approve proposed language for an interstate compact for a mutual recognition model for nursing regulation. *Communique*, 1-4.
- Next Generation Internet Initiative. (1999). Retrieved March 4, 1999 from the World Wide Web: <http://www.ngi.gov>.

- Nickelson, D. (1998b). Telehealth and the Evolving Health Care System: Strategic Opportunities for Professional Psychology. *Professional Psychology: Research and Practice*, 29X(6), 527-535.
- NUA. (1998). How many online? New York: NUA Ltd. Retrieved August 16, 1999 from the World Wide Web: http://www.nua.ie/surveys/how_many_online/index.html
- O'Conaill, B., & Whittaker, S. (1997). Characterizing, predicting, and measuring video-mediated communication: A conversational approach. In K. E. Finn, A. J. Sellen, & S. B. Wilbur (Eds.), *Video-Mediated communication* (pp. 107-131). Mahwah, NJ: Lawrence Erlbaum.
- Payment for Teleconsultations in Rural Health Professional Shortage Areas, 63 Fed. Reg. 58879 (1998).
- Peterson, K. & Miller, L. (1996, February 2). On-line adultery: Cyberflings are heating up the Internet. *USA TODAY*, pp 01D.
- Quittner, J. (1997, April 14). Divorce Internet Style. *Time*, p. 72.
- Sampson, J.P. (1983). Computer-assisted testing and assessment: Current status and implications for the future. *Measurement & Evaluation in Guidance*, 15, 293-299.
- Sampson, J., Kolodinsky, R., & Greeno, B. (1997). Counseling on the information highway: Future possibilities and potential problems. *Journal of Counseling and Development*, 75(3), 203-212.
- Shaw, J. (1997). Treatment rationale for Internet infidelity. *Journal of Sex Education & Therapy*, 22 (1), 29-34.
- Skinner, H.A. & Allen, B.A. (1983). Does the computer make a difference? Computerized versus face-to-face versus self-report assessment of alcohol, drug, and tobacco use. *Journal of Consulting & Clinical Psychology*, 51, 267-275.
- Smith, M.A. & Leigh, B. (1996). Using the world wide web to institute a distributed, on-line participant pool. Paper presented at the 1996 Society for Computers in Psychology Conference. Chicago, IL.
- Schnarch, D. (1997). Sex, intimacy, and the internet. *Journal of Sex Education and Therapy*, 22(1), 15-20.
- Space, L.G. (1981). The computer as psychometrician. *Behavior Research Methods and Instrumentation*, 13, 595-606.
- Spielberg, A. R. (1998). On call and online: Sociohistorical, legal, and ethical implications of e-mail for the patient-physician relationship. *The Journal of the American Medical Association*, 280, 1353-1359.
- Sproull, L.S. (1986). Using electronic mail for data collection in organizational research. *Academy of Management Journal*, 29, 159-169.
- Stamm, B., (1998). Clinical Applications of Telehealth in Mental Health Care. *Professional Psychology: Research and Practice*, 29, (6), 536-542.
- Stern, S.E. & Faber, J.E. (1996). The lost e-mail method: Milgram's lost letter technique in the age of the internet. Paper presented at the 1996 Society for Computers in Psychology Conference. Chicago, IL.
- Thomas, J. (Ed.). (1996). The Ethics of Cyberspace Research [Special Issue]. *The Information Society*, 12(2).
- Turkle, S. (1997). *Life on the screen: Identity in the age of the internet*. New York: Touchstone.

- Turkle, S. Quoted in: Toufexis, A. (1996, February 19). Behavior: Romancing the computer. The first cyberadultery suit shows the risks of looking for love online. *Time*, p. 53.
- University Corporation for Advanced Internet Development. (1999). Retrieved March 4, 1999 from the World Wide Web: <http://www.ucaid.edu/>
- Vaughan, J. & Vaughan, P. (1996) Online affairs. Retrieved May 15, 1998 from the World Wide Web: <http://www.vaughan-vaughan.com/com010.html>
- Walsh, J.P., Kiesler, S., Sproull, L.S., & Hesse, B.W. (1992). Self-selected and randomly selected respondents in a computer network survey. *Public Opinion Quarterly*, 56, 241-244.
- Waller, A., & Alcantara, O. (1998). Ownership of health information in the information age. *Journal of American Health Information Management Association*, 69(3), 28-38.
- Webster, J., & Compeau, D. (1996). Computer-assisted versus paper-and-pencil administration of questionnaires. *Behavior Research Methods, Instruments, & Computers*, 28, 567-576.
- Whittaker, S. & O'Conaill, B. (1997). The role of vision in face-to-face and mediated communication. In K. E. Finn, A. J. Sellen, & S. B. Wilbur (Eds.), *Video-mediated communication* (pp. 23-49). Mahwah, NJ: Lawrence Erlbaum.
- Young, K. S. (1997). The relationship between depression and Internet addiction. *Cyberpsychology and Behavior*, 1(1), 24-28.
- Young, K. S. (1998a) Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology and Behavior*, 1(3), 237-244.
- Young, K. S. (1998b). *Caught in the Net: How to recognize the signs of Internet addiction and a winning strategy for recovery*. New York, NY: John Wiley & Sons, Inc.
- Young, K. S. (1999) The evaluation and treatment of Internet addiction. In L. VandeCreek & T. Jackson (Eds.). *Innovations in Clinical Practice: A Source Book* (Vol. 17; pp. 1-13). Sarasota, FL: Professional Resource Press.

Chapter Seventeen

E-Counseling: The Willingness to Participate

by Lily Mastura Hj. Harun & Ramlan Hj. Hamzah

Abstract

We are now in the Third Wave¹ (Toffler, 1991; in Mohd. Nor Mamat, 2000), which emphasizes the usage of information and communication technology (ICT) in every facet of our lives. According to our Prime Minister, Dato Seri Dr. Mahathir Mohamed (Mohd. Nor Mamat, 2000), “We do not have a choice, the era of technology is forcing us to change our way of life and work situation. The faster we change, adopt, and adapt - the better it would be for our future”. This study shares the views of computer literate respondents about their willingness to participate in e-counselling sessions. The results showed that the respondents are generally reserved to use e-counselling services and still insist that the physical presence of the counsellor is important in the counselling process. The findings however do indicate that the e-counselling method is favourable to the needs of young people aged between 25 to 35 years old, especially females. The study also indicated that e-counselling could in fact save time, cost, and distances to travel in search of counsellors’ assistance.

Introduction

ICT is no longer a new concept. It is somewhat ingrained in society today in that it has become part and parcel of our everyday lives. In Malaysia, the campaign is “one computer for every household.” Though there is no survey conducted to ascertain the above campaign, one can say that it is almost a reality. In the United States for instance, Tapscott (1998) (in Mohd. Nor Mamat, 2000) did a survey and found that about 40% of the households in the United States have access to the Internet and this percentage is thought to be increasing. The United States Internet users come to around 150 million, which is actually half of the world’s Internet users. Tapscott estimated that by the year 2005, there would be 1 billion users linked around the globe. One of the interesting findings in Tapscott’s study was that teenagers as Internet users have increased from 50% in 1994 to 74% in 1996, and to 88% in 1997. He also found that e-mail users have increased from 35 million in 1995 to 80 million in 1998. Of these, 36% were mainly children and teenagers. Hence it could be said that teenagers and the Internet are one in the ICT culture.

It is not a different scenario in Malaysia. Not only that each household has their own computers; cyber cafes are tremendously available in most towns. Teenagers and even younger children frequent these cyber cafes (Ding, 2000; Shaharom, 2000). The advent of Wireless Access Protocol (WAP) has made the Internet easily accessible at the palms of their hands and e-mail via WAP is as easy as A-B-C.

The advent of the above technology has opened a new era in the counselling profession. Can counselling actually be affected by using WAP? It has been long emphasized that counselling should be undertaken in the face-to-face encounter. This entails a physical presence between the counsellor and the client. Every counselor-to-be was told that this process is fundamental. Tang (1996) remarked that eye contact between counsellor and client eases the process of sharing and at the same time develops confidence on the part of the client to entrust the counsellor with the ‘stories of his life’. Accordingly, Tang (1996) commented that eye contact offers a wider perspective for the counsellor to explore the client’s concerns. It is through eye contact that the non-verbal aspects of communication can provide ample information to know the client and his concerns.

However as discussed earlier, with the advent of ICT and the practicality of brief therapies and solution-focused therapies (the post-modern approach to therapies), it is seen that the electronic means of conducting counselling is a real possibility. Kalb (2001) quoted Russ Newman from the American Psychological Association as saying, “This is an emerging area with potential pluses and minuses, Öwe’re watching and we’re interested.”

Tait (1999) noted that the traditional approach to counselling should be reconsidered. It is seen that humans interact more with machines rather than human beings. If this were the case, the closest counsellor to a person

would be just a 'click' away; hence the process of making an appointment to see the counsellor is something in the past. Being in close competition, the electronic means of acquiring counselling seems to be the cutting edge in the profession (Guterman, 1994, 1996a, 1996b). Counsellors all over the world should be radical to accept these changes because the electronic mode of delivering counselling is actually in abundance across the Internet (Kirk, 1996; Sampson, Kolodinsky, & Greeno, 1997). The services are in the form of e-mail counselling and counsellor education, computing in group and family counselling, online support groups, and the Internet as a mental health information source (Oravec, 2000).

What is e-counselling? E-counselling can be defined as follows. Generally it relates to having counselling sessions across a distance. The distance can be narrowed by the usage of telephones, television, and telegraph. For Sanders and Rosenfield (1998), e-counselling refers to the counselling process through the medium of telecommunication technologies, which includes telephone, Internet, and tele-conferencing. And for Tait (1999), e-counselling refers to the interaction of a counsellor and a client at different places within the same time frame. E-counselling is operationally defined as conducting counselling sessions using telecommunication technologies, e.g., telephones and the Internet.

In Malaysia, there are numerous counselling services offered over the telephones. Amongst them are the Befrienders, Pink Triangle, Teledera, Cancer Online, AIDS Online and others. Studies done by Derham and Womersley (1995), Oravec (1996), Bobevski, Holgate, and McLennan (1997), Rosenfield (1997), Sanders and Rosenfield (1998), and Tait (1999) have all indicated the significance and importance of using telephones as a means of conducting counselling sessions.

In the ICT era, the Internet has taken over the telephone as a means of conducting counselling. What is more interesting is that the mobile telephones in existence and WAP enable one to be in a session any time, any where one likes. Studies done by Murphy and Mitchell (1998); Caudron (1998); Lawrence (1998) (in Murphy & Mitchell, 1998); Bloom (1998); Oravec (2000); and Lily Mastura (2000) have indicated that the Internet is another choice to conduct counselling and it can be as successful as the face-to-face counselling. On the other hand, an exploratory study conducted by Othman (2000) indicated that school counsellors were unready and unprepared to accept the current electronic influx. If the counsellors are in this state of dilemma, then what happens at the end of line – would clients be in a 'fixated' stage?

Objectives of the Study

The study aims to identify the respondents' willingness to participate in e-counselling; respondents' awareness about the existence of e-counselling; respondents' willingness to experience counselling in virtual reality; respondents' ability to save time while engaged in e-counselling; respondents' need for the physical presence of the counsellor; respondents' economic sources to fund the e-counselling process; and respondents' views about the future of e-counselling in Malaysia.

Methodology

This is an ex-post facto research. Respondents for the study comprised of 94 students from a private college in the state of Selangor. They are aged between 17 to 25 years old (81%) and 26 to 35 years old (19%). There were 62 (67%) males and 32 (33%) females. Of these numbers, 34 (36.6%) were Malays, 47 (50.5%) Chinese, 9 (9.7%) Indians, and 3 (3.2%) others. Amongst the Malay respondents only 23 (68%) have attended traditional counselling sessions while 14 (30%) for the Chinese and only 1 (11%) for the Indian. Of the total respondents, 88 (95.7%) were computer literates while 6 (4.3%) were otherwise. About 18 (19.2%) of the respondents have attempted using e-counselling, while 69 (73.4%) have not tried before. Of these numbers that attempted e-counselling 11 (18%) were males and 7 (22%) were females. The students were mainly from the computer science, information science and computer and information technology degrees.

Data for the research were collected by questionnaires, which were constructed by the researchers. The questionnaire consists of two parts: Part A: Demographic Information plus Computer Skills and Part B: Students' Perception of E-Counselling: Willingness to Participate. Respondents answered the questionnaire based on a 5 point-Likert scale. The researchers administered the questionnaires personally.

Results and Discussions

Willingness to participate

The results revealed that 50 (52%) of the respondents were willing to accept or participate in the e-counselling sessions. This is quite a conservative number. There were 39 (41.9%) respondents who were not sure whether they could participate in the process or not while 5 (5.4%) of the respondents totally reject the idea of e-counselling.

Awareness of e-counselling

It was found that respondents were generally not aware of the existence of e-counselling in Malaysia (49.5%). However, a single item tested indicated that only 19.7% were not sure of the existence of this service. This might reflect the fact that respondents are aware of the services but are not willing to try it yet. They do indicate that they would like to try (69%), however are quite unsure how to go about it. Client's anonymity is a factor that would encourage the respondents (74.2%) wanting to try the service. This finding is somewhat similar to the findings of Oravec (1996), Bobevski, Holgate, and McLennan (1997), and Tait (1999).

A majority of the respondents (74.1%) felt that this service ought to be offered in Malaysia though they are not quite ready to participate. The un-readiness to participate is due to the fact that respondents thought that their concerns could not be dealt with efficiently through the wireless protocol. This is supported by the fact that respondents felt that the face-to-face encounter with the counsellor is more convincing for the process to be successful.

Counselling in virtual reality

Though e-counselling could actually save the distance to travel, it is actually thought not appropriate to travel the domains of emotion. About 60% of the respondents thought that distance to travel is no longer an issue, but the inexistence of a counsellor would lead to improper understanding and interpretations of their concerns. This finding is similar to the opinions of McLeod (1993). Accordingly, McLeod commented that e-counselling could lead to the high risk of misunderstanding. This will eventually lead to high levels of frustrations and client will feel that no one can help them. E-counselling could also lead to a different interpretation of the counsellor's warmth during the process. It was also noted by McLeod and Machin (1998) that the organizations or individuals offering the e-counselling services are at often times not qualified thus leading to further misnomer in the profession.

Despite the above concerns, respondents felt that e-counselling is easily accessible (58.7%), flexible (63.4%), well attended to (57%), felt not neglected (60.3%), save the distance to travel (66%), felt no restrictions to express emotions (59.2%), the counsellor's presence is felt (57%), e-counselling is not a deterring factor for the counsellor to understand their clients (66%). The mixed findings suggest that e-counselling is in the transition stage of acceptance amongst its users.

Ability to save time

Most literature reviews suggest that e-counselling could actually save time. This finding is not uncommon for this particular research. Due to the 24-hour availability of the services, respondents felt that they could have a "friend" when the need arises. 74.4% of the respondents felt that they do not waste time traveling to their counsellors and 73% of the respondents reported that the e-counselling hours are flexible. E-counselling could actually save time, avoiding the hassle of making an appointment and waiting for the counsellors in the waiting room. As mentioned earlier, when the need arises, get to the computer and start "pouring your heart out." By this criteria, 75.5% of the respondents opted that they would use this service. And because the respondents were students, they felt that they could always have their leisure hours to communicate with their counsellors and not get so uptight during the day to have their sessions.

With regard to saving time, 53.8% of the respondents generally felt like e-counselling is successful. However, 56.2% of the respondents felt that whether it saves time or not is not the real issue. The presence of the counsellor is still important.

Physical presence of the counsellor

About 59.5% of the respondents felt that the physical presence of the counsellor is still important while 40.5% felt it is quite all right for the counsellor to be absent physically. Although it is quite all right for the counsellor to be absent physically and that e-counselling takes place, these respondents felt that their counsellors

need not understand them fully via this method. Though a little confused here, the point that could be deduced is that the presence of the counsellors does still make a difference in the process. Accordingly, Murphy and Mitchell (1998) commented that the physical absence of counsellors or clients (or both) would be an inadequate source to work with. Counselors and clients lack body language to work with in e-counselling. This absence definitely gives alarm to the clients especially (doubting whether the counsellor really understands them or not) and for the counsellors to make appropriate interpretations of the responses provided by the clients. So any misinterpretations incurred during the e-counselling process is actually a worry as mentioned by McLeod earlier. Siegman and Friedstein (1989) also mentioned the fact that communications by electronic mode lack the sound of voice. The absence of voice will deter a fluent understanding and interpretation of the message conveyed. Matthews and Marino (1990) thought that non-verbal communication in the face-to-face encounter actually conveys a lot of message rather than verbal communication. And for these, e-counselling has its barriers. The elements of non-verbal communication like eye contact, facial expression, body posture and gesture are all absent from the messages. The worries on the part of the counsellors have been reported by Colon (1996). Counsellors worry about not being able to see the non-verbal aspects of communication of the client and fear making slipshod interpretations of their clients' concerns.

Sources to fund the e-counselling process

Though some respondents (about 23 to 26%) generally agree that the e-counselling process could save money, a majority of the respondents felt that money is actually an issue for them to be involved in the e-counselling process. They are quite wary of the terms of payments for the services, they worry about the increases in their telephone bills, and anxious of the high fees incurred for the e-counselling services. These show that when it comes to cost, this could be a deterring factor. The long hours online triggers on the bill, which then triggers pressure on the pocket. Therefore, the respondents felt that to save money, is to walk to the counsellor's office – this would contradict the earlier findings. Tait (1999), Rosenfield (1997), and Oravec (2000) have argued about the monetary implication of e-counselling. However, Oravec (2000) felt that to be online will save the distance and fare to see the counsellor. Thus, saving money can be very true in this case, but the odds are many. This situation can be explained by the fact that respondents are still studying and income is a great worry. The situation could be different for people with careers and a steady income.

The future of e-counselling in Malaysia

Despite the worries mentioned above, respondents felt that e-counselling still has a future in Malaysia. They are quite positive towards it, though there are still others who are not sure about the service. Watts (1996) took the view that "there are some kinds of users who are happier using the computer than other sources of help," and "some forms of help which the computer is better able to provide." He observed that those "with relatively stable goals and a relatively strong sense of independence are more satisfied with computer-aided guidance systems and benefit more from them than do individuals with less stable goals and less sense of independence." According to Kalb (2001), "we're all more pressed for time, trying to avoid despair, Internet counseling is immediate, it's focused, and it cuts to the chase."

If e-counselling services were to be offered, the respondents said they would want a cheaper or lower rate or even suggest a student rate. The respondents also agreed that the services to be extensive so that it reaches the masses, e-counselling could actually compete with the traditional counselling process. Sanders and Rosenfield (1998) and Guterman and Kirk (1999) reported that e-counselling is the second-best method to traditional counselling. In Sanders' study, e-counselling was given free to the students through their high schools and colleges.

Conclusions

Thus it can be concluded that despite the uncertainties and anxieties, e-counselling still has a promising future. It was further revealed in the study that female students seemed to favour e-counselling more than males. This finding is similar to the ones done by Rosenfield and Smillie (1998) and Surtees, Pharoah, and Wainright (1998). Accordingly, females are able to relate their emotions more readily and easily than males. So despite the medium, females are better communicators than males (Dewdney, 1995). It was also found in the study that the younger age group of respondents is more inclined to use this service as compared to the older age group. Most

of the respondents in the younger age group are teenagers (a situation similar to Tapscott's finding). And according to Erickson's psychosocial stages of development, teenagers are busy searching for their self-identities. So it does not stop them to look for it in any mode, medium or form.

Hence despite the above, though the responses toward e-counselling were quite conservative generally, in some aspects of the study, it did show the respondents' positivism towards e-counselling. To overcome the apprehension of e-counselling consumers, various techniques have been introduced, including emotional bracketing, emoticons, textual visualizations, literary techniques, and even tele-conferencing to overcome the physical absence of the counsellors. These techniques have been found to be successful (Argyle & Shields, 1996; Murphy & Mitchell, 1998; Tait, 1999; Lily Mastura, 2000). To overcome the burden of cost, a few suggestions are forwarded. For instance, the toll free line, free WAP using the short message sending (SMS) services, and local area network (LAN) are alternatives that can be explored to ensure e-counselling has its place in peoples' minds. To ensure the place in peoples' minds, the e-counselling services (agencies and personnel) need to be recognized. This can be done professionally through courses organized by an accredited organization to handle matters and acts pertaining to conducting counselling electronically. Morrissey (1998) noted that ACES Technology Interest Network has drafted the list "Technical Competencies for Counselor Education Students" to include basic computer and Internet proficiency. Support is available from the appropriate agencies like the Ministry of Education (if e-counselling is to take place in education); PERKAMA (Malaysian Counselling Association), to guide the practice of e-counselling; the Ministry of Communication and Multimedia, to provide free telecommunication technologies for this purpose; the Ministry of Finance, to provide funds for the cost of operating e-counselling; and any private sectors that have an interest in the world of telecommunication technologies.

Notes:

1 - Alvin Toffler's "Third Wave"(see his book *The Third Wave*) is based on his human economic-development timeline: foraging, fishing, hunting, and herding dominated until about 10,000 years ago when an agricultural model took over. Currently, we are in a "third wave" in which information and technology drive the economy.

References

- Argyle, K. & Shields, R. (1996). *Is there a body in the Net? Cultures of Internet: Virtual spaces, real history, living bodies*. Great Britain: Sage Publications.
- Bloom, J. (1998). The ethical practice of web-counselling. *British Journal of Guidance and Counselling*, 26, 53-60.
- Bobeviski, I., Holgate, A.M. & McLennan, J. (1997). Characteristics of effective telephone counselling skills. *British Journal of Guidance and Counselling*, 25(1), 25-32.
- Caudron, S. (1998). Shrink-wrap. *Industry Week*, 247, 76-78.
- Colon, Y. (1996). Chatter(er)ing through the fingertips: doing group therapy online. *Journal of Feminist Theory*, 9, 205-215.
- Derham, L. & Womersley, L. (1995). Evaluation of caller satisfaction. *Crisis Line Newsletter*, April 95.
- Ding, C.M. (2000). Pembentukan generasi Internet di alaf baru. *Pemikir*, Isu Jan-Mac: 27-50.
- Dewdney, C. (1995). *The Skin of Culture*. London: Somerville House Publishing.
- Guterman, J. T. (1994). A social constructionist position for mental health counselling. *Journal of Mental Health Counselling*, 16, 226-244.

- Guterman, J. T. (1996a). Doing mental health counselling: A social constructionist revision. *Journal of Mental Health Counselling, 18*, 228-252.
- Guterman, J. T. (1996b). Reconstructing social constructionism: A reply to Albert Ellis. *Journal of Mental Health Counselling, 18*, 29-40.
- Guterman, J. T. & Kirk, M. A. (1999). Mental health counsellors and the Internet. *Journal of Mental Health Counselling, 21(4)*, 309-326.
- Kalb, C. (2001). Seeing a virtual shrink. *Newsweek* 01/22/2001, 137(4), 54-56.
- Kirk, M. A. (1997, January). Current perceptions of counseling and counselor education in cyberspace. *Counseling Today*, pp. 17-18.
- Lily Mastura Hj. Harun. (2000). E-mail therapy: A case study. In *Proceeding Of Education And ICT In The New Millennium*, ed. Zaidatol Akmaliah Lope Pihie, Lily Mastura Hj. Harun, Kok Lian Yee et. al, p. 542-552. Serdang: Universiti Putra Malaysia.
- Matthews, C. & Marino, J. (1990). *Professional Interactions: Oral Communications Skills in Science, Technology and Medicine*. New Jersey: Prentice-Hall.
- McLeod, J. (1993). *An Introduction To Counselling*. UK: Open University Press.
- McLeod, J. & Machin, L. (1998). The context of counselling: A neglected dimension of training, research and practice. *British Journal of Guidance and Counselling, 26*, 325-337.
- Mohd Nor, M. (2000). Era maklumat dari perspektif Islam. *Pemikir*. Isu Jan-Mac, 15-26.
- Morrissey, M. (1998, May). ACES Technology Interest Network drafts technology competencies for students. *Counseling Today*, 6, 17.
- Murphy, L.J. & Mitchell, D. L. (1998). When writing helps to heal: E-mail as therapy. *British Journal of Guidance and Counselling, 26*, 21-33.
- Oravec, J. A. (1996). *Virtual Individuals, Virtual Groups: Human Dimensions Of Groupware And Computer Networking*. New York: Cambridge University Press.
- Oravec, J. A. (2000). Online counselling and the Internet: Perspectives for mental health care supervision and education. *Journal of Mental Health, 9*, 121-136.
- Othman, Mohamed. (2000). The information highway and the readiness of counsellors in delivery of counselling services. In *Proceeding Of Education And ICT In The New Millennium*, ed. Zaidatol Akmaliah Lope Pihie, Lily Mastura Harun, Kok Lian Yee et. al, p. 225-230. Serdang: Universiti Putra Malaysia
- Rosenfield, M. (1997). *Counselling By Telephone*. London: Sage Publication.
- Rosenfield, M. & Smillie, E. (1998). Group counselling by telephone. *British Journal of Guidance and Counselling, 26*, 11-19.
- Sampson, J.P. Jr., Kolodinsky, R. W., & Greeno, B. P. (1997). Counselling on the information highway: Future possibilities and potential problems. *Journal of Counselling and Development, 75*, 203-212

- Sanders, P. & Rosenfield, M. (1998). Counselling at a distance: Challenges and new initiatives. *British Journal of Guidance and Counselling*, 26, 5-11.
- Shaharom, T.M.S. (2000). Dari pascamoden ke cyberspace. *Pemikir*. Isu Jan-Mac:101-124.
- Siegmán, A.W. & Friedstein, S. (1989). *Non-verbal behavior and communications*. New York: Hillsdale.
- Surtees, P.G.; Pharoah, P.D.P.; & Wainright, N. W. J. (1998). A follow-up study of new users of a university counselling service. *British Journal of Guidance and Counselling*, 126, 255-272.
- Tang, C.Y. (1996). *Bimbingan Dan Kaunseling: Untuk Sekolah Rendah Dan Menengah*. Kuala Lumpur: Kumpulan Budiman Sdn. Bhd.
- Tait, A. (1999). Face-to-face and at a distance: The mediation of guidance and counselling through the new technologies. *British Journal of Guidance and Counselling*, 127, 113-123.
- Toffler, Alvin. (1991). *The third wave*. New York: Bantam Books.
- Watts, A. (1996). Computers in guidance. In A. Watts, B. Law, J. Killeen, J. Kidd, & R. Hawthorn (Eds.) *Rethinking Careers In Education And Guidance: Theory, Policy, And Practice*. London: Routledge.

Chapter Eighteen

International Consultation, Professional Development and The Internet: School Psychology Practice and the Future

by Gayle L. Macklem, Rachel Kalinsky, & Kristin Corcoran

Changing the roles and numbers of mental health workers in schools is critical if children's mental health needs are going to be met. School psychologists, in particular, need to take on more contemporary roles. It now appears as if it may be possible to meet both peer consultation and professional development needs of school psychologists through technology, and at the same time, provide practitioners with the impetus to change.

Moving Beyond the Traditional Role

The future of school psychology depends on our being able to demonstrate that school psychologists can help schools in a number of ways, well beyond traditional gate-keeping duties. School psychologists continue to struggle with role limitations due to the fact that special education has expanded, and also because perceptions of what school psychologists do continues to be restricted (Ruskowski & Perticone, 2000). Many people still maintain that the school psychologist's sole function is to complete testing within the special education process.

As we broaden what "assessment" means, we must realize that we are addressing both educational and health needs in schools (Bardon, 1994). Indirect service including consultation, research, program development and in-service training are role responsibilities that school psychologists need to engage in more frequently. School psychologists may be well aware that research, data-based decision making, and program evaluation are needed but role change is slow in coming for a variety of reasons (Bradley-Johnson & Dean, 2000). At the same time there is hope, as individual school psychologists move into roles that are more contemporary (Bracken, 1999). As the needs of society have changed, school psychological services have expanded to meet those needs. The demand for increased services will continue as schools try to meet the educational and emotional needs of all children (Kamphaus, 1995).

Facing a Shortage of School Psychologists

The future holds both problems and promises. We may be facing a shortage of school psychologists in the near future. For example, surveys show that significant numbers of school psychologists are retiring in the United States (Thomas, 1999). This potential shortage can be considered positively, emphasizing the need for training programs at the graduate level, and indicating a strong job market for school psychologists (Lund, Reschly & Martin, 1998). However, among the negative consequences of such a shortage is the potential compromise of standards for entry into the profession as well as the lack of progress in expanding the role of school psychologists. Because the need for additional practitioners is greater than applicants to training schools, there is a need for ways to attract new applicants for these programs and to look at alternative training routes (Miller & Palomares, 2000).

Efforts to recruit more individuals to the field of school psychology can begin by increasing public awareness about school psychology as a profession. Within and outside of schools, many do not understand the role of the school psychologist because of its lack of visibility. Miller and Palomares (2000) offer recruitment strategies, such as identifying undergraduate "feeder" programs, making more people aware of the available graduate training programs, and adapting programs to meet the needs of more students. As the requirements for entry into the profession increase, more and more school psychologists are seeking doctoral degrees and post-doctoral training (Kamphaus, 1995). If this trend persists, one wonders how state certification regulations may be altered and how this could affect the enrollment in school psychology training programs. However, many still consider

school psychology to be a non-doctoral profession that is separate from others within the field of psychology (Bardon, 1994).

Keeping Abreast of Changes

Educational reform affects the work of school psychologists. Psychologists' knowledge about learning and the ways schools can be more productive can contribute to such reforms (Sarason, 1997). Some believe that one of the biggest threats to school psychology is a lack of power to change what is wrong in schools (Sarason, 1997; Dawson, 1994). State, national and international school psychology associations must support individuals in the profession to help them make changes both in the structure of schools and also in the support provided to children. By focusing on the social context of education, one can approach school reform using a relational approach. School psychologists can advocate for such school models as a way to address the needs of school children academically, behaviorally and psychologically (Baker, Terry, Bridger & Winsor, 1997).

With the ongoing social and political changes in society, school psychologists and other school personnel are faced with a greater need for preventative work within the education arena. Exposure to violence in the community and in schools has become a primary concern in the United States. The impact of disasters from a variety of sources including weather, accident, illness or violence is better understood today. We know that exposure to violence is related to mental health issues in children (Mazza & Overstreet, 2000). School psychologists must begin to reduce the impact of violence on at-risk students by helping students develop protective behaviors and to develop strategies with which to cope with continuing violence. Knoff (2000) sees school psychology moving in the future toward developing prevention programs, which will address safety, behavior management and discipline. There have been many school-based programs that were developed in the last decades of the twentieth century to address the importance of mental health issues in education (Pfeiffer & Reddy, 1998). School psychologists are a valuable resource within such programs, integrating their knowledge with other school personnel and community agencies in order to focus on prevention, treatment and the general wellness of youth in schools.

Technology's Influence on School Psychology

Uses of Technology by School Psychologists

Technology is part of the present and is most certainly part of the future of school psychology. In 1999, technology in the fields of education and psychology was a focus at the National Association of School Psychologists Annual Convention in Las Vegas (Macklem, 1999). New ways in which computer technology can help those in the field were presented. School psychologists are using technology to some extent already. They use computers for word processing, to score tests and to collate data. They prepare newsletters and reports using the computer. School psychologists use e-mail and web pages to share information and to communicate with others through listservs. School psychologists use the Internet to search for information about disabilities and to locate self-study guides available on professional organizations' web pages (Pearrow & Macklem, 1998).

As schools are beginning to use technology, school psychologists may want to be involved in the planning of how technology will be used in work with students, particularly if computer assessment is to be part of that future (Taylor, 2000). The future may involve computerized ability tests, which will include sophisticated measures such as precise reaction time. Given that certain achievement measures (e.g., entrance exams) and neuropsychological instruments can be administered via a computer, there may be a growing trend toward this type of test administration. However, Kaufman (2000) feels that only a "radically different and new methodology" would entice school psychologists to move away from their traditional tests with their extensive research bases. School psychologists should also be kept abreast of the ways that assistive technology can help students with disabilities and what types of software programs are being integrated into classrooms.

Benefits of the Internet to School Psychology

The Internet gives tremendous access to information and resources. It allows for collaborations and networking with peers, continuing education and long distance learning (Taylor, 2000). There are an increasing number of on-line courses being offered in psychology and other disciplines, opening up opportunities for people who may not have geographic access to a training program (Roberts, Blakeslee, Brown, & Lenk, 1990). The Internet is a potential time saver in research projects. It has already been demonstrated that researchers can post

questionnaires on the World Wide Web (WWW) and get fast responses, which saves mailing costs and reduces data entry errors. In spite of the limitations of data collection on the WWW, this method can be an efficient means for psychology data collection (Pettit, 1999). The Internet has been used, by authors of journal articles and papers, to compose and revise work from start to finish through numerous drafts using e-mail, so that the entire article is completed online (Roberts, Blakeslee, Brown, & Lenk, 1990). Counseling applications through the Internet have been developed including opportunities for supervision, collaboration and conferencing, as well as collecting data for research and establishing bulletin board systems and listservs to exchange information (Sampson, Kolodinsky, & Greeno, 1997).

There are numerous resources available to psychologists through the Internet, but only a small number of websites that are specifically designed for school psychologists. Among them, *The Global School Psychology Network* has a website (<http://www.dac.neu.edu/cp/consult/index.html>) that provides a description of the various professional development options GSPN offers as well as helpful resources for parents and practitioners, including links to related sites. *School Psychology Resources Online* is an extremely thorough, well-organized site with links to various topics of interest to psychologists, educators and parents and can be reached at <http://www.schoolpsychology.net/>. The *WWW School Psychology Homepage* (<http://facpub.stjohns.edu/~ortiz/spwww.html>) is sponsored by St. John's University and offers many resources for school psychologists, including information about training programs, legal resources, as well as an annotated bibliography of Internet resources for counseling and school psychology. The *School Psychologist's Home Page* (<http://www.bartow.k12.ga.us/psych/main.htm>) is sponsored by the Bartow County School System in Georgia and offers educational links, common questions asked of school psychologists, forms and paperwork, and information about crisis intervention. There are also websites for state associations, NASP and ISPA, as well as sites to access school psychology journals.

Ethical Issues Regarding Internet Use

Apart from its benefits, use of the Internet also poses ethical issues. There are potential problems using e-mail for consultation with peers, parents and other professionals. It is not too soon to look at the possibilities for ethical violations that could conceivably occur using e-mail to help students (Brown, 2000; Harvey & Kruger, 1999). When computer use was becoming more common among psychologists, there were concerns about the validity of computer-based interpretive reports and their potential substitution for psychological assessments (Sutkiewicz, 1997). For counseling applications, there have been identified risks to using the Internet. There are concerns about the level of confidentiality regarding clients' histories, the validity of information transmitted electronically, the credentials of counselors and the inability of some individuals to access computer networks due to hardware and Internet access costs (Sampson, Kolodinsky & Greeno, 1997). Certain databases may not provide accurate information. One should learn whether a website is reputable before gathering data in order to make sure that the information is reliable (Brown, 2000).

As a way of dealing with the ethical problems posed by electronic communication, the research team of the Global School Psychology Network devised a set of guidelines for participants to follow. The guidelines include the following which address a variety of issues:

1. Leave important decisions about cases to face-to-face meetings,
2. Use e-mail for generating possible alternatives,
3. Remember that many social cues are absent when using electronic mail. Phrases might be misconstrued as being critical, insulting or dismissive,
4. Sometimes it is easier to clarify an issue with a brief telephone conversation or an in-person meeting than e-mail,
5. Do not use information that will lead to the possible identification of a student, client or colleague. Use a pseudonym in place of the actual name, and
6. If you use a computer that is accessible to other individuals, do not leave your 'user id' or 'password' on the computer. If you do, other people can log on to your account. (from Kruger & Macklem, 1999, p.20)

Consultation in School Psychology

Electronic Consultation and Collaboration

Leaders in school psychology feel that it is extremely important for school psychologists to have supportive colleagues to turn to who share a similar way of thinking and who share similar visions (Dawson, 1994). Computer-mediated collaboration is disseminating rapidly in education, business and professional circles. Because computer-mediated communication is thought to be one of the main influences that are changing the way we learn, electronic collaboration in education is being studied intensely by a small, but increasing number of researchers (Kirkley, Savery, & Grabner-Hagen, 1998).

Online environments can promote group interaction, which makes them very useful for collaborative learning (Bonk & Cunningham, 1998). Interestingly, when use of e-mail increases in organizations, the other means of social interaction tends to decrease (Kirkley, Savery & Grabner-Hagen, 1998). This suggests that the social interactional effects of Internet use need to be studied.

Consultation as Technology and Computer Mediated Consultation

Computer mediated consultation via the Internet is a relatively new aspect to the field of consultation, but it seems to have very positive results. It is an exciting and new avenue for school psychologists to use as a way to consult with peers around the world. Every school psychologist who is able to connect to the World Wide Web has the capacity to access voluminous information and resources, which can help make his/her job easier, and in turn can become more knowledgeable and adept in the field. The Internet helps enhance consultation and, in addition, has the potential to address professional development needs as it affords distance learning (Adelman & Taylor, 2000).

Computer-mediated consultation has tremendous potential for reducing one of the more significant barriers to using consultation as a method of service delivery. Time appears to be a major barrier for school psychologists' ability to consult with others in the field. Some school psychologists may also feel isolated and work in a system that only has a limited number of school psychologists. Communicating via the Internet allows a building-based school psychologist to consult with others without having to meet face-to-face at every meeting. Not only does this form of communication help with time constraints, but it also provides the opportunity for individual professionals to consult with school psychologists all over the country. Consultation between school psychologists and teachers has received more attention by researchers than consultation between school psychologists and parents. Less work has been done on peer mediated consultation than on other types of consultation (Macklem & Kalinsky, 2000).

The Future of Consultation

Consultation is most likely going to increase in the future because of students' needs, and both teachers and school psychologists want to see consultation services increase (Stenger, Tollefson & Fine, 1992). Consultation is not only going to increase in the schools, but also with outside agencies and other service professionals (Bradley-Johnson & Dean, 2000). The future holds very promising indicators that the practice of consultation is on the rise. Enhanced peer consultation is becoming a more popular method for professionals to use as an aspect of consultation. The use of technology is another way to facilitate consultation, which includes peer consultation. Although these concepts are relatively new to the field, there is research that indicates their effectiveness for school psychologists.

Peer Consultation

Peer consultation is important for several different reasons. Since many school psychologists are relatively isolated from their peers, this provides them with the opportunity to consult with others in the field. It also provides school psychologists with the ability to update their skills and meet the demands of their job. Peer consultation is also beneficial for new practitioners who may need assistance in one or more aspects of their work where their training may have been lacking (Macklem & Kalinsky, 2000).

For many professional school psychologists, there is a limited amount of supervision by qualified supervisors. However, peer consultation has been seen as a potentially very effective means to increasing support available to practitioners. Spice and Spice (1976) introduced the triadic model of peer supervision for school psychologists. In this model, counselors work together in triads rotating the roles of supervisee, facilitator and commentator. In

this potentially valuable model, school psychologists must be willing to assume responsibilities similar to that of a supervisor.

One advantage of peer consultation is that it focuses on helping each participant reach a desired goal, rather than evaluating each other. Peer consultants are responsible for providing feedback and support to a colleague; however, they have a greater responsibility to evaluate their own performance, which contrasts with the traditional model of supervision.

Peer consultation occurs when peers work together for mutual benefit. The consultants provide both critical and supportive feedback, but importantly it does not involve evaluation. The term peer consultation is used to describe similar relationships that are nonhierarchical in nature so that neither individual has the power or responsibility to evaluate the other's performance. Peer consultation offers numerous benefits to school psychologists (Macklem & Kalinsky, 2000):

1. Decreased dependency on experts,
2. Greater interdependence of colleagues,
3. Increased responsibility for assessing one's own skills and those of peers,
4. Opportunity to structure one's own growth,
5. Increased self-confidence, self-direction and independence,
6. Development of consultation skills,
7. Use of peers as models,
8. Ability to choose the peer consultants, and
9. Elimination of evaluation and supervisory responsibility.

(Benshoff & Paisley, 1993)

In order for the peer consultation process to be successful, individuals must be motivated, commit to scheduled meetings and must be open to giving and receiving positive and negative feedback. It is impossible to provide and receive constructive criticism to help improve skills for each individual involved in the process.

Research indicates that the two aspects of peer supervision that have been seen as potentially valuable are: receiving feedback from peers about counseling technique and approaches and the actual peer support and guidance, which involved encouraging one another (Benshoff, 1992). In the case of peer consultation, both feedback and support appear to be very important.

Professional Development Needs in School Psychology Around the World

Need for Professional Development

Some reviewers feel that school psychologists in the United States have more professional development opportunities than were available in the past. Others (McIntosh & Phelps, 2000) seem to feel that more professional development is needed. Those who feel that more is needed suggest that peer supervision is a way to help school psychologists meet professional development needs. They advocate for professional development credit for supervision. One complication of supervision is the fact that it sets up hierarchical relationships, which may involve evaluation and this might dampen opportunities for growth.

The field of school psychology is quite diverse. Many school psychologists are isolated in their work with little access to other school psychologists. Laws that effect practice are changing along with societal change. These changes show that there is continual need for training for practitioners (Harvey & Struzziero, 2000).

School psychologists around the world seem to be dealing with many of the same issues. For example, school psychologists in France are currently dealing with the same issues that school psychologists are struggling with in the United States and elsewhere (Bartarseh, 1999). Issues such as bilingualism, distinguishing disabled readers from weak readers as a result of poor instruction, and the dynamics of behavior problems appear to be widespread concerns. School psychologists in New Zealand are addressing issues such as clinical interventions and crisis interventions, ethical and legal issues, consultation and school culture. Again, these concerns are familiar issues to school psychologists worldwide. The concerns are not only child centered but involve job duties. School psychologists in the United Kingdom tend to concentrate on cognitive and educational assessment because of special education mandates just as in the United States, and yet they want to be able to use the many skills that they have been trained to perform (Galloway, 1998; Sheppard & Dawson, 1998). Role issues are key

topics of discussion in France, Greece, Russia and the United States (Bartarseh, 1999; Hyman & Kaplinski, 1994; Oakland, 1996; Psalti, 1995).

Professional development needs are universal. The need may be especially critical in countries where school psychology is a relatively new field and professionals are working toward acceptance of their services as in Hungary, Russia and Greece. Professional development is also a critical need in areas where the field has a longer history (Oakland, 1996; Pluymert, 1997; Psalti, 1995). In the United Kingdom, educational psychologists are urged to attend to their own personal development and emotional development needs (Indoe, 1998).

In some areas of the world, specific plans are in place for professional development. In the United States, the National Association of School Psychologists has published a text on supervision by Harvey and Struzziero (2000), who advocate for supervision as a way to prevent "professional stagnation" and to improve services (p. xii). At Massey University in New Zealand, professional development mentors work with interns to develop individual professional plans. The program has been developed to enhance professional development through collaborative projects, consultation with experts, group preparation of journal articles on the Internet, and consultation that is mediated through the computer, for support and supervision (Ryba, Pine, Mentis & Bowler, 1999). Ryba and Selby (1999), educational psychologists from New Zealand, envision a global training community for school psychologists via the Internet.

Computer-Human Interaction Studies

There is considerable interest at present in the social context of learning. This body of work suggests that it is critical to develop more participatory, learner-centered environments (Bonk & King, 1998). Contemporary models of education stress constructivist approaches which are expected to replace the traditional model in which the teacher is the transmitter of information to the learner (Bink & Cunningham, 1998).

A number of computer-human interaction studies are underway. Studies of collaborative writing mediated by the computer, for example, have lead to the development of taxonomy of five levels that can help define interaction-writing tools:

- Level 1 involves electronic mail and delayed messaging tools,
- Level 2 involves delayed conferencing/collaboration and remote access tools,
- Level 3 depicts real-time dialoguing as in chat rooms,
- Level 4 is a higher level as two or more individuals work on text concurrently,
- Level 5 is described as cooperative hypermedia in that graphics, video or other features are added to concurrent collaboration.

(Bonk & King, 1998)

What interests researchers on collaborative writing is how the technology tools will impact the participants, i.e., the human interaction. Initial findings suggest that both synchronous and asynchronous computer collaboration efforts can have advantages over face-to-face discussions when one member of the dyad has more expertise than the other, as in professional development situations or coaching or mentoring relationships. Those advantages include:

- more engagement in learning,
- greater depth of discussion,
- increased time on task, and
- facilitation of higher order thinking.

(Bonk & King, 1998, p.20)

Computer-Supported Collaborative Learning

A specific sub-field of computer-human interaction studies involves computer-supported collaborative learning. Instructional environments, which utilize technology, involve learner-centered principles such as social interaction, interpersonal relations and communication with other learners. In fact, some researchers feel that the success of learner-centered instruction depends on using collaborative technologies where groups can be formed based on common interests (Bonk & Cunningham, 1998). The theoretical underpinnings for use of collaborative technologies for learning include Piagetian-inspired cognitive-constructivist principles, and the

Vygotsky inspired social constructivists. Social constructivists are concerned with dialogue, interaction and collaboration. Both points of view are thought to promote generative learning.

Sociocultural objectives match the contemporary learner-centered goals of education. These objectives include designing important learning experiences from the point of view of the learner and focusing on collaboration and mentoring as part of those experiences. Sociocultural theory promotes the ideas that learners construct knowledge when they interact, or engage in social dialogues, with others (Kang, 1998).

Professional Development Theory

In the field of education in the United States, there is a history of professional development programs that have not worked, principally because the programs have not been sustained over time (Cooper & Boyd, 1998). Researchers have noted that presenting information alone does not sustain a change. Studies of professional development methodology indicate that not only presenting information in isolation, but also modeling and demonstration, measured in isolation, tend not to result in changes in practice. When adults try out new skills using simulation the result is improved learning, but only when new skills are simple. Feedback, particularly if it is structured, results in changes in professionals' behavior. Coaching specifically has resulted in the most sustained results in assisting professionals to translate new knowledge into practice, and this works best if some of the other instructional methods are combined with coaching (Gravois, Rosenfield & Vail, 1999; Sprinthall, Reiman & Thies-Sprinthall, 1996). Although there are disadvantages to mentoring such as the difficulty of matching novice to experienced school psychologists, the advantages of mentoring include more freedom for the developing professional, a good deal of support for the novice, and benefits to both individuals participating in the relationship (Harvey & Struzziero, 2000).

Theories of adult learning suggest that as individuals develop professionally, they go through various levels. Stages of professional development have been identified in several professional fields of study. Studies of psychotherapists (reported in Guest, 2000) suggest six stages of development, exuberance, taking charge, identity, independence, calm, and collegiality (p.238). Steffy, Wolfe, Pasch, & Enz (1999), in reporting on the stages of teachers' professional development, list novice, apprentice, professional, expert, distinguished and emeritus. Dreyfus and Dreyfus (reported in Harvey and Struzziero, 2000) have suggested five levels of development: novice, advanced beginner, competent, proficient, and expert.

Stages of professional growth and development may not be exactly the same for school psychologists as for other professionals, and there are researchers looking at this question (Guest, 2000). Yet, given the similarity of ideas about adult development, the stages are likely to be similar. Given this caution, within these theories an individual might function at a different growth level for each of the several sub-role responsibilities involved in a given job. It is at the proficient level that reflection becomes prominent in practice (Harvey & Struzziero, 2000). However, many practitioners do not grow beyond the competent level into the proficient and expert levels, possibly because of the lack of stimulation through professional development.

Vygotsky's work suggests that adults grow cognitively when they interact through discussion in social groups. In addition to what the individuals bring to the task cognitively, an open climate or a facilitating environment seems to be needed. More specifically, the way in which the facilitating environment works is dialoguing or collaborative reflection with supportive peers in order to support generalization of learning (Cooper & Boyd, 1998; Sprinthall, Reiman & Thies-Sprinthall, 1996). Studies of training programs with school counselors show that guided reflection and support has the effect of stimulating cognitive growth and supervisor skills (Sprinthall, Reiman & Thies-Sprinthall, 1996). This type of relationship and environment looks as if it may facilitate professionals moving to higher personal levels of development.

Theories of the career cycles of educators suggest that there is a decrease in satisfaction around the midpoint of the job cycle. Becoming a mentor or resource to other professionals is a role change that might prevent this slump. At the highest levels of adult personal development, educators desire to be facilitators of change, or models capable of reflective judgment. In order to reach the highest levels of adult stages growth, educators need to continue to learn and engage in ongoing professional development because adults who function at higher stages of development perform more competently when presented with complex tasks (Sprinthall, Reiman & Thies-Sprinthall, 1996).

Professional development, when it is thought of as cognitive-developmental instruction, suggests that the key elements include the opportunity for taking on a role such as mentor (peer coach or leader) balanced with

reflection and dialoguing. This effort must be sustained over time, and individuals experiencing this growth must be supported through collegial or collaborative groups (Sprinthall, Reiman & Thies-Sprinthall, 1996).

In order for growth to occur, professional development must be sustained over time, a network of individuals with similar interests must be developed, dialoguing must occur on a regular basis, relationships must be trusting, there must be opportunities to take the role of teacher/leader/mentor/coach, and reflection must be guided (Brody & Davidson, 1998).

Professionals must develop and maintain competencies in communicating, and in relationship making, in order to collaborate to work. Offering assistance is a critical component of collaboration. At the highest levels of professional development, interactive professionalism takes place. Interactive professionalism refers to "reflection about practice," along with an assumption of improving one's skills on a life-long basis (Gravois, Rosenfield & Vail, 1999, p.159).

Examples of Professional Development Communities

Learning Communities

Professional collaboration is a special relationship between individuals. The collaborators must support the professional independence of one another, and appreciate differences of opinion. When a group of professionals are involved in collaboration, they might be thought of as a collaborative community. In a collaborative community, each individual receives and gives assistance making a genuine contribution. Some writers feel that as our technology has become more and more interactive, communication via computers has the potential to contribute to the re-organization of the learning process itself (Bonk & King, 1998).

Developing communities of learners is a new goal in education. Forest (1998) has defined community as "an inherently cooperative cohesive and self-reflective group entity where everyone feels they belong, and whose members work on a regular, face-to-face basis toward common goals while respecting a variety of perspectives, values, and life styles" (p.292). In a community of learners, diversity is respected. In order to develop a community of learners, interaction must be sustained around common interests, valuable experience must be shared, and getting one's needs met is critical. There may be sub groups, or small learning groups, within the larger community. Forest also notes (p.302) that a successful community is able to demonstrate itself as a model for others.

Communities of learners, communicating online, build collective knowledge. When establishing learning communities that are truly collaborative, the concept of 'teacher' is reformulated (Brody & Davidson, 1998). The online discussion leaders assist and support the learning of others rather than direct the learning of others, through instructional conversation. The role of collaboration in learning enhances each learner's ability to receive information from several perspectives, and allows learners to experiment with ideas and generate new insights. The social nature of learning becomes very clear, as does the need for communities of practice (Bonk & Cunningham, 1998).

Research has been conducted on the various aspects of collaborative computer technologies. Chat areas, for example, have discussion threads with some discussion focused and other discussion off-track or social. This is referred to as 'noise' because it interrupts the flow of the conversation. There are different levels of participation. For example, whereas some individuals contribute a high number of messages, others read but do not contribute. This phenomenon appears to be common in computer-mediated communication. These individuals are often referred to as 'lurkers' (Bonk & King, 1998). In a chat room, the discussion can be very confusing for some participants because it is difficult to keep track of the key conversational thread at times.

Communicating by e-mail has been found to level the invisible hierarchies between participants, support and promote teamwork, and attract individuals within organizations who might not otherwise actively participate. E-mail promotes exchanging information through collaborative networks (Kirkley, Savery & Grabner-Hagen, 1998). A series of studies of electronic communication in graduate courses at a university in the mid-west region of the United States have looked at the effects of computer-human interaction. It was found that when the instructor acted as a facilitator of student learning, students who communicated via e-mail returned messages to the whole group rather than to a specific individual most of the time (Kirkley, Savery & Grabner-Hagen, 1998). Frequency of messages over time increased and then decreased. Important side discussions took place so that a wider group of topics were discussed than would have been covered if the group had been engaged face-to-face. Men contributed more than women contributed, and native speakers sent the majority of messages. Finally,

many of the participants did not send messages although they read the messages sent by others.

Communication via e-mail results in shorter messages than face-to-face communication. Yet over time, social effects take place. E-mail users even make up for the lack of nonverbal messages by creating signs to communicate emotions. In fact, one point of view suggests that emotion in computer-mediated communication can be more intense than in face-to-face communication because participants build stereotyped and idealized images of frequent discussion partners. Self-awareness and objectivity is enhanced when nonverbal cues are missing (Kang, 1998). In a longitudinal study in Korea, which also involved students, group cohesiveness developed and participation was more equal than in face-to-face discussions. When chat exchanges were made, students took on roles in the process naturally, such as 'summarizer' (Kang, 1998).

One of the key components in this series of studies is collaborative learning to foster social interaction and transformative dialogue. Transformative dialogue is interactive, addresses real problems, encourages the formation of hypotheses and explanations and develops common understandings. Communities are developed that build knowledge as participants learn from each other (King, 1998).

Professional Development Communities

One example of an online community is TAPPED-IN. TAPPED-IN is a research project, which was designed by the Center for Technology in Learning in Menlo Park, California, USA. It went online in 1996. The vision was based on the fact that teachers do not have time for significant professional development or to participate in learning communities. Technology would serve as a skeleton on which to build a professional development community for this group of educators (Schlager, Fusco & Schank, in press). FTF sessions as well as both asynchronous and synchronous activities using the computer are involved.

Some of the data that the project is generating has been posted online. Participation is an interest of these researchers and they have found that 10 to 20 percent of those who have become members in TAPPED IN log on each month, with more activity during the week than on weekends. They have also found a number of volunteers to help man the services they offer, and these individuals are described as 'elders' of the community (Schlager, Schank & Fusco, 1999; SRI International 2000). Initial findings of these studies indicate some of the components of a successful online community for teachers include meaningful online activities, incentives and awards for participation, mentoring for new users and support services for every member of the community, and informal networking (Schlager, Schank & Fusco, 1999). The initial barriers to participation have been attributed by new members to technology, but researchers are finding that there are social barriers as well which have been described as akin to being a tourist in a different country at the busiest time of the day (Schlager, Fusco & Schank, 1998).

Sprinthall, Reiman & Thies-Springshall (1996) assert that field-based professional development of educators is "about as difficult a problem to solve as exists" (p.699). In stepping up to the plate to meet this challenge, a group of researchers under the capable leadership of Louis Kruger, Psy.D., a professor at Northeastern University in the USA, have been working to develop a global professional development online community for school psychologists. The research described in this paper makes the challenge of developing such a community quite clear:

1. We do not as yet fully understand the stages of professional development for school psychologists specifically, although we have some ideas about the adult development of other professional groups.
2. We do not yet understand which school psychologists, at which stage of development, would most benefit from online professional development activities.
3. We do not yet understand whether or not school psychologists at differing levels of personal and professional development would have needs for differing types of support and different professional development activities.
4. We do not yet know whether participation in an online community will effect the day-to-day practice of school psychologists.

When the network began in 1994, it was not yet known whether or not a community of professional practice could be established on the Internet, because this had not yet been demonstrated. Research was the critical issue from the beginning. The first year, classroom teachers were paired with school psychologists to form consultation dyads via the Internet. The classroom teachers in the project presented children's issues and the school psychologists associated with the project, using a behavioral model, served as consultants giving each teacher feedback, support and specific assistance in child management and other issues. The goal was to improve teacher knowledge and to reduce feelings of emotional isolation that many teachers experience. This initial thrust of the project showed that the classroom teachers did experience support as well as specific assistance (Kruger & Struzziero, 1997; Kruger, Struzziero, Kaplan, Macklem, Watts, & Weksel, under review).

In 1997, the focus of the project shifted to investigate whether or not it would be possible to establish a professional development community on the Internet that would be open only to school psychologists all over the world. Also in 1997, the new Massey University Educational Psychology Training Programme of New Zealand joined the Global School Psychology Network. Graduate students and university staff were provided with their own folder or 'neighborhood' and participated in the other discussion groups available through the project (Ryba, 1999). Ken Ryba (1999), a member of the GSPN research team in New Zealand, concluded that the GSPN dialogues represented a network of knowledge. Students could access this knowledge through scaffolding so that they could grow personally and professionally. Focusing on forming the community was as important as content and training activities. The network was opened to state and national associations of school psychologists as well.

The new focus of the GSPN research team became whether or not it would be possible to demonstrate if individuals, who communicate primarily via the Internet, could experience a sense of community. If this were possible, then the team wanted to identify the factors that would lead to a sense of community, and which of those variables would be most important. The research team was also interested in how school psychologists would evaluate the GSPN as compared to other professional development opportunities (Kruger & Macklem, 1999).

Data from the first year indicates that 84.4% of the respondents were from 21 states in the USA, and the other 15.6% of participants were from New Zealand, Israel, and Greece. Recruitment efforts were strongest in Massachusetts and New Zealand with the help of Massey University colleagues. Between October of 1997 and June of 2000, 343 school psychologists logged on to the network. In June of 2000, 25% of the participants lived in countries other than the United States (Kruger, personal communications via e-mail, 6/30/2000).

The GSPN is accessible to school psychologists with special software by FirstClass, developed by Centrinity, Inc. (<http://www.centrinity.com/>). A school psychologist can join the network at no cost by: 1) agreeing to the ground rules akin to being a good neighbor, 2) agreeing to complete surveys, and 3) agreeing to allow messages to be used for research purposes. Once this is accomplished, a desk top appears with numerous choices. Each participant joins a small neighborhood and also is given access to the Community Forum, an open discussion group. Another large open area is the 'Theme of Month' folder. The network also offers free online mini courses and study groups, a resource library, a project updates folder, something akin to a yearbook with biographical notes prepared by members, several association folders and private mailboxes (Macklem, Kalinsky & Kruger, 1999).

It is interesting that many of the problems in establishing an online community that SRI International experienced have also been observed to occur on the GSPN. For example, a smaller percentage of individuals log on regularly than actually belong to the network and new and potential members attribute problems to technology. Although the communities have developed totally unaware of each others work, some of the same components have been established including:

1. giving space to associations (Massachusetts, New Jersey, and APA on the GSPN),
2. commandeering volunteer leaders,
3. hosting online events,
4. presenting Topics of the Month for discussion,
5. offering courses and setting up chats in real time.

There are two apparent major differences between the two communities. First, SRI International holds conferences and live workshops to attract participants but the GSPN has not used this method of attracting participants. And second, from the beginning, the GSPN has had a governing board with clear rules for participation

to maintain a welcoming and accepting atmosphere online whereas SRI International has not (Kruger, personal communication; Schlager, Fusco & Schank, 1998).

Findings to Date from the Research

The early data from the GSPN has indicated that it is possible to design and implement a professional development community on the Internet. Survey data clearly demonstrates that a 'sense of community' can be established in those individuals who participate, with a greater sense of community developing among those who participate more frequently. It has been found (contrary to the apparent data from SRI International) that a sense of community can develop irrespective of whether or not individuals see each other face-to-face. Frequencies of logging on, and the number of messages sent, were both found to be related to developing a sense of community. In addition, issues such as feelings of safety, ability to influence discourse and other decisions of the community, and stimulating professional development were also important (Kruger, Shriberg, Donovan & Burgess, 2000). During the 1999-2000 school year, 208 people logged on from 35 states and several countries (L. Kruger, personal communication, September 11, 2000).

Continuing research is providing additional evidence that degree of participation, and participants feelings about the environment contribute to their own sense of community. The strongest variables have been meeting the professional development needs of participants and providing social support, and the active participation of members (Kruger, Maital, Macklem, Shriberg, Burgess, Kalinsky & Corcoran, paper under review).

Advantages of International Consultation and Professional Development Experiences on the Internet

One of the more enticing aspects of the network has been the ability to communicate with school psychologists around the world. International consultation will undoubtedly be part of the future. The GSPN has demonstrated that international consultation is possible through the first project of its kind in school psychology, the Global School Psychology Network. There are a number of advantages of international consultation from the point of view of the authors:

1. access to peers functioning at various stages of professional development,
2. access to human resources, i.e., the personal/professional experiences of peers which allows us to think, 'outside the box' when problem solving,
3. opportunities to coach or mentor others, which in turn contributes to one's own professional growth,
4. opportunities to share one's own work with colleagues in other parts of the world,
5. opportunities to expand one's worldview and the way in which we view our own specific job duties which affords opportunities to expand thinking and reflect about what we do,
6. the realization that we are dealing with many of the same issues no matter where we live, and
7. opportunities to earn professional development credits at home.

The need for professional development, the isolation of many school psychologists from their peers, the differing levels of development from novice to expert, and the frequent changes in the field of school psychology all pose a challenge for the field worldwide. The Global School Psychology Network has been designed to deal with these challenges by using technology to provide peer consultation and to facilitate the development of a sense of community among the school psychologists who participate.

Data that has been collected to date indicate that it is possible to establish a professional development community on the Internet which offers participants opportunities for learning and professional growth through the sharing of information and through informal (e-mail messages) and formal (mini courses) mentoring and coaching relationships. Although demonstrating that growth beyond the competent level of professional development has yet to be studied using the Internet, the ingredients for growth seem to be present and participants do feel that their professional development needs can be met.

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References

- Adelman, H.S., & Taylor, L. (2000). Shaping the future of mental health in schools. *Psychology in the Schools*, 37(1), 49-60.
- Bardon, J.I. (1994). Will the real school psychologist please stand up: Is the past a prologue for the future of school psychology? The identity of school psychology revisited. *School Psychology Review*, 23(4), 584-588.
- Bartarseh, G. (1999, October). On the scene in French school psychology. *Communique*, 27(2), p.22.
- Bartarseh, G. (1999, February). Voila! Notes from French school psychology periodicals. *Communique*, 27(5), p.24.
- Benshoff, J.M. (1992). *Peer consultation for professional counselors*. MI: ERIC/CASS.
- Benshoff, J.M., & Paisley, P.O. (in press). The Structured Peer Consultation Model for School Counselors. *Journal of Counseling and Development*.
- Bergan, J.R. (1977). *Behavioral consultation*. OH: Merrill.
- Bergan, J.R., & Tombari, M.L. (1975). The analysis of verbal interactions occurring during consultation. *Journal of School Psychology*, 13, 209-225.
- Bernard, J.M., & Goodyear, R.K. (1992). *Fundamentals of clinical supervision*. MA: Allyn & Bacon.
- Bonk, C.J., & Cunningham, D.J. (1998). Searching for learner-centered, constructivist, and sociocultural components of collaborative educational learning tools. In C.J. Bonk & K.S. King (Eds.), *Electronic collaboration: Learner-centered technologies for literacy, apprenticeship, and discourse*. (pp.25-50). New Jersey: Lawrence Erlbaum Associates, Publishers.

- Bonk, C.J., & King, K.S. (1998). Computer conferencing and collaborative writing tools: Starting a dialogue about student dialogue. In C.J. Bonk & K.S. King (Eds.), *Electronic collaboration: Learner-centered technologies for literacy, apprenticeship, and discourse*. (pp.3-24). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Bracken, B.A. (1999, June). Advances in school psychology: Thirty years of role expansion. *Communique*, 27(8), 12-13.
- Bradley-Johnson, S., & Dean, V.J. (2000). Role change for school psychology: The challenge continues in the new millennium. *Psychology in the Schools*, 37(1), 1-5.
- Brody, C., & Davidson, N. (1998). Introduction: Professional development and cooperative learning. In: C.M. Brody & N. Davidson (Eds.), *Professional development for cooperative learning: Issues and approaches*. (pp.3-21). Albany: State University of New York Press.
- Brown, A.J. (2000, January). E-mail and confidentiality. *Massachusetts Psychologist*, 6(11), 5.
- Brown, D.T. (1994). Will the real school psychologist please stand up: Is the past a prologue for the future of school psychology? The consolidation of the profession. *School Psychology Review*, 23(4), 589-600.
- Cohen, R. (1975). Co-professional collaborative school consultation model. Psychological consultation: Helping teachers meet special needs. Council for Exceptional Children, 211-226.
- Cooper, C., & Boyd, J. (1998). Creating sustained professional growth through collaborative reflection. In: C.M. Brody & N. Davidson (Eds.), *Professional development for cooperative learning: Issues and approaches*. (pp.49-62). Albany: State University of New York Press.
- Dawson, M. (1994). Will the real school psychologist please stand up: Is the past a prologue for the future of school psychology? School reform issues. *School Psychology Review*, 23(4), 601-603.
- Erchul, W.P., & Chewing, T.G. (1990). Behavioral consultation from a request-centered relational communication perspective. *School Psychology Review*, 5(1), 1-20.
- Folger, J., & Puck, S. (1976, April). Coding relational communication: A question approach. Paper presented at the meeting of the International Communication Association, Portland, OR.
- Forest, L. (1998). Cooperative learning communities: Expanding from classroom cocoon to global connections. In: C.M. Brody & N. Davidson (Eds.), *Professional development for cooperative learning: Issues and approaches*. (pp.287-307). Albany: State University of New York Press.
- Galloway, D. (1998). Special education in the United Kingdom: Educational psychologists and the effectiveness of special education. *School Psychology Review*, 27(1), 77-83.
- Gravois, T.A., Rosenfield, S. & Vail, L. (1999). Achieving effective and inclusive school settings: A guide for professional development. In: S.I. Pfeiffer, L.A. Reddy, & C.A. Maher (Eds.), *Inclusion practices with special needs students: Theory, research and application*. (pp.145-170). *Special Services in the Schools*, 15(1-2). New York: The Hawthorne Press, Inc.
- Guest, K.E. (2000). Career development of school psychologists. *Journal of School Psychology*, 38(3), 237-257.
- Gutkin, T.B. (1996). Core elements of consultation service delivery for special service personnel: Rationale, practice and some directions for the future. *Remedial and Special Education*, 17(6), 333-340.

- Gutkin, T.B. (1999). The collaboration debate: Finding our way through the maze: Moving forward into the future: A response to Erchul (1999). *Journal of School Psychology, 37*(3), 229-241.
- Harvey, V.S., & Kruger, L.J. (1999). Computer-mediated consultation: Ethical issues and guidelines. *Communique, 26*(6), 6, 8, 10, 12.
- Harvey, V.S., & Struzziero, J. (2000). *Effective Supervision in School Psychology*. MD: National Association of School Psychologists. (pp. xii; 110, 128).
- Hyman, I.A., & Kaplinski, K. (1994). Will the real school psychologist please stand up: Is the past a prologue for the future of school psychology? Role and function. *School Psychology Review, 23*(4), 564-583.
- Indoe, D. (1998). School psychology and mental health interventions in the United Kingdom: Educating education in mental health. *School Psychology Review, 27*(1), 97-105.
- Kamphaus, R.W. (1995). Psychological Services in the Schools. (ERIC Digest ED390017.) ERIC Clearinghouse on Counseling and Student Services, Greensboro, NC, American Psychological Association, Washington, D.C.
- Kang, I. (1998). The use of computer-mediated communication: Electronic collaboration and interactivity. In C.J. Bonk & K.S. King (Eds.), *Electronic collaboration: Learner-centered technologies for literacy, apprenticeship, and discourse*. (pp. 315-337). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Kaufman, A.S. (2000). Intelligence tests and school psychology: Predicting the future by studying the past. *Psychology in the Schools, 37*(1), 7-16.
- Knoff, H.M. (2000). Organizational development and strategic planning for the millennium: A blueprint toward effective school discipline, safety, and crisis prevention. *Psychology in the Schools, 37*(1), 17-32.
- King, K.S. (1998). Designing 21st-century educational networks: Structuring electronic social spaces. In: C.J. Bonk & K.S. King (Eds.), *Electronic collaboration: Learner-centered technologies for literacy, apprenticeship, and discourse*. (pp. 365-371). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Kirkley, S.E., Savery, J.R., & Grabner-Hagen, M.M. (1998). In: C.J. Bonk & K.S. King (Eds.), *Electronic collaboration: Learner-centered technologies for literacy, apprenticeship, and discourse*. (pp. 209-233). New Jersey: Lawrence Erlbaum Associates, Publishers.
- Kruger, L.J. & Macklem, G.L. (1999, April). The Global School Psychology Network. In: J. Cummings (Chair), *How will the Internet change worldwide communities of practice and training in school psychology?* Symposium conducted at the Annual Convention of the National Association of School Psychologists, Las Vegas, Nevada.
- Kruger, L.J., & Macklem, G.L. (1999, Summer). The Global School Psychology Network. *Massachusetts School Psychologist Association Newsletter, 20*(5), 19-22.
- Kruger, L.J., Macklem, G., Maital, S., Shriberg, D., Burgess, D., Kalinsky, R., & Corcoran, K. (under review). *Sense of community among school psychologists on the Internet*.
- Kruger, L.J., Shriberg, D., Donovan, P., & Burgess, D. (2000, August). "Internet-based professional development community" *The Global School Psychology Network*. Poster presented at the Annual Convention of the American Psychological Association, Boston, MA.

- Kruger, L.J., Struzziero, J., Kaplan, S., Macklem, G., Watts, R., & Weksel, T. (under review). *The use of e-mail in consultation: An exploratory study of consultee outcomes.*
- Lund, A.R., Reschly, D.L., & Martin, L.M. (1998). School psychology personnel needs: Correlates of current patterns and historical trends. *School Psychology Review, 27*(1), 106-120.
- Macklem, G.L. (1977, Winter). Computer-mediated consultation (CMC) project: Electronic interviews with the researchers. *Massachusetts School Psychologists Association Newsletter, 19*(3), 1, 3-6.
- Macklem, G.L. (1999, Winter). Technology comes of age at the National Association of School Psychologists Annual Conference in Las Vegas. *Massachusetts School Psychologists Association Newsletter, 20*(5), 7-8.
- Macklem, G.L., & Kalinsky, R. (2000, March 29). *School consultation: One of the primary roles of school psychologists, providing both prevention and intervention services to children and school staff: Our successes and the future.* Paper presented at the National Association of School Psychologists Annual Conference, New Orleans, Louisiana.
- Macklem, G., Kalinsky, R., & Kruger, L. (1999, Fall). The Global School Psychology Network. *The Nova Scotia Psychologist, Vol. 12, No. 11, 11-14.*
- Mazza, J.J., & Overstreet, S. (2000). Children and adolescents exposed to community violence: A mental health perspective for school psychologists. *School Psychology Review, 29*(1), 86-101.
- McIntosh, D.E., & Phelps, L. (2000). Supervision in school psychology where will the future take us? *Psychology in the Schools, 37*(1), 33-38.
- Miller, D.C., & Palomares, R.D. (2000, March). Growth in school psychology: A necessary blueprint. *Communique, 28*(6), 1, 6-7.
- Oakland, T. (1966, June). School psychology and education in Russia: An interview. *Communique, 24*(8), 16-17.
- Parsons, R.D. (1996). *The Skilled Consultant: A Systematic Approach to the Theory and Practice of Consultation.* Boston: Allyn & Bacon.
- Pearrow, M., & Macklem, G.L. (1998, May). Introduction to communicating on the computer. Presented at the Massachusetts School Psychologists Annual Conference, Worcester, Mass.
- Pettit, F.A. (1999). Exploring the use of the World Wide Web as a psychology data collection tool. *Computers in Human Behavior, 15*(1), 67-71.
- Pfeiffer, S.I., & Reddy, L.A. (1998). School-based mental health programs in the United States: Present status and a blueprint for the future. *School Psychology Review, 27*(1), 84-96.
- Poland, S. (2000, March). The non-hardware side of school safety. *Communique, 28*(6), 22-23.
- Pluymert, K. (1977, May). School psychology in Hungary: Personal reflections from ISPA '96. *Communique, 25*(7), 14.
- Psalti, A. (1995, March). The dawn of school psychology in Greece. *Communique, 23*(6), 12-13.
- Quinn, M.T. (1999, September). Adding culture to the tools of school psychologists. *Communique, 28*(1), 34, 38-39.

- Roberts, N., Blakeslee, G., Brown, M., & Lenk, C. (1990). *Integrating Telecommunications Into Education*. New Jersey: Prentice Hall.
- Rogers, L.E., & Farace, R.V. (1975). Analysis of relational communication in dyads: New measurement procedures. *Human Communication Research, 1*, 222-239.
- Rose, L. (1995). *Netlaw: Your rights in the online work*. Berkeley: McGraw Hill.
- Ruskowski, J.B., & Perticone, E.X. (2000, March). School psychology or psychology in the schools? *Communique, 28*(6), 30, 32.
- Ryba, K. (1999, April). Linking Aotearoa New Zealand with the Global School Psychology Network. In: J. Cummings (Chair), *How will the Internet change worldwide communities of practice and training in school psychology?* Symposium conducted at the Annual Convention of the National Association of School Psychologists, Las Vegas, Nevada.
- Ryba, K., Pine, T., Mentis, M., & Bowler, J. (1999, February). Training educational psychologists in the 21st century: A Massey University perspective. *The Bulletin, The New Zealand Psychological Society, Inc., 95*, 5-13.
- Ryba, K., & Shelby, L. (1999, April). Global training initiatives in school psychology. MiniSkills Workshop presented at the National Association of School Psychologists Annual Convention, Las Vegas, Nevada.
- Sampson, J.P., Jr., Kolodinsky, R.W., & Greeno, B.P. (1997, January/February). Counseling on the information highway: Future possibilities and potential problems. *Journal of Counseling and Development, 75*, 203-211.
- Sarason, S.B. (1997). NASP distinguished lecture series: What should we do about school reform? *School Psychology Review, 26*(1), 104-110.
- Schlager, M., Fusco, J., & Schank, P. (1998, Winter). Cornerstones for an online community of education professionals. *IEEE Technology and Society, 17*(4), 15-21, 40. Retrieved from the World Wide Web: <http://tappedin.org/info/papers/ieee.html>
- Schlager, M., Schrank, P., & Fusco, J. (1999, May). CHI 99 online communities workshop. Position Paper. Center for Technology in Learning, 333 Ravenswood Avenue, Menlo Park, CA 94025. Retrieved from the World Wide Web: <http://www.cc.gatech.edu/~asb/workshops/chi/99/participants/schlager.html>
- Schlager, M., Fusco, J., & Schank, P. (1999). Evolution of an online education community of practice. SRI International. Draft to appear in Schlager, M., Fusco, J., & Schank, P. (in press). Evolution of an Online Educational Community of Practice. To appear in K.A. Renninger and W. Shumar (Eds.). *Building virtual communities: Learning and change in cyberspace*. NY: Cambridge University Press. Retrieved from the World Wide Web: <http://www.tappedin.org/info/papers/evol99/>
- Sheppard, J., & Dawson, M.M. (1998). Educational and school psychology in the United Kingdom and the United States: An introduction. *School Psychology Review, 27*(1), 7-13.
- Sheridan, S.M., Welch, M., & Orme, S.F. (1996). Is consultation effective? A review of outcome research. *Remedial and Special Education, 17*(6), 341-354.
- Spice, C.G., Jr., & Spice, W.H. (1976). A triadic method of supervision in the training of counselors and counseling supervisors. *Counselor Education and Supervision, 15*, 251-280.

- Sprinthall, N.A., Reinmen, A.J., & Thies-Sprinthall, L. (1996). Teacher professional development. In: J. Sikula, T.J. Buttery & E. Guyton (Eds.). *Handbook of research on teacher education: A project of the Association of Teacher Educators. Second Edition.* (pp.666-700). New York: Macmillan Library Reference, USA. Simon & Schuster Macmillan and London Prentice Hall International.
- SRI International. (2000, May). Research on Community Development. Design History of TAPPED IN (1999). Retrieved from the World Wide Web: <http://www.tappedin.org/info/research.html>
- Steffy, B.E., Wolfe, M.D., Pasch, S.H., & Enz, B.J. (1999). *Life cycle of the career teacher.* CA: Corwin Press.
- Stenger, M.K., Tollefson, N., & Fine, M.J. (1992). Variables that distinguish elementary teachers who participate in school-based consultation from those who do not. *School Psychology Quarterly*, 7(4), 271-284.
- Struzziero, J.A., Kruger, L.J., & Watts, R. (1999, Summer). How does e-mail communication differ from face-to-face communication during school-based consultation? *Massachusetts School Psychologists Association Newsletter*, 20(5), 14-15.
- Sutkiewicz, F. (1997, Autumn). Ethical issues involved with computer use: How to avoid the pitfalls. *Massachusetts School Psychologists Association Newsletter*, 20(1), 7-9. Reprinted with permission from Dialogue (1997, Summer). Georgia Association of School Psychologists.
- Taylor, L. (2000). Shaping the future of mental health in school. *Psychology in Schools*, 37(1), 49-60.
- Thomas, A. (1999, December). School psychology 2000: Personnel needs in the next millennium. *Communique*, 28(4), 10.
- Zins, J.E., & Erchul, W.P. (1995). *Best Practices in School Psychology, III.* The National Association of School Psychologists.

Chapter Nineteen

How People Learn (and What Technology Might Have to Do with It)

Marcy P. Driscoll

At an educational conference last spring, I attended a session focused on the potential of instructional technology to transform teaching and learning in schools. One of the speakers told a story about his 14-year-old son who, like himself, loved technology toys and always had to have the latest and greatest new thing to come on the market. One day, this son went to school after downloading to his Palm Pilot™ the program from the TV remote control. Then in one of his classes, the boy used the program to turn on and off the television in the corner of the room. The teacher was understandably annoyed, and when she figured out who the culprit was, she hauled him off to the principal's office demanding that the principal "do something!" At this point in the story, the speaker paused and asked the audience to consider what an appropriate response by the principal might be. Surely, this was a teachable moment, for teacher and student. Although many of us are regular users of Personal Digital Assistants (PDAs), we are only beginning to imagine how the technology might be used in the service of teaching and learning. So what did the principal do? He banned it!

I offer this story not to malign the principal, but to argue that technology integration in schools is not easy to achieve, no matter how much evidence we have that it can help learning. It's also important to integrate technology appropriately, as critics are quick to point out that computers, besides being expensive, can harm young children who sit for hours in front of them instead of being engaged in the "real world" (Alliance for Childhood, 2000). So what is known about how people learn and the role technology may play in their learning? How might that knowledge provide guidelines for appropriate uses of technology that can help students and teachers? Four broad principles offer a framework to teachers for thinking about how technology can support their instruction:

- Learning occurs in context.
- Learning is active.
- Learning is social.
- Learning is reflective.

Learning Occurs in Context

Read the following sentence: "The notes were sour because the seams split." What does it mean? Chances are that you found the sentence confusing, even though all the words are common and familiar. Now consider that the sentence is describing bagpipes and read it again. I suspect it makes much better sense now. Without an appropriate context, comprehension and learning are difficult and unlikely to succeed very well. Keep in mind, however, that learners will attempt to make sense of anything unfamiliar, just as you attempted to make sense of that sentence. When they do so, they draw upon prior understandings and experience, but the meanings they construct may be quite different from what was intended if they cannot activate an appropriate context for learning. "Children are ignorant but not stupid: Young children lack knowledge, but they do have abilities to reason with the knowledge they understand" (National Research Council, 2000, p. 234).

Technology can facilitate learning by providing real world contexts that engage learners in solving complex problems (Duffy & Cunningham, 1996; Honebein, 1996; & Cognition and Technology Group at Vanderbilt, 1992). *The Jasper Woodbury Problem Solving Series* (Cognition and Technology Group at Vanderbilt, 1997), for example, is an interactive video environment that presents mathematical problems through the adventures of a boy named Jasper. In each episode, Jasper faces a challenge, such as figuring out how much fuel is needed to fly an ultra-light aircraft into a remote area to rescue a stranded eagle. Students must apply important concepts in mathematics to solve Jasper's challenge. Because the video adventures are interesting, students are drawn into them. Because the challenges are complex, students engage in problem solving for extended periods of time.

must have been written by at least a college student, if not a scientist. In all cases, however, the notes were written by fourth grade students in response to the notes and questions of their peers.

With migration to the Internet, CSILE, now known as Knowledge Forum, facilitates connections between schools and the scientific community, allowing practicing scientists to serve as mentors to students. Other projects, such as Kids as Global Scientists, also bring students and various experts together in virtual communities through Internet links. Such “a dialogue-based approach to learning creates a rich intellectual context, with ample opportunities for participants to improve their understanding and become more personally involved in explaining scientific phenomena” (National Research Council, 2000, p. 226).

Learning Is Reflective

In one of the graduate courses I teach on emerging theories of learning, I want students to experience the implications of the ideas they are studying. Thus, they might be required to work in a group, participate in a class project, contribute to a knowledge-building enterprise, and so on. Several times during the semester, I ask students to reflect on their own learning, the functioning of their group, and the operation of the class. A few years ago, early in the semester, students complained so much about aspects of the course that I brought up the issues in class (usually their reflections are confidential and sent to me by e-mail). One individual who was a fifth grade teacher said, “Cooperative learning is fine for kids. But I’m an adult! My learning shouldn’t have to depend on anyone else.” As we discussed further how others felt about learning in a group, the same individual spoke up again, this time rather bemused. She said, “Maybe I’m reacting the same way my fifth graders do when I try something new with them.” It was an important insight for her that was prompted by deliberate reflection of the class on what it means and feels like to work in a learning group.

Learning is facilitated when students get feedback about their thinking, whether that feedback comes from within, a teacher, or a peer. Then provided the opportunity for revision, students can achieve at higher levels and reach deeper understandings. Technologies that promote communication within and outside the classroom make it easier for feedback, reflection, and revision to occur. Many of the technology examples presented above facilitate reflection in the dialogue that they promote among learners. Where dialogue or discussion is not inherent in the tool, teachers bear the responsibility of initiating and guiding it.

A Few Parting Thoughts

Technology by itself does not guarantee learning. Rather, it is in how teachers and students use available technologies that determines whether transformative learning happens. Educators can respond to the challenge like the principal who banned PDAs from his school. Or they can explore the power of technology to help learners achieve important outcomes. Understanding principles of learning is a good way to begin.

References and Further Reading

- Alliance for Childhood. (2000). *Fools’ gold: A critical look at computers and childhood*. Available online: http://www.allianceforchildhood.net/projects/computers/computers_reports_fools_gold_contents.htm
- Cognition and Technology Group at Vanderbilt. (1992). The Jasper experiment: An exploration of issues in learning and instructional design. *Educational Technology Research & Development*, 40, 65-80.
- Cognition and Technology Group at Vanderbilt. (1997). *The Jasper project: Lessons in curriculum, instruction, assessment, and professional development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Driscoll, M. P. (2000). *Psychology of learning for instruction* (2nd ed.). Needham Heights, MA: Allyn & Bacon.
- Duffy, T. M., & Cunningham, D. J. (1996). Constructivism: Implications for the design and delivery of instruction. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology*. New York: Macmillan.

- Hannafin, M., Land, S., & Oliver, K. (1999). Open learning environments: Foundations, methods, and models. In C. M. Reigeluth (Ed.), *Instructional design theories and models: A new paradigm of instructional theory* (Vol. II, pp. 115-140). Mahwah, NJ: Lawrence Erlbaum Associates.
- Honebein, P. C. (1996). Seven goals for the design of constructivist learning environments. In B. G. Wilson (Ed.), *Constructivist learning environments: Case studies in instructional design*. Englewood Cliffs, NJ: Educational Technology Publications.
- Jonassen, D. H., & Land, S. M. (Eds.). (2000). *Theoretical foundations of learning environments*. Mahwah, NJ: Lawrence Erlbaum Associates.
- LaJoie, S. P. (Ed.). (2000). *Computers as cognitive tools*, Vol. II. Mahwah, NJ: Lawrence Erlbaum Associates.
- National Research Council. (2000). *How people learn*. Washington, D.C.: National Academy Press.
- Pea, R. D., Gomez, L. M., Edelson, D.C., Fishman, B. J., Gordin, D. N., & O'Neill, D. K. (1997). Science education as a driver of cyberspace technology development. In K. C. Cohen (Ed.) *Internet links for science education: Student-scientist partnerships* (pp. 189-220). New York: Plenum.
- Rieber, L. P. (1996). Seriously considering play: Designing interactive learning environments based on the blending of microworlds, simulations, and games. *Educational Technology Research & Development*, 44, 43-48.
- Scardamalia, M. (April, 2002). *Creative work with ideas: A luxury?* Paper presented at the annual meeting of the American Psychological Association, New Orleans, LA.
- Scardamalia, M., & Bereiter, C. (1994). Computer support for knowledge-building environments. *The Journal of the Learning Sciences*, 3 (3), 265-283.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.

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