COUNSELING AND COMPUTER TECHNOLOGY

IN THE NEW MILLENNIUM—AN INTERNET DELPHI STUDY

by

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(ABSTRACT)

Computer technology is developing so rapidly that the extent to which it is being utilized by counselors and counselor educators in their work is virtually unknown. The purpose of this study was to assess how much and in what ways counselor experts believe computer-related technology (CRT) is being utilized by professional counselors today. An additional purpose of this study was to determine projected use of CRT by the year 2008.

Data were collected by means of a modified futures Delphi method in which a panel of 21 counselor experts comprised of one group of counselor educators, three groups of counselor practitioners, and one group of computer technologists completed three rounds of questions. The study, which was conducted entirely on the World Wide Web, requested Likert-type ratings of 53 generic work-related tasks in eight task categories for frequency of CRT use to accomplish the tasks and reasons for the selections. In addition, panelists rated ten specific CRT tools for frequency of use, and supplied written examples of current and future CRT use by counseling professionals.

The findings of the study indicate counselors and counselor educators are using a large variety of CRT tools, including word processors, spread sheets, a variety of software programs, e-mail, chatrooms, listservs, databases, and other web-related tools to assist

them in over half of job-related tasks today. Experts forecast CRT use by counselors will significantly increase by the year 2008, when professional counselors are expected to utilize CRT for at least 90% of their work-related tasks.

It is suggested that findings of this study may provide an important foundation for much needed research investigating potential differences between therapeutic work accomplished with the help of CRT and traditional therapy, i.e., face-to-face therapy, in which computer technology is not utilized. Finally, results establish the need to implement and promote computer skills training and competency assessments in counselor education programs.

This dissertation is dedicated to my beloved children,

Alexandra and Jonathan.

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CHAPTER ONE

Introduction to the Study

Background and Theoretical Framework

Around the globe, computers are changing the ways we conduct business and engage in personal exchanges. The rapidly developing, world-encompassing field of computer technology is affecting the traditional ways we do such things as shop, advertise, correspond, and educate. With the help of computers, it is now possible to perform a limitless number of tasks from the comfort of your home that would previously have involved a much greater expenditure of time and effort. For example, it is no longer necessary to get into a car and fight traffic and crowds at the mall to make a purchase. Instead, personal computers can now be used to buy most any imaginable product and have it conveniently delivered to your door. On the other hand, if you have a product or service to sell, you can use your computer to create advertisement, make it accessible to consumers worldwide, and incorporate in-house operations, once again, without ever leaving home.

Sales generated via the Internet are referred to as e-commerce, and e-commerce is a booming business. Estimated e-commerce sales for the fourth quarter, 2000, in the U.S. alone were $856.2 billion, while retail e-commerce sales were estimated at $8.7 billion, an increase of 67.1 percent (± 4.3%) from the fourth quarter of 1999 (U.S. Department of Commerce, http://www.census.gov/mrts/www/current.html). This estimate does not include additional sales made from online travel services, financial brokers and dealers, and ticket sales agencies.

Computers are also changing the ways we correspond for business and pleasure. You can send and receive documents, communicate with customers, pay bills, buy and sell stock, make bank transactions, prepare and file income taxes, obtain legal advise, open business accounts, and conduct conferences from your home office. You can make phone calls, including visual contact, send cards, animated greetings, flowers, candy, music, photographs, and home movies to friends and loved ones within seconds using your personal computer. You can even locate old friends, former classmates, and long, lost relatives with the help of computer technology.

In addition, it is no longer necessary to drive great distances or relocate to further your education or upgrade your skills. Computer technology is opening a whole new vista of learning opportunities. Colleges, universities, and technical schools around the world are using computer technology to deliver courses in every conceivable field. A survey conducted by the U.S. Department of Education in 1997-1998 reported that video and Internet-based technologies were used more than any other mode of service delivery by institutions offering distance education courses (U.S. Department of Education, http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000013). The survey indicated a three-fold increase in the use of asynchronous Internet-based technologies when compared to data from a similar survey conducted in 1995-1996. Institutions using these technologies expressed plans to increase Internet-based distance education service delivery even more in the future. Results of the survey suggest a need to redefine traditional concepts of distance education, and point to the future development of virtual universities.

The medical profession is increasingly incorporating computer technology into its field as well. Computers are being used to train medical personnel, maintain and transmit patient records, to establish third-party payer data bases, and to examine and even diagnose patients (Huang and Alessi, 1996). In addition, medical professionals use computers for billing, appointments, patient mailing lists, patient education, and counseling (Skinner, Siegfried, Kegler, and Strecher, 1993).

In short, one would be hard-pressed to find any aspect of our modern lives that is not being affected by the rapidly expanding enterprise of computer-related technology (CRT). Lindsay (1988) notes, "Computer technology has revolutionized many aspects of our society and is without a doubt the most significant innovation of the century." It is, therefore, inevitable that computer technology is changing the mental health professions as well. As Sampson, Kolodinsky, and Greeno (1997) point out, "During the past 30 years, computer applications have become an increasingly common resource used in the delivery of counseling services" (p. 203).

Historically, with the introduction and incorporation of any new and revolutionary technology, many heated debates have been generated on both its merits and dangers. The mental health field's reactions to technological incorporations have been no exception. Audiotapes, videotapes, and even the common telephone each received their share of yea- and nay saying upon introduction into the realm of therapy. When these technologies were first used by mental health professionals, questions such as the following were common: Is this technology here to stay or merely a passing fad? Is this *machine* appropriate in an occupation that centers on *human* interactions? Will this technology interfere with the human component in our work, or serve as an aid to

increase and enhance human output? Initially, mental health professionals also voiced concerns about issues of privacy and confidentiality when using these technologies with clients.

Many of these same issues have reemerged in recent debates over the use of CRT in the counseling profession. As we enter the new millennium, some of the most commonly discussed topics among counseling professionals today concern the impact of computers on the mental health field both now and in the future. Bowman and Bowman (1998) paraphrase Morrisey's (1997, p. 12) prediction that "the incorporation of technology into the mental health profession shows every indication of becoming 'one of the shifts in paradigms' the counseling profession will face in the new millennium" (p.428).

The majority of debates over computer technology use by mental health professionals have centered specifically on the use of the Internet in counseling clients. As Bowman and Bowman (1998) observe, "Criticisms range from the factual and informed to rabid exhortations that the 'sky is falling'" (p. 436). These concerns stem from the fact that CRT has advanced so rapidly, little to no research has been conducted to guide its incorporation into an occupation whose primary focus is human interaction. Harper (1999) observes, "no comprehensive research studies have been conducted testifying to the benefits of cybercounseling" (p. 7)

In addition, this rapid expansion of CRT has led to non-standardized acquisition of technological skills by mental health professionals, of which counseling via the Internet is but one example. As Torres-Rivera, Maddux and Phan (1999) point out, "technology in general and the World Wide Web in particular, have begun to have an

impact on the field of professional counseling" (http://jtc.colstate.edu/vol1_1/multicultural.htm, 2nd paragraph). The extent of this impact is unknown, and needs to be assessed.

The challenge for mental health professionals today is "to wisely decide how to take advantage of the new abilities technology affords both clients and the profession, while maintaining the integrity of the profession to promote meaningful, personal interrelationships necessary to true community. Essentially, this means developing an appropriate integration of [what Naisbitt (1982)] refers to as high tech and high touch" (Bowman & Bowman, 1998, p. 429).

Statement of the Problem

The problem for the present study is computer technology is developing at such a rapid rate that the extent to which it is affecting the work of counselors and counselor educators is virtually unknown. Two major aspects of this problem are:

1. We do not know the degree to which counselors are currently using computer-related technology.
2. We do not have an assessment of future trends in the use of CRT by counseling professionals.

Purpose of the Study

In order to determine how counseling professionals are currently using computer technology and assess potential trends, there were four purposes of this study:

1. To assess which aspects of counselor work-related tasks are currently being accomplished with the aid of computer-related technology.
2. To explore how much counselors and counselor educators rely on various computer-related tools.
3. To explore the kinds of CRT counselors and counselor educators are likely to use in their work in the near future.
4. To forecast the extent of CRT use for counselor work-related tasks by counseling professionals in the next ten years.

Research Questions

The following four research questions guided the inquiry for this study:

1. How much do counselors and counselor educators rely on computer-related technology to complete job-related tasks today?

The first research question was addressed in two ways:

(a) A questionnaire was developed by the researcher and a committee of counseling professionals that listed generic counselor tasks to be rated by counseling and technology experts for how much counselors and counselor educators currently rely on CRT to accomplish the tasks. Following the methodology outlined in this study, the questionnaire was administered as "Delphi questionnaire, Round 1, Part A, Current ratings" and again as "Delphi questionnaire, Round 3, Current ratings."

(b) The researcher and a committee of professionals in computer-related technology designed a second questionnaire. This questionnaire listed a variety of CRT tools

to be rated by counseling and technology experts for frequency of current use in categories of counselor work-related tasks. This questionnaire was referred to as "Round 2, Part B" in the study.

1. Which counselor-related tasks are counseling professionals currently accomplishing with the help of CRT?

The second research question was addressed in the following three ways:

(a) To answer this research question, responses to the Delphi questionnaires, "Round 1, Part A, Current ratings" and "Round 3, Current ratings" were summarized for kinds of counselor tasks being accomplished with the help of CRT.

(b) In addition, data was summarized from results of the questionnaire developed by the researcher, which asked counseling and technology experts for specific examples of CRT use to currently accomplish categories of counselor work-related tasks. This questionnaire was referred to as Delphi questionnaire, "Round 1, Part B, Current Examples."

(c) Finally, responses to the "Delphi questionnaire, Round 2, Part B", were analyzed for categories of counselor tasks in which counselors are currently using specific CRT tools.

1. What are specific ways in which counselors and counselor educators are currently using computer-related technology in performing job-related tasks?

This research question was answered in two ways:

(a) A summary of responses to the Delphi questionnaire, "Round 1, Part B, Current Examples" provided a variety of ways that counseling professionals are currently using CRT in their work.

(b) Results from the Delphi questionnaire," Round 2, Part B", were analyzed for kinds of CRT tools currently being used by professional counselors.

1. How much and in what ways will counselors and counselor educators rely on computer-related technology to do their work in the next ten years?

This research question asks for forecasts of the previous three research questions for the next ten years, involving:

(a) How much will counselors and counselor educators rely on computer-related technology to complete job-related tasks in the near future?

This question was answered by summarizing responses to the Delphi questionnaires labeled "Round 1, Part A, Future ratings" and "Round 3, Future ratings" in which counselor tasks were rated for extent of CRT use to accomplish counselor tasks for the year 2008.

(b) Which counselor-related tasks will counseling professionals accomplish in the next ten years with the help of CRT?

To answer this research question, responses to the Delphi questionnaires, "Round 1, Part A, Future ratings" and "Round 3, Future ratings" were summarized for kinds of work-related tasks counselors will accomplish with the help of CRT in the next ten years. Additionally, results from the Delphi questionnaire, "Round 1, Part B, Future Examples", were summarized to address this question.

(c) What kinds of CRT will counselors and counselor educators be using to perform job-related tasks in the next ten years?

This research question was addressed through information obtained from responses to the Delphi questionnaires labeled by the researcher as "Round 1, Part B, Future Examples."

Delimitations

This study was delimited in the following ways:

1. All areas of specialization within the field of counseling, such as school counseling, drug rehabilitation, and career counseling were not represented in the Delphi panel of experts. Therefore, findings may not apply to other areas of counseling not represented in the study.
2. Experts chosen to represent counselors were restricted to those with a minimum of five years experience as licensed and/or certified counselors who worked with adult clients on issues of mental health.
3. Counseling experts were required to possess knowledge of computer-related technology not necessarily typical of counseling professionals. In order to participate in the Internet-based study, it was necessary for participants to be users of the Internet, and to possess the necessary computer skills and resources associated with that use.

Limitations

This study was limited in the following ways:

1. The only way to verify predictions about the future is to wait until they occur.
2. The opinions of the panel of experts was limited to the knowledge, skills, and experiences that each member possesses, and their interpretations of them and the issues being investigated.

3. The researcher brought her own limited knowledge, skills, and experiences to this study, and her own unique ways of interpreting them and the issues being investigated.
4. Since this study was based on the opinions of a select group of experts, generalization of results must be made with caution.

Definition of Terms

The following terms are defined in order to promote clarity of understanding in this investigation:

chatroom. Locations on the Internet and the World Wide Web that enable people to instantly communicate with one another irrespective of geographic location by typing words on a computer keyboard. The words are instantly viewed by another individual or group of individuals located on the same Internet or Web channel.

computer-related technology (CRT). Computer hardware and software. This may include:

a. personal computers, such as IBM or MacIntosh.
b. software used for word-processing, data organization, and storage.
c. Internet access to websites offering, public chatrooms, private chatrooms for one-on-one communications, and mailing lists.

counselor educators. Persons currently employed by an accredited college or university to instruct master's and/or doctoral-level students in counseling.

counselors. Persons meeting the requirements for and currently holding the title of National Certified Counselor and/or Licensed Professional Counselor in their state of practice or who have held such titles, and who have counseled individuals on issues of mental health for a period of at least five years.

Delphi. A systematic polling of the opinions of a panel of experts knowledgeable on a given topic through iterative questionnaires.

Delphi panel of experts. A group of individuals systematically chosen by the Delphi researcher as representative of persons knowledgeable about the issues of concern to the investigation.

futures Delphi. A Delphi study in which experts are asked to forecast the likelihood of future events occurring.

hypertext. A means of moving from one WWW document to another, or to another computer system.

Internet. Thousands of computer groups, or networks, that are connected around the globe for the purpose of sharing information.

modified Delphi. A variation of the Delphi method in which the Delphi questionnaire is prepared prior to the beginning of the Delphi study by a panel representative of the Delphi panel of experts.

near future. Ten years from the current date.

software. Electronic instructions contained on computer disks that provide computers with information necessary to perform the tasks required by the user.

technologists. Individuals who possess specialized skills in the design and/or operation of computers and/or computer-driven equipment. Skills in computer-related technology may include, but are not limited to, designing and/or developing web pages, computer programming, software development, knowledge of operating systems, network administrators, persons with computer science degrees, persons with engineering backgrounds, instructional technologists, information systems managers, or database administrators.

URL. A Uniform Resource Locator or Internet address/location. URL's begin with http://.

Web page. A document located on the Internet. These documents may be linked to one another to form a group of documents. The main document, or starting page, is referred to as the home page.

Web-accessible database. A website containing data that can be secured using software designed specifically for data transfer.

World Wide Web (WWW). A collection of documents on the Internet connected through hypertext.

Need for the Study

The use of computer applications by counseling professionals has continued to steadily increase during the past 30 years (Sampson, et al., 1997), with a particularly rapid expansion of computer use in the early 1980's (Bowman and Bowman, 1998). In these pioneering years of CRT use, counseling professionals concentrated primarily on the development of software programs designed to simulate therapists (Weizenbaum, 1965; Wagman & Kerber, 1978; Selmi, Klein, Greist, Johnson, & Harris, 1982), computer-assisted career guidance systems (Stevens & Lundberg, 1998 and Sampson, 1984), and computer-assisted testing and assessment (Sampson, 1986).

During the past decade, counseling professionals have shifted their focus to the application of CRT to counseling tasks that center on therapeutic intervention and counselor supervision. Particular attention has been given to positive and negative aspects of using the Internet as a medium for service delivery (Bowman and Bowman,

1998; Eriksen, Artico, Schmitt, Quinn, Waters, & Wilson, 1997; Lindsay, 1988; Sampson et al., 1997; Steenbarger & Smith, 1996; Harper, 1999; Cabaniss, K., 1998; King, Engi, & Poulos, 1998; and Wilson, Jencius, & Duncan, 1997).

Although counseling via the Internet, typically referred to as "cybercounseling" or "webtherapy", has received so much attention lately, there has been scant exploration of (1) the extent to which counselors are using various other types of CRT in their work, and (2) other work-related tasks performed by counselors that could be aided by CRT. As Harper (1999) points out, "Cybercounseling is not the only way counselors can use the Internet in their practice" (p.11). Likewise, although therapeutic intervention may be the focal task that counselors perform in their work, CRT can help counselors perform many other work-related tasks included in marketing, record-keeping, and professional development.

In addition, no trend assessment has been made concerning the variety of ways CRT might be used by mental health counselors and counselor educators to perform all aspects of their work, including therapeutic intervention and supervision, in the near future. Without these assessments, educators and policy makers lack important information that could enable them to better design training programs for preparing professionals to upgrade their skills in order to remain competitive in a field struggling for independent identity. These assessments would also help establish long overdue computer competency requirements and training standards for the next generation of counselors to meet the demands of a technologically sophisticated clientele.

For almost two decades, there has been a call for increased computer skills training for counseling professionals (Johnson, 1983; Engels, 1984; Berven, 1985; and

Sampson, 1984). In 1984, Ekstrom & Johnson suggested, "The counseling profession must, in the future, provide leadership in setting standards for training counselors about computers, in confronting the ethical issues that computers raise, and in providing a mechanism for shared professional evaluation of computer programs for counseling" (p. 132). Lindsay (1988) agrees: "The issue of computer literacy within counselor-education programs is of major significance for the counseling profession" (p.327).

In 1999, the Association for Counselor Education and Supervision (ACES) Technology Interest Network established guidelines for technological competency standards of counselor education graduates (see http://www.chre.vt.edu/thohen/competencies.htm). Although the guidelines are an important pioneering effort by ACES, counselor education programs are not currently incorporating minimal computer literacy standards or providing coursework to optimally train counselors in technological skills they will need to be proactive in developing roles they play in the future (Stone and Turba, 1999). Counselors today are still not receiving the technological training they need to survive and excel in a technologically-oriented world (Eriksen, et al., 1997; Stone and Turba, 1999; Lundberg & Cobitz, 1999; Stevens & Lundberg, 1998; McFadden, 2000; and Hayes, 1999). "Counselors need a greater knowledge of technology and its implications for counseling practice: [there is a] need for computer literacy" (Eriksen, et al., 1997, p. 9). Stone and Turba (1999) agree that "One of the most powerful and neglected skills in our preparation and in-service programs is technology" [2nd paragraph].

Information concerning the extent and types of CRT use by counselors both now and in the next 10 years could also provide a foundation to help guide research into many

of the issues raised by an ever-increasing use of the Internet as a vehicle for counseling service delivery. "By anticipating possibilities and problems, one can undertake more informed research and development efforts to help ensure that counseling on the information highway helps rather than harms clients" (Sampson, et al., 1997). Questions related to use of the Internet in service delivery have been hotly debated among counseling professionals and regulating boards, such as the American Counseling Association (ACA) and the National Board of Certified Counselors (NBCC), who are vitally concerned with the quality and efficacy of work that counselors perform with clients, and the impact their work has on the public they serve.

In fact, both organizations have demonstrated the importance of issues related to Internet use by establishing written guidelines for the ethical practice of webcounseling by professional counselors (see http://www.counseling.org/gc/cybertx.htm and http://www.nbcc.org/ethics/wcstandards.htm). However, ACA and NBCC acknowledge the tentative nature of these recommendations due to lack of solid research to establish the Internet as an appropriate medium for service delivery. In addition, Harper (1999) warns, "no comprehensive research studies have been conducted testifying to the benefits of cybercounseling or the effectiveness of using e-mail or video conferencing as a therapeutic medium. Currently, only anecdotal evidence or case examples exist to support the claims of effectiveness of these techniques" (p. 7).

While many professionals have espoused a "wait-and-see" attitude concerning the development of CRT use by counselors, others have suggested a more active stance in guiding its development, and make a call for more empirical evidence for computer-mediated counseling. "Of concern is the fact that counseling already is taking place over

the Internet before our ethics and assumptions about counseling can be fully considered. As a result, as the profession continues to confront this issue, some of the actions taken will, of necessity, be remedial in nature" (Wilson, Jencius, & Duncan, 1997, p. 16). Harper (1999) adds, "as the professional community debates use of the Internet to provide counseling, clients currently are receiving help in an unregulated arena" (p. 12).

The results of an Internet search by Sampson, et al. (1997) revealed "at least 275 practitioners currently offering direct counseling services across the Internet…Instead of being a 'potential' future event, counseling and counseling-related activities are a 'present' reality. Although these numbers are relatively small in comparison with the tens of thousands of counselors currently offering services through more traditional means, the annualized growth rate indicates that increases in Internet counseling will occur" (p.205). Wilson, et al. (1997) propose that "the number of counseling and psychology services offered over the Internet is growing so rapidly as to render growth estimates meaningless" (p.1).

Before we can begin much needed research to investigate how computers are impacting the nature of work performed by counseling professionals, we must first explore the variety of ways in which computer technology is currently being used by these professionals. We must also look ahead to potential trends in CRT use by counselors in order to effectively anticipate the technological training needs of counseling graduates. These assessments will provide important information enabling us to design programs that will produce counselors better prepared to: 1) conduct research into potential effects of CRT on therapeutic outcome, 2) monitor and guide development of software utilized by counseling professionals, and 3) continue as competitive service providers able to

meet the needs of increasingly technologically-oriented consumers. It is hoped that this study will help provide important requisite foundations for accomplishing these goals.

Summary and Overview

The impact of CRT on counseling, both now and in the future, can be more readily grasped when we examine how much and in what ways it is currently being utilized by counseling professionals and forecasts are made about its use for the future. Examining the current use of CRT by counseling professionals will give us an appropriate background for assessing the impact it is making on how we engage in the business of helping others. In using this information to forecast future developments of CRT use by counselors, we will be better able to make decisions regarding the technological training of future counselors, where to concentrate research concerning the use of technology by counselors, and of the potential costs and benefits of CRT to practitioners, educators, and the public they serve.

Chapter 2 contains a brief summary of the history of technology use by counseling professionals. The development of the Delphi method is reviewed, along with reasons for its selection for use in this study. Chapter 3 contains the research methodology used in this study, including descriptions of the Delphi panel of experts, selection procedures for the panel, creation of the Delphi questionnaire, web-based instructions for the panelists, and complete descriptions of the three rounds of questionnaires completed by panelists. Chapter 4 presents results of the study. It includes a brief summary of the instructions for completing the Delphi questionnaires, the process for summarizing the responses given by panelists, and a detailed report of results of each of the three rounds of this Delphi

study. Finally, Chapter 5 provides a summary of the findings, and discusses conclusions and recommendations based on these findings.

CHAPTER TWO

Review of the Literature

Technology in Counseling

Sign on to any listserv whose members are professional therapists, and you will find computer technology a frequently debated topic. Are computers appropriate to the counseling process? How will the use of computers affect counselor roles? How will therapists be using computers in the future? These are but a few of the many questions with which counselors appear to be wrestling as the use of computer technology continues to grow.

Many concerns about the use of computer technology in therapy echo those when telephones and audio and video taping were introduced to the profession. In fact, analogies have been drawn between telephone counseling and the recent use of Internet service delivery (King, et al., 1998; Wilson, et al., 1997; Sampson, et al., 1997; Harper, 1999). Therapists were worried about the effects these technologies would have on the therapeutic relationship and efficacy of service delivery. In addition, there were concerns about confidentiality of client-related materials and dehumanization of the therapeutic process.

Similar objections to computer technology use arose in the 1960's with the development of computer programs designed to simulate therapists. Wagman (1984) and Wagman and Kerber (1984) provide excellent overviews of Weizenbaum's (1965) pioneering computer program's, ELIZA and DOCTOR, which attempted to simulate client-centered counselors; the cognitive behavioral program, MORTON (Selmi, Klein,

Greist, Johnson, & Harris, 1982); and Wagman and Kerber's (1978) program based on cognitive approaches to avoidance-avoidance dilemmas, called PLATO Computer-based Dilemma Counseling System (PLATO DCS). The introduction of each of these programs prompted an onslaught of critical debate about the role of computers in therapy. Wilson, et al. (1997) speculate on reasons for counselor reluctance to embrace new technologies:

> Over two decades ago, the profession debated the wisdom of telephone-based crisis counseling services, raising the same sorts of standards-of-practice issues (McLaren, 1992; Mermelstein & Holland, 1991), perhaps reflecting our profession's reluctance to endorse change until it is proven safe for clients (Wilson, 1995a). Today we recognize that within its framework telephone-based counseling has helped millions of people address therapeutic issues despite our profession's earlier worries. Do worries about using the Internet to provide counseling services emanate from dangers inherent in the medium or from a generalized professional tendency to doubt that which has not been proven safe? Unfortunately, the empirical evidence is not in yet (p.6).

Objections and Counter Objections to Technology

While no conclusive research data could be found to settle disputes concerning the merits or dangers of computer technology use by counselors, the importance of these issues is evident in the amount of attention they have been given in recent literature. Objections raised to the use of computer technology by counselors, and responses to them, primarily relate to therapeutic intervention, particularly with respect to use of the

Internet. Wilson, et al. (1997), provide an excellent summary of many of the issues raised by Internet use for therapeutic intervention:

1. Difficulties in screening potential Internet clients for suitability of the counseling medium to meet the client's particular needs, and lack of adequately researched guides or instruments for doing so.
2. Problems with validity when utilizing assessment instruments under non-standardized conditions, such as on the Internet and in delivery of results to clients.
3. Disclosure obligations across state boundaries.
4. Problems in determining whether clients are being served by another counselor when counselor and client are geographically dispersed.
5. Challenges in establishing a therapeutically intimate relationship with clients one has not met, and maintaining "interest and investment in a disembodied person over time" (p.13).
6. "Internet-based counselors will be obliged to take pains to warn clients of potential problems with interruption of service, to warn clients against over-reliance on this medium for support, and to develop referral links in the client's community prior to beginning services" (p.14).
7. Duty to warn issues and the need for developing methods to help with positive identification of clients and their addresses.
8. Issues of privacy.
9. Confidentiality of records.
10. Protecting clients engaging in Internet groups.

Other important issues related to CRT use by counselors not included in the list that are also frequently discussed are the lack of counselor training in computer technology (Davidson & Jackson, 1996; Stamm, 1998; Galinsky, Schopler, & Abell, 1997; Huang & Alessi, 1996; Stevens & Lundberg, 1998; Wilson, et al., 1997; King, et al., 1998; Stone & Turba, 1999; Lundberg & Cobitz, 1999; Bloom, 1998; McFadden, 2000; and Hackerman & Green, 2000) and the potential for changes in therapist roles brought about by CRT, particularly more toward the role of public psychoeducator (Huang & Alessi, 1996; Ekstrom and Johnson, 1984; Walz, 1984; Sampson, 1990; Stone & Turba, 1999). However, a discussion of how the role of therapists will be changed by computer technology begs the question of a clear definition of what is to be changed. What we call psychotherapy is frequently vague and imprecise, and "resists being manualized" (Pipes and Davenport, 1999, p.3). We cannot meaningfully speculate about what we are moving toward if we do not have a clear concept of what it is we are moving from. In a field that has been plagued by a lack of clear role definitions, it seems reflexive at best to likewise assume, as many counselors have done, that computer technology will change what we do for the worse.

In contrast, the pioneering work of Weizenbaum (1965) and Wagman and Kerber (1984) have taught us that the process of attempting to operationalize counseling techniques in clear and concise ways necessary for computer software development "could result in significant theoretical advances" (Wagman and Kerber, 1984, p.144). They predict that the results could "provide highly effective methods for training counselors in the use of those procedures" (p.149).

In her discussion of development of computer simulation for counselor training, Phillips (1984) agrees that the process of operationalizing therapeutic procedures forces much needed clarity and precision. However, computer-based interactive simulation in counselor training has been slow in developing. Tracing the evolution of technology use for counselor training, Casey (1999) found several key factors that have contributed to the delays, including challenges in operationalizing and accurately reproducing subtleties of human interaction many feel are vital to the counseling process, and resistance by many counselors to the incorporation of technology into the profession. Much of the fear or reluctance toward technology use in counseling may be a reflection of the conflict between a demand for precision inherent in CRT and our own uncertainties about the imprecise nature of *how* we do *what* we do, i.e., the *process* of achieving effective therapeutic outcome.

While so much attention has been focused on potential problems with using the Internet for therapeutic intervention, many advantages have been cited as well. Sampson, et al. (1997) suggest various potential uses for Internet-based CRT tools by counselors to accomplish specific work-related tasks:

1. electronic mail (e-mail)

   Potential uses include therapy; marketing; screening; client/therapist correspondences for scheduling, inter-session monitoring and post- therapeutic follow-up; client record transfer; referrals; intake; homework; research; and professional collegiality (Bowman & Bowman, 1998).

2. websites/homepages

Potential uses include marketing/advertising; information dissemination; and publications.

3. computer videoconferencing

   Potential uses include therapy; homework; referrals; and consultation

4. bulletin board systems/listservs/newsgroups

   Potential uses include consultation; referrals; resources for information; and professional collegiality (Bowman & Bowman, 1998).

5. computerized simulation

   Potential uses include supervision and skills training.

6. databases/FTP sites

   Potential uses include research; information resources for therapists; self-help libraries; client record transfers; and assessment and analyses.

7. chat rooms/electronic discussion groups

   Potential uses include group therapy; self-help; and support.

8. software (may or may not be Internet-accessible)

   Potential uses include skills training; self-help; and homework.

Other non-Internet-based CRT tools potentially useful to therapists include;

9. spreadsheets

   Potential uses include record keeping/data organization/client information and research.

10. word processors (Bowman & Bowman, 1998))

    Potential uses include record keeping; correspondence; marketing; and research publication.

It is apparent from the above list that a great deal of technology is available for use by mental health professionals in a variety of work-related tasks. The problem to date is we do not have an assessment of how much these CRT tools are being used to accomplish which counselor tasks.

Precise Definitions and Accountability

Before we can ask which counselor tasks are more readily or not suited to use of CRT, we must first be able to describe or list these tasks. A search of the literature revealed no such list. It was necessary for the purposes of this study, therefore, to develop a list of generic tasks by reducing the complex and seemingly nebulous set of behaviors in which counselors engage in service delivery to a set of identifiable generic tasks that counselors perform in their work. The procedures for developing this list are described later in the Methods section of this study (see p. 43).

Devising a list of tasks performed by counselors in their work, which is how we accomplish the goals of therapy, leads us to closely related questions concerning the role(s) of therapists and accountability for outcome effectiveness. Many of the conflicts and objections about Internet use by therapists relate heavily to the lack of clarity in defining what kinds of services are being offered utilizing this medium for service delivery. As Bowman and Bowman (1998) point out, using terms that are unclear about exactly what type of service is being performed, e.g., mental health counseling, crisis intervention, consultation, education, “challenge the counseling profession in how to effectively and ethically use technology. Moreover, the lack of clarity as to exactly what is being offered to the consumer raises serious concerns about accurate provision of

information about the profession and informed consent of clients as they enter into relationships via the Internet" (p. 432).

Another related and important issue associated with CRT use concerns accountability and evaluations of therapeutic outcome effectiveness of counseling professionals for the services they provide. In his book, *Job Shock*, internationally recognized business consultant and author, Harry S. Dent, Jr. predicts accountability will become a vital issue for businesses of the future. Steenbarger & Smith (1996) appear to agree, stating "Given heightened calls for accountability from the public, school and campus administrations, and insurers, the assessment of quality in counseling is likely to become a key tool for marketing and survival in coming years" (p. 146).

Counseling professionals will have to establish standardized means of evaluating outcome effectiveness for the services they provide with, as well as without, the use of CRT in order to justify the high cost of care provision. If these standards are not rigorously researched and established within the profession, it seems reasonable to assume managed care providers will impose standards from without. Concerned about this possibility, Huang and Alessi (1996) warn, mental health practitioners "will clearly feel an impact if managed care companies independently develop Internet-accessible computerized screening tools that refer patients to care providers without our input" (p. 865).

Many counselors have expressed concerns about the development of computer use by professionals without clear guidelines backed by research, and have called for an active role by counselors in remedying the situation (Sussman, 1998; Morrissey, 1997). Almost 15 years ago, counselors were warned: "an environment currently exists,

therefore, in which inappropriate use of computer technology is encouraged by the lack of relevant research data and the resulting confusion regarding counselor identity and behavior" (Sampson, 1986, p.569). The current, gaping lack of research into CRT use by counselors has done little to change that environment. Some counselors have simply adopted a "wait-and-see" attitude toward the situation, while others (Cohn, 1997; Huang & Alessi, 1996; King, et al., 1999; Hayes, 1999; Wilson, et al., 1997; Sussman, 1998; Morrissey, 1997; Sampson, et al., 1997; Harper, 1999; Myrick & Sabella, 1995; Hackerman & Green, 2000; Delmonico, et al., 2000) propose research to provide resources enabling us to proactively guide the development of technology use within the field of professional counseling. As Pelling and Renard (1999), point out, "In our technologically driven society we often take the benefits of such technology for granted when in reality research is needed to clarify the effects of our use of technology in many areas" [34th paragraph].

In order to prepare counselors with the skills necessary for research into many of the issues they are currently facing and will continue to face in using technology in their work, and to remain competitive in the world market of mental health professionals, it is important that counselor training programs implement mandatory competency standards in the use of CRT. There is a serious need for more computer skills training of counseling professionals (Davidson & Jackson, 1996; Stamm, 1998; and Galinsky, et al., 1997). With the exception of those skills related to the use of statistics software, counseling graduate programs do not, as a rule, train or require students to demonstrate specialized proficiency in computer-related skills. Stamm (1998) suggests, "to better know when and how to use technology to support healing…mental health professionals

will need more technology proficiency, particularly with computers, than has been the norm. This is particularly true for those who will be establishing their practices in the coming decades" [5th paragraph]. Despite the fact that the Association for Counselor Education and Supervision (ACES) has established guidelines for minimal computer skills competency, the guidelines are neither standard practice nor mandatory in counseling graduate programs. Lundberg & Cobitz (1999) propose, "Increasing the awareness of technology uses, followed by skill training, and workshops on integrating technology into effective professional practice, is needed. In addition, developing technology expertise and effective training within counseling curricula is a next step" [27th paragraph].

Exploration of issues related to technology use through research may provide much needed answers that will guide us in developing technology as a useful tool for therapists entering the new millennium. Sneiderman (2000) states, "Technology by itself doesn't solve problems or produce productivity gains. It's how technology is applied and managed that makes the big difference" (p. 16). Before we can conduct meaningful research about the effects of computer technology on the work we do in therapy, we must make a preliminary assessment of ways computers are currently being utilized by counseling professionals and the extent of this use. In addition, the continually rapid advancement of CRT means that we must take future trends in technology use into consideration in the development of counselor training programs. To do otherwise would leave counseling program graduates at a technological disadvantage in a world that is increasingly becoming more and more technologically oriented.

A study is needed in which experts in counseling and computer technology could express their opinions and reach consensus regarding: (1) an assessment of how much and in what ways computers are currently being utilized by counseling professionals, and (2) a trends forecast concerning computer use by counselors in the near future. It is with this important background information that much needed research into computer use by counseling professionals can make a significant and meaningful beginning. The Delphi method is a process well suited to accomplishing each of the above goals.

The Delphi Method—An Overview

The Delphi method was the method of choice for answering the research questions presented in this study concerning the use of computer-related technology by counselors and counselor educators both now and in the near future. Delphi is a systematic polling of the opinions of a panel of experts knowledgeable on a given topic through iterative questionnaires, referred to as "rounds" (Dalkey, Rourke, Lewis, & Snyder, 1972). Following each round of questions, summary feedback of the previous round's responses is sent to each panelist for consideration. A request is made for individual changes in response, for convergence with the group summary response of each issue, or to provide a rationale for non-convergence. This process is an attempt to reach group consensus among individuals who may be geographically dispersed and who are unaware of each other's identity throughout the Delphi process, which lasts until response stabilization occurs or as dictated by the design of the study (Dalkey, et al., 1972).

History of the Delphi

In the early 1950's, the RAND Corporation, in Santa Monica, California, was hired to conduct a top-secret study for the U.S. Airforce to examine the potential effectiveness of atomic attack. RAND research team members, Olaf Helmer, Norman Dalkey, Nicholas Rescher, and others, were given the task of deciding the best way to approach the issue. They decided that the opinions of a panel of experts should be sought, but were not satisfied with conventional means of gathering group opinions.

Dalkey had concluded that prior work by statisticians concerning the statistical properties of group judgment was going in the wrong direction, and would not be useful (N.C. Dalkey, personal communication, April 26, 1999). Results of experiments at RAND indicated that the responses of a group were not as accurate as the median of individual estimates without discussion (Dalkey, 1969). Olaf Helmer proposed a new approach to the group decision-making process (N.C. Dalkey, personal communication, April 26, 1999) that would overcome some of the undesirable aspects of conventional group conferences involving face-to-face contact, such as:

1. Swaying of group decisions by dominant, more vocal personalities, which can result in more extreme positions (Jaeger & Busch, 1984).
2. Semantic noise that reflects irrelevant individual or group interests over problem-solving discourse (Dalkey, 1969).
3. Reluctance to change prior expressed opinions for fear of "loss of face".
4. Reluctance to express opinions that differ from the perceived group consensus.
5. Potential fear among junior members of reprisal or criticism from senior, more powerful group members for expressing conflicting opinions.

The RAND team named the process, Delphi, after the site of the Greek oracle "where necromancers foretold the future using hallucinogenic vapors and animal entrails" (Gordon, 1994). The panel of experts was selected from those at the RAND Corp. alleviating security problems for the study (N.C. Dalkey, personal communication, April 26, 1999). The study looked favorable, and was the basis for the first paper on Delphi published in *Management Science* in 1964.

The Delphi Process

Panel Selection

Since the results of a Delphi study depend on the opinions expressed by the Delphi panel, one of the most important steps in the Delphi process involves the selection of the panel of experts. Great care should be taken in the selection of its members. Persons are usually considered experts after they have acquired a considerable amount of knowledge and experience in the field of inquiry. They may be identified in a number of ways: literature searches that reveal persons who have published works relevant to the topic of investigation; through institutions, such as universities and government agencies; through referrals made by members of professional listservs; and by personal referrals from professionals within the field of investigation.

Once a list has been formulated, a prospective panelist should be personally contacted with a request for their participation in the study. The request may be made in person, via telephone, mail, or e-mail. The following written information should be provided to the prospective panelist:

1. Purpose of the inquiry.

2. A brief explanation and outline of the Delphi process.
3. Expected time commitments of the panelist to complete all phases of the study. It is important to remember experts are persons who are generally in high demand, and, consequently, may not have much time to spare.
4. Assurance of response anonymity.
5. How the expert is to be compensated for their time. While not always essential, it is strongly recommended that participants receive compensation for their services whenever possible (Linstone & Turoff, 1975).
6. An offer to make the results of the study available upon its completion.

A panel size of 15 - 25 experts is typical for the Delphi process (Dalkey, personal communication, July 10, 1998). Although participant numbers are small compared to statistically-oriented modes of inquiry, it is important to understand, as Gordon (1994) points out, "…Delphis do not (and are not intended to) produce statistically significant results: in other words, the results provided by any panel do not predict the response of a larger population or even a different Delphi panel. They represent the synthesis of opinion of the particular group, no more, no less" (p.4). Gordon also points out that panel members are "non representative, knowledgeable persons" (p.6). Care should be taken to assess the motivation/interest level of prospective candidates prior to their acceptance. Attrition rates may be understandably high among panelists who have low interest in the study.

Delphi Question

After the panel has been selected and confirmation of acceptance to participate has been received, it is time to send the first round of questions to the experts for their consideration. Delphi questions have been described by Gordon (1994) as consisting of three general types, each requiring different kinds of expertise:

- *Forecasts* on the occurrence of future developments based on knowledge of cutting-edge research and technology.
- *Desirability* of some future state based on moral, political, or social considerations.
- *Policy* issues concerning the means for achieving or avoiding a future state (p.4).

Formulation of questions is a critical stage of the Delphi process. According to Murray Turoff, an internationally recognized expert on the Delphi process and co-author of, *The Delphi Method: Techniques and Applications* (1975), precision and clarity of expression are vital to both the smooth execution of the questioning process as well as interpretation of responses from panel members (personal communication, April 26, 1998). For this reason, it is highly recommended that researchers perform a pilot study to identify possible ambiguities in wording of both Delphi questions and instructions. A pilot run will also provide researchers with valuable feedback on other aspects of the Delphi process from the participant's perspective, such as length of time to complete each round of questions, and, in the case of electronically conducted studies, any technological glitches in accessing and responding to the questionnaires via the Internet.

Delphi Rounds

After the Delphi questions have been refined, the study is ready to begin. The Delphi panel of experts are sent one or more questions in open-ended form for their

consideration. Responses to these open-ended questions are analyzed by a research committee and used to generate a list of items to be rated by the Delphi panel in the next and subsequent rounds of the study. Alternatively, a modified form of the Delphi process may use the responses of a smaller committee, representative of the Delphi panel of experts, to generate the list of items to be rated during the study. The committee meets, and the list is formulated prior to the beginning of the study. This form of Delphi is commonly referred to as a modified Delphi.

In formulating the Delphi questionnaire, it is also desirable to approach the issues to be considered by panelists in a multidimensional manner (M. Turoff, personal communication, April 26, 1998 and Wills, 1972). By presenting the issues in a variety of ways (Mitroff & Linstone, 1993), one can explore related aspects of the issues under consideration and acquire a richer understanding of panel responses.

Once the questionnaire containing the list of items to be rated is completed, it is sent to individual panel members for their consideration. Panelists are also given the opportunity to suggest additional items for consideration in the next round of questions. Responses are tallied by the research staff and summarized for feedback to panelists during the next round.

According to Dalkey, et al. (1972), “the simple process of taking a group median appears to be a relatively effective way of pooling diverse information within the group” (p.54), and is preferred over the mean in reporting group responses for feedback (Gordon, 1994). Dalkey, et al. (1972) add that this process of systematically pooling the opinions of a group of knowledgeable individuals can somewhat compensate for the limited experiences and biases of a given individual by increasing the range of experience and

having the biases cancel out (p.133). Frequently, the interquartile range, containing 50 percent of respondents' answers, is reported with the median.

Using summary data from round 1, a revised questionnaire is created for each of the Delphi panelists for the second round of Delphi questions. This questionnaire includes the items rated in the previous round, the summarized group response to each item, and the individual panelist's previous response to each item on the questionnaire.

During this round of the Delphi, panelists are asked to consider the response of the group from the previous round, review their own previous response, and rate each item again. In addition, panelists are asked to rate new items submitted by group members in the previous round. A request is made for panelists to provide reasons for non-consensus to the group response. In order to avoid an artificial consensus, instructions should be worded so that panelists do not feel pressured to change their response to the group response or answer questions about which they are unsure (M. Turoff, personal communication, July 19, 1998). For this reason, a "no response" option is essential.

Again, a tally is performed of group responses to each item and reported in the third round questionnaire. As before, previous responses to each questionnaire item are given. Panelists are requested to re-evaluate their previous response in view of the current group response, make any desired changes, and give reasons for non-consensus. The Delphi process continues until responses stabilize or as dictated by the design of the study (Dalkey, et al., 1972).

Advantages of the Delphi

The Delphi process is well suited to answer questions requiring a value judgment. In a series of experiments during the late 1960's to assess the appropriateness of the Delphi procedure for group value judgments, Dalkey, et al. (1972), concluded "the outcome of these experiments appears to be that the Delphi procedures—as far as we can evaluate them at present—are appropriate for generating and assessing value material" (p.57). Dalkey, et al. (1972) and Dalkey (1969) suggest a number of advantages, in addition to those mentioned earlier that relate to response anonymity, associated with the Delphi process:

1. It is a rapid and relatively efficient manner in which to acquire expert opinions.
2. If well designed, the procedure requires less effort of respondents than a conference.
3. It can be a highly motivating environment.
4. Feedback can be novel and interesting.
5. The systematic procedures give the appearance of objectivity to the outcomes.
6. There is a sense of shared responsibility due to anonymity, which decreases social inhibitions.
7. Information can be obtained from a large group of experts that are geographically widely dispersed, and who may be of diverse backgrounds or live in remote locations (Strauss & Zeigler, 1975).
8. The researcher has an increased ability to focus the group's attention on the topic of interest (Weatherman & Sevenson, 1974).
9. It increases rational input (Skutsch & Hall, 1973).
10. It is a relatively inexpensive means of gathering group opinion (Barnett, Danielson, & Algozzine, 1978)

Disadvantages of the Delphi

In a critical review of the Delphi method, Weaver (1972), cited several studies (Campbell, 1966; Weaver, 1969; and Waldron, 1970) investigating factors affecting Delphi forecasting outcomes. Weaver (1972) found evidence for questioning the accuracy of Delphi forecasts, and suggested that its utility would be enhanced, instead, by a shift in focus to the plausibility of forecasts. Other criticisms of the Delphi method include:

1. The inductive analysis of responses to the initial questionnaire may lead to problems in interpretation (Bernstein, 1969).
2. The unproveable nature of a Delphi makes its utility subject to the influences of unforeseen events, such as scientific discoveries, politics, and events in nature (Bunning, 1976 and Linstone & Simmonds, 1977).
3. Lack of assurance of consensual agreement by panel members (Bernstein, 1969).
4. Motivating panel members to participate in the Delphi, and maintaining their interests in each subsequent round of questions (Tersine & Riggs, 1976).
5. Time investments in preparation and execution of the rounds of questions when utilizing conventional (i.e., regular mail) methods of questionnaire delivery, and computer programming challenges when utilizing electronic delivery of the Delphi.

Summary

Our world today is witnessing increases in the use of CRT so incredibly rapid that estimates become obsolete before they reach publication. Computer technology is being

incorporated into all aspects of human interaction, and is changing many of the traditional ways in which things have been done. The mental health field's reactions to the increase in CRT use are reminiscent of those expressed when other technological introductions occurred. It is important for us to remember that computers were not created to replace the human element. Instead, they were designed as powerful tools to make our tasks easier and more efficient. Instead of engaging in "all-or-nothing" thoughts about the use of computer-related technology by counseling professionals, we need to examine specific ways CRT is already helping us in our work, and how it may continue to do so in the future. The answers will provide us with valuable information to guide us in future research and training in the use of technology by counseling professionals.

CHAPTER THREE

Methodology

Although we know computer-related technology (CRT) is being used by counseling professionals, it is virtually unknown how extensively and in what ways CRT is being used, or what the trend will be for future use of CRT by counselors and counselor educators. The purpose of this study is to explore these issues. This information provides the necessary foundation to begin examining whether there are important differences in counselor work done with the aid of CRT and work done in more traditional, non-technologically aided ways. In addition, this study sought information useful in guiding counselor educators in how best to meet the technological needs of future graduates in counseling programs.

Due to the expense and time commitments necessary to bring together a group of individuals qualified to explore these issues, and the fact that exploration of these issues do not lend themselves to the use of statistical, analytical techniques, the Delphi method was the most appropriate means of collecting data for this study (Linstone, 1978). The Delphi method seeks the opinions of persons who have attained a level of knowledge and experience in their occupational fields that is respected by others, and are referred to as experts. Webster (1991, p.478) defines an expert as someone who is “very skillful; having much training and knowledge in some specific field”. The experts in a Delphi study are a group of individuals systematically chosen by the Delphi researcher as representative of persons knowledgeable about the issues of concern to the investigation.

There are many variations on the traditional Delphi first developed in the 1950's for the RAND Corporation by Olaf Helmer and Norman Dalkey. The present study utilized a variation referred to as a modified Delphi. In a traditional study, the panel of experts is initially asked open-ended questions in order to generate a list of responses to be rated by panelists in subsequent rounds of the study. A modified Delphi begins with a list of the issues to be explored that was developed prior to the beginning of the study. Additionally, a Delphi study in which experts are asked to forecast the likelihood of future events occurring is referred to as a futures Delphi.

The present study employed a modified futures Delphi with a panel of 30 experts in the field of counseling and computer technology to answer the following four research questions:

1. How much do counselors and counselor educators rely on computer-related technology to complete job-related tasks today?
2. What are specific ways in which counselors and counselor educators are currently using computer-related technology in performing job-related tasks?
3. Will computer-related technology be used more extensively by counselors and counselor educators in their work in the next ten years?
4. Will computer-related technology assist counselors and counselor educators in their work in different ways in the near future?

The Delphi Panelists

The panelists for this Delphi study were chosen to represent each of five groups of professionals including one group of counselor educators, three groups of counselor

practitioners, and one group of computer technologists. Nominations for the Delphi experts were acquired through a search of major publications in the fields of counseling and computer technology, posting formal requests to professional listservs on the Internet, requests made to departmental chairpersons at major U.S. universities, and by personal referrals. Copies of the written request for nominations posted on professional Internet listservs, are included in Appendix A, p. 110-115.

Counselor and technologist nominees for the study were asked to have achieved the following description of expert status:

> An expert may be defined as someone with special skills or knowledge evidenced by leadership in professional organizations, holding office in professional organizations, presenter at national conventions, published in recognized journals, etc.

In addition, counselor nominees were asked to meet the requirements for and hold the title of National Certified Counselor and/or Licensed Professional Counselor in their state of practice or to have held such titles, and to have counseled individuals on issues of mental health for a period of at least five years. Counselor nominees were required to possess expertise in at least one of the following four counselor categories:

1. Counselor educators defined as persons currently employed by an accredited college or university to instruct master's and/or doctoral-level students in counseling.
2. Counselors who work in agency settings such as state mental hospitals, community mental health agencies, or large, corporate-owned mental health agencies.
3. Counselors who work in private practice, either as an individual or with other individuals.

4. Counselors who work in college or university counseling centers that help students with a variety of mental health issues.

In addition to having achieved the above description of expert status, technologist nominees were asked to possess demonstrated skills and/or titles in computer-related technology including, but not limited to:

- designing and/or developing web pages
- computer programming
- software development
- knowledge of operating systems
- network administrator
- hold a computer science degree
- background in engineering
- instructional technologist
- information systems manager
- database administrator

Organizing the Delphi Panel

Correspondences with Delphi panelists were conducted via e-mail. An e-mail letter of introduction was sent to each of the panel nominees inviting their participation in the Delphi study. The letter outlined the importance of the study, the Delphi method, panel member qualifications to be included in the study, and the amount of time required to complete the study. Included in the introductory letter was a consent form to be returned to the researcher acknowledging acceptance of the invitation to participate as a

Delphi panelist. A message acknowledging receipt of the consent form was returned to each panelist. Copies of the letter of introduction and consent form are included in Appendix B, p. 116-121.

The Delphi panel consisted of 5 counselor educators, 7 private practitioners, 3 agency counselors, 8 counselors who work in university counseling centers, and 7 computer-related technologists, for a total of 30 panelists (Table 1). A list of the names of the 21 panelists who completed all three rounds of the Delphi is included in Appendix C, p. 122.

Table 1

Delphi Panelists

Panelist classification	N-Rd 1[1]	N-Rd 2[2]	N-Rd 3[3]
Counselor Educators	5	2	2
Private Practitioners	7	7	5
Agency Counselors	3	3	3
University Counseling Center Practitioners	8	6	4
Technologists	7	7	7
Total N[4]	30	25	21

[1]No. of panelists participating in Round 1 [2]No. of panelists participating in Round 2
[3]No. of panelists participating in Round 3 [4]Total no. of panelists

Creating the Delphi Questionnaires

Four committee meetings were held in which the questionnaires used in the Delphi study were developed. The following seven steps were used in creating the Delphi questionnaires:

1. There were three meetings to develop a checklist of tasks and categories for those tasks performed by counselors in their work. The committee that developed the checklist consisted of one faculty member in counselor education, one staff member in the university counseling center, one staff member experienced in the Delphi

method, and two doctoral candidates in counselor education. During the first meeting, the group developed a total of 111 counselor tasks and 9 categories for those tasks.

2. The researcher summarized the individual counselor task lists created by the committee members of the first meeting, and presented the summarized list at the next meeting to the counselor education faculty member and counseling center staff member from the initial committee plus one additional counselor education faculty member. The purpose of the second meeting was to edit and organize the list of summarized tasks and task categories. Members were given strips of paper with each of the tasks and categories of tasks typed on them, blank strips on which to write additional categories or tasks, and a blank poster board. Each member was asked to independently organize the task categories and place individual tasks under the appropriate categories. After each member had finished, the researcher used adhesive tape to secure the items to the poster boards just as they had been placed by the individual committee members. The individual poster board items were later typed as they appeared onto paper. A chart was organized which listed each item and where each committee member had placed that item on his/her poster board.
3. A third meeting was held to reach consensus concerning the number of items to be included in the final list of counselor tasks and the organization of those items into specified categories. The committee for this meeting included all faculty and staff members of the two previous meetings and one additional faculty member who represented the computer technologist group. As a result of the meeting, a list of 46

tasks that counselors perform in their work were grouped into the following 7 categories to be rated for CRT use:

a. Marketing/ Client Recruitment
b. Report and Record-keeping (paperwork)
c. In-session Intervention/Therapy/Counseling
d. Clinical Assessment/Testing
e. Consultation and Referral
f. Supervision/Training
g. Professional Development

4. Three additional open-ended questions were added to the Delphi questionnaire following the list of tasks. The first question asked for additional tasks that panelists felt should be added to the list. A fourth committee consisting of two representatives of the technologist group of panel experts, including a faculty computer scientist and an assistive technology coordinator, and the researcher met to develop the second and third open-ended questions for each category of tasks that counselors and counselor educators use in their work:
    - The second question asked for specific examples of how computer-related technology is currently used to accomplish these tasks.
    - The third question asked for specific examples of how computer-related technology will be used in the year 2008. The second and third questions included examples for the panelists in order to stimulate their thinking.
5. Finally, the committee of computer-related technologists and the researcher developed a list of nine computer-related technology (CRT) tools and an "other" category to be

rated by panelists for frequency of use in Round 2, Part B of the Delphi. These 10 items are listed in the description of Round 2-B, step 6, p. 52.

6. After the questionnaires were finalized, the study's computer programmer created web-based versions of the questionnaires and posted them on the Internet for the study.
7. Execution of the web-based questionnaires for Rounds 1 and 2 were tested for ease of comprehension, accessibility, and response delivery and capture, by two counselors and one psychologist prior to the actual run of the Delphi study. The study's computer programmer incorporated suggestions for changes.

The Delphi Process—Round 1

The Delphi Process involves an iteration of questionnaires referred to as rounds. Traditionally, questionnaires are mailed to the Delphi panelists for their consideration, returned to the researcher for summarization of group responses, and re-sent to panelists for reconsideration. This back-and-forth process typically continues until consensus is reached or response changes by panelists have significantly diminished. The traditional method of mailing questionnaires can become quite costly, and time-consuming for both the researcher and panelists. This study attempted to use the Internet to alleviate these problems.

When this research began, there were no known Delphi studies that had been totally conducted via the Internet. There were no software programs available to readily adapt the study to the Internet. It was necessary to write an individual program, using a web-based language known as HTML, to transfer the Delphi questionnaires to web pages

accessible to the Delphi panelists through the Internet. This program was further complicated by the necessity to identify and summarize coded responses, and feed the summarizations into the next web page questionnaire.

This process involved a considerable amount of time and effort on the part of the study's computer programmer, which is the trade-off in conducting a Delphi study on the Internet with the present lack of available software specifically designed for this purpose. The time and cost factors are spent up front, prior to the beginning of the study. If programmed properly, the payoff comes in the relatively brief amount of time necessary to collect the Delphi data, the amount of time and effort required of busy professionals who serve as panelists, and the costs of mailing questionnaires back-and-forth.

In conducting the first round of this Delphi study, 10 steps were followed:

1. Panelists were notified about the beginning date of the study. In the letter of notification (Appendix D, p. 124-125), panelists were given a summary of the instructions, the location of the Web questionnaire (URL), and a personal code for accessing the Round 1 questionnaire. Each member was asked to complete and submit all responses to Parts A and B of Round 1 within three days.

Login and Demographics

2. Upon entering the URL of the Web questionnaire, panelists were taken to a welcome page that requested their personal code for login and registration. Copies of the welcome/login page and demographic questionnaires are included in Appendix D, p. 126-129. Panelists with codes that began with the letter "T" were taken to the

technologist demographic page. Panelists with all other codes were taken to the counselor demographic page.

3. After responses were selected to the demographic questionnaire, panelists submitted their responses electronically.

Instructions

4. Following submission of demographic information, panelists were taken to the instruction page for Round 1 (Appendix D, p. 130-131) where detailed instructions were given for how to respond to the questions in that round of the modified Delphi study. It was recommended that panelists print the instructions for ease of reference while making their responses to the Round 1 questionnaire. Round 1 of the study consisted of two parts—Part A and Part B. It was recommended that panel members take a break between submission of the two parts of Round 1. Panelists were instructed to complete Part A of Round 1 after reading the instructions.

Round 1, Part A

In an effort to answer the first research question, "To what extent is computer-related technology currently used by counselors and counselor educators?", Part A requested that panelists rate a total of 46 tasks grouped in 7 categories of tasks that counselors perform in their work. Each task was first rated by panelists for *current* use of computer-related technology (CRT) by counselors and counselor educators to perform the task. The rating scale was a five-point Likert-type scale with the following values:

- **5 = Essential** if it allows counselors to do things they never could do before.

- **4 = Very Helpful** if it significantly decreases effort, makes things much more efficient, or improves the quality of the product or service.
- **3 = Helpful** if it makes the job easier to perform, but is not essential.
- **2 = Not used, but would like to** if CRT and/or the skills to use it are not currently available, but would be used if they were available.
- **1 = Not used, and no need for** if there is no interest in using CRT for the task, its use would be inappropriate for the task, or no desire to use.

Panelists were allowed to choose one numbered rating for each task.

5. In order to answer the third research question, "Will computer-related technology be used more extensively by counselors and counselor educators in their work in the next ten years?" panelists were next requested to rate each task again for *future* use of CRT to do these tasks. As in the previous rating for present use of CRT, panelists were allowed one numbered rating for each task with respect to future use of CRT to perform the task. A copy of Round 1, Part A is included in Appendix D, p. 132-134.
6. When Part A was completed, panelists were instructed to click on a submit button to electronically relay responses to the researcher's Web-accessible database for summary and analysis.

Round 1, Part B

7. In Part B of Round 1, the Delphi panelists were asked to add new categories of tasks or specific tasks within categories that they felt needed to be added to the list in Part A by typing in the appropriate blank space or form field on the Web page.

8. Next, panel members were asked to give specific examples of how CRT is used for each of the seven task categories both now and in the year 2008. This survey question was included to partially address research question number two, "What are specific ways in which counselors and counselor educators are currently using computer-related technology in performing job-related tasks?" Examples were given by the researcher for both present and future use of CRT in order to prompt panelists to provide similar kinds of examples not already given (see Appendix D, p.135-140).
9. When Part B was completed, panelists were instructed to click on a submit button to electronically relay responses to the researcher's Web-accessible database for summary and analysis. At the end of Part B, panelists were notified that they would be informed when to begin Round 2.
10. Additional tasks and task categories added by panelists during Part B of Round 1 were summarized, organized, and edited by a sub-panel consisting of three counselors, who had not participated in prior editing of the study's Round 1 questionnaire, and the researcher using the following procedures:
    - Individual response items and category headings were printed on paper and cut into individual strips.
    - The sub-panel was asked to sort the response items and category strips into similarity groups. Each member of the sub-panel sorted strips independently of other members.
    - When all strips had been placed in piles, members reconvened to compare and discuss their sortings until a consensus was reached on how task items were to be presented.

As a result of the sub-panel's summarizations, 7 new counselor tasks and 1 new counselor task category, Professional Accountability, were added to the Round 2 questionnaire for an initial rating by panelists.

There were a total of 30 panelists who completed the Round 1 questionnaire.

The Delphi Process—Round 2

In conducting Part A of the second round of the Delphi study, panelists were first asked to rate the new tasks and category of tasks added by them during Round 1. During Part B, panelists were asked to rate CRT tools developed by the computer scientist, technology coordinator, and researcher. Round 2 was conducted following a seven-step procedure:

1. Delphi panel members were notified by e-mail when to begin Round 2 of the study. The message included summary instructions and the location of the Web questionnaire (URL) (Appendix E, p.142-145).
2. After login with a personal code, panelists were taken to the instructions page for Round 2 where detailed instructions were given for how to respond to the questions (Appendix E, p. 147-148). It was recommended that panelists print the instructions for ease of reference while making their responses to the Round 2 questionnaire. Panelists were then prompted to proceed to Part A of the Round 2 questionnaire.

Round 2, Part A

3. Panelists were asked to rate new tasks that were added by them during Round 1, Part B. Each task was first rated for current, then future use of computer-related

technology (CRT) by counselors and counselor educators to perform the task (Appendix E, p.149).

4. When Part A was completed, panelists were instructed to click on a submit button to electronically relay responses to the researcher's Web-accessible database for summary and analysis.
5. After submission of responses, panel members were instructed to proceed to Round 2, Part B.

Round 2, Part B

6. Part B requested panelists to indicate how often they use CRT tools for the 7 counselor task categories. A copy of this questionnaire is included in Appendix E, p.150. The 10 CRT tools to be rated were:
   a. e-mail
   b. word processor
   c. web
   d. spread sheet
   e. project management
   f. graphics
   g. animation
   h. simulation
   i. statistical software
   j. other (this item was a blank space or form field on the Web page in which panelists could add CRT tools not covered in the list)

Each of these items were to be rated once for each task category using the following scale:

- D = Daily
- W = Weekly
- O = Occasionally
- N = Never
- N/A = Not applicable

7. All members were asked to complete the questionnaire within three days. Of the 30 panelists who participated in Round 1, 25 (83%) completed the Round 2 questionnaire.

The Delphi Process—Round 3

The Round 3 questionnaire asked panelists to rate the original 46 tasks in 7 categories of Round 1 plus the 7 tasks and 1 new category added in Round 2 for a total of 53 counselor tasks in 8 task categories. Panelists were to consider the group rating, their previous rating, and make a final rating for each task. In addition, panelists were asked to select reasons for their final ratings. In conducting the third round of the study, the five steps listed below were followed:

1. Delphi panel members were notified by e-mail when to begin Round 3 of the study. The message included summary instructions and the location of the Web questionnaire (URL). A copy of the e-mail message is located in Appendix F, p.153-156.

2. After login with a personal code, panelists were taken to the instructions page for Round 3, sections 1 and 2, where detailed instructions were given for how to respond to the questions (Appendix F p.158-161). It was recommended that panelists print the instructions for ease of reference while making their responses to the Round 3 questionnaire. Panelists were then prompted to go to the first section of the Round 3 questionnaire.
3. The items in Round 1 that were provided by the researcher and the items that Delphi panelists added in Round 1 were combined into one comprehensive list of 53 tasks in 8 categories of tasks that counselors and counselor educators perform in their work. Responses to items in the combined list that were submitted in Rounds 1 and 2 were summarized by reporting the median response by all panelists for each item. This information provided feedback to individual panelists on how other panel members responded to the items in the list, and was placed in a column next to the appropriate task item.

   Prior to the median response, the panelist's previous rating was given for each task item. Panelists were asked to review the median response and change their previous rating for present use of CRT to perform counselor tasks to agree with the median response, or state reasons for maintaining previous ratings by typing in the appropriate blank space. This process was repeated for future ratings of each task (Appendix F, p. 162-197).
4. For tasks that received a final rating of 5, 4, or 3, panelists were next asked the following, "For those items that you rated as 5, 4, or 3, please indicate <u>how</u> CRT

helps accomplish the task now and will help in the year 2008. Choose as many as apply from the following scale:

- **E = Efficiency** means able to produce more with less effort
- **Q = Quality** means able to produce a superior product or service; can do the job better than it was previously done
- **O = Opportunity** means able to do things that may not have been previously possible

For tasks that received a rating of 1 or 2, panelists were asked the following: "For those tasks that you rated as 1 or 2, please indicate reason(s) CRT has not helped accomplish the task in the present and will not help accomplish it in the year 2008. Choose as many as apply from the following scale:

- **O = Other**, please write in
- **T =** lack of **Training** to use
- **C = Costs** of soft/ hardware
- **S =** no available **Software**
- **I =** CRT is **Inappropriate** to task

5. Panel members were asked to make responses and submit them electronically within three days. Due to the length of the Round 3 questionnaire, panelists first rated task items 1-27, then proceeded to items 28-53. Of the 25 panelists who responded to Rounds 1 and 2, 21 completed the Round 3 questionnaire, making a total of 70% of those panelists who began the Delphi study completed the process.

Table 2

Delphi Process Summary

Delphi Panel Development
1. Requests for expert panel nominees, e.g., posted e-mail request for nominees on listservs, including study description and panelist criteria (Appendix A, pp. 114-119)
2. E-mailed letter of introduction and consent form to nominees (Appendix B, pp. 120-125).
3. Delphi panel selection finalized (Appendix C, pp. 126-130).
Development of Delphi Questionnaires
1. First meeting with sub-panel to develop list of counselor tasks and categories. Results: 111 tasks, 9 categories.
2. Second meeting with sub-panel to summarize tasks for redundancy, modifications and organization.
3. Third meeting with sub-panel for consensus on finalizing counselor tasks and categories list. Results: 46 tasks in 7 categories.
4. Fourth meeting with new sub-panel to develop open-ended questions requesting examples of CRT. Results: 2 open-ended questions requesting specific examples of current and future CRT use.
5. List of CRT tools for Round 2-Part B ratings developed during fourth meeting.
6. Delphi questionnaires transferred to Web by computer programmer.
7. Web-based questionnaires for Rounds 1 and 2 tested and refined.
Round 1
Part A
1. E-mailed begin study notification to panelists, including summary instructions, URL, personal access code, and schedule (Appendix D, pp. 132-133)
2. Panelists logged in codes at Welcome URL (Appendix D, p. 134).
3. Panelists completed demographic questionnaire (Appendix D, pp.135-137).
4. Panelists accessed web instructions for completing Round 1 (Appendix D, pp. 138-139).
5. Panelists rated 46 counselor tasks in 7 categories for current and future use of CRT in Part A of Round 1 questionnaire (Appendix D, pp. 140-142).
6. Responses to Part A submitted and median responses calculated for each counselor task.
Part B
7. Panelists suggested new tasks and categories.
8. Panelists gave specific examples of current and future use of CRT (Appendix D, pp. 143-148).
9. Panelists submitted their examples for summary and analysis. Total panelists responding to Round 1: 30.
10. New tasks and task categories suggested by panelists summarized, edited, and organized by new sub-panel. Results: 7 new tasks and 1 new category.
Round 2
Part A
1. E-mailed Round 2 notification to panelists, including begin and end dates, summary instructions, and URL (Appendix E, pp. 150-152).
2. Panelists accessed welcome page and web instructions for completing Round 2 (Appendix E, pp. 153-155).
3. Panelists rated 7 new tasks added by them in Round 1, Part B for current and future use of CRT (Appendix E, p. 156).
4. Responses submitted, and median responses calculated.
5. Panelists instructed to proceed to Part B.
Part B
6. Panelists rated 10 CRT tool items for frequency of use (Appendix E, p. 157).
7. Responses submitted (Appendix E, p. 158). Total panelists responding to Round 2: 25.
Round 3
1. E-mailed Round 3 notification to panelists, including begin and end dates, summary instructions, and URL (Appendix F, p. 160-162).
2. Panelists accessed welcome page and web instructions for completing Round 3 (Appendix F, pp. 163-167).
3. Panelists rated 53 counselor tasks in 8 categories for current and future use of CRT (Appendix F, pp. 187-205).
4. Reasons selected by panelists for final ratings.
5. Responses submitted in two sections: items 1-27 and 28-53. Total panelists completing the Delphi: 21.

CHAPTER FOUR

Results

The purpose of this study was to explore how much and in what ways computer-related technology (CRT) currently affects, and is expected to affect in the future, the ways in which counselors and counselor educators do their work. A committee of professionals, representative of members chosen for participation in the study, developed and refined a questionnaire listing tasks that counselors perform in their work. The list of 46 tasks in seven categories developed by the committee was used in a modified Futures Delphi to answer the following four research questions:

1. How much do counselors and counselor educators rely on computer-related technology to complete job-related tasks today?
2. Which counselor-related tasks are counseling professionals currently accomplishing with the help of CRT?
3. What are specific ways in which counselors and counselor educators are currently using computer-related technology in performing job-related tasks?
4. To what extent and in what ways will counseling professionals use computer-related technology to do their work in the next ten years?

Delphi is a method of acquiring the opinions of a group of geographically dispersed individuals, considered experts in their occupational fields, who remain anonymous to each other throughout the data-gathering process. The group of experts is referred to as the Delphi panel. Panel members are sent a series of questionnaires, called rounds, which

list a number of statements pertinent to the topic of investigation. Statements are to be rated by the experts, and returned to the investigator for summarization.

In a standard Delphi, the initial round of questions sent to the panel of experts are open-ended, allowing panel members the freedom to provide information that the investigator will use to create the Delphi questionnaire. In a modified Delphi, this phase of the Delphi process may be completed by a committee of individuals representative of the Delphi panel prior to the beginning of the rounds of questioning. A futures Delphi asks panelists for their opinions on matters that may occur in a future time frame.

After each round of questions, summary data, in the form of a median or mean response for each statement, are computed by the investigator, and relayed to the panel of experts in the subsequent round of questions. Panelists are then asked to consider the responses of other members, give a new response to each statement, and provide reasons for non-compliance with the group rating. This process continues until group consensus is reached or changes in response diminish, usually within 3-4 rounds. After the last round of questions are returned and analyzed, panelists are provided the final summary results of their ratings.

In an effort to achieve a more accurate understanding of the opinions expressed by the Delphi panelists, the research questions for this study were posed from several perspectives. In addition to rating counselor tasks for current and future use of CRT, panelists were asked to provide *specific* examples of CRT use in counseling, to indicate personal use of specific CRT tools, and, finally, to select reasons for the final ratings of CRT use to accomplish counselor tasks.

The Delphi Panelists

A panel of 30 experts were chosen and agreed to participate in the Delphi study. Of the 30 panelists who participated in Round 1, 23 were counselors, including five counselor educators, eight counselors who worked in college/university counseling centers, three who worked in agency settings, and seven who worked in private practice. The remaining seven panelists were experts in computer-related technology and were referred to collectively as technologists. There were 21 panelists who completed all three of the Delphi rounds.

Beginning at the End

Results of initial rounds of Delphi questionnaires provide baseline references from which to gauge shifts in the responses of Delphi panelists, after feedback, toward or away from group consensus during subsequent rounds of questioning. Observation of these response shifts can provide useful information about group decision-making processes in general as well as information about individual members or subgroups of a specific Delphi panel. For these reasons, the initial responses of a Delphi study are important to the Delphi process. However, it is the final responses of the Delphi that are the primary focus of investigation.

It was during Round 3 that individual members of this Delphi panel of experts, after consideration of the responses of other panel members, gave their final ratings of the completed list of 53 counselor tasks for use of CRT to complete those tasks, both now and in the future. Therefore, this discussion will begin with the results of the final

ratings, and include results from Rounds 1 and 2 to provide support for, or to point to important changes during, the final phase of the Delphi process.

Round 3—Counselor Tasks

Round 3 Questionnaire Instructions Summarized

Panelists were asked to perform the following five steps in giving responses for Round 3, the third and final round of the Delphi study:

For current/future use of CRT to accomplish tasks:

1. Observe your previous rating for the task in the first column.
2. Observe panelists' median response in the second column.
3. Rate the task again by changing to the median response, or keep your previous rating by choosing the same rating as you chose before.
4. For each final rating of 5, 4, or 3, choose E = Efficiency, Q = Quality, and/or O = Opportunity to tell us HOW CRT helps accomplish the task. Choose all that apply.
5. For each final rating of 1 or 2, choose O = other, T = lack of training to use, C = costs of soft/hardware, S = no available software, or I = CRT is inappropriate to task to tell us why CRT is NOT helpful for the task. Choose all that apply.

Round 3—Summarization of Counselor Tasks

Round 3 ratings of counselor tasks were summarized using the following eight steps:

1. Each task rating for *current* use of CRT to accomplish the task was summarized for percent of panelists responding with each of the five possible ratings. Percent ratings for responses of 5, 4, or 3 were then grouped together to form an overall *use of CRT* rating for each counselor task.
2. For items selected by at least 50% of Delphi panelists as accomplished with the help of CRT, mean ratings and total frequencies of panelists responding were calculated.
3. Next, items panelists selected as using CRT were rank-ordered according to mean rating in descending order from 5.00 to 3.00 and grouped according to counselor task category.
4. The percent of panelists rating each counselor task as "2" or "1" for use of CRT were grouped together to form an overall *non-use* of CRT percentage rating for each task.
5. For items selected by at least 50% of Delphi panelists as *not* accomplished with the help of CRT, mean ratings and total frequencies of panelists responding were calculated.
6. Of the non-use items, those specifically rated "2 = [CRT] not used, but would like to" were rank-ordered according to percent responding in descending order of magnitude, then grouped according to task category.
7. The categorization of counselor tasks into use and non-use items was repeated for responses from counselors and technologists combined, counselors as a separate group, and technologists as a separate group.
8. Steps 1-7 were repeated for *future* ratings.

Round 3—Panelists' Final Ratings of Counselor Tasks

Current Use of CRT.

When Round 3 counselor and technologist responses were combined, a total of 21 panelists selected 31 of the 53 counselor tasks as currently accomplished with the use of computer-related technology (CRT) (Table 3). Ten of those task items received mean ratings of ≥ 3.50, indicating high use of CRT for those items.

Table 3

Round 3—Current (C) and Future (F) Ratings for CRT Use

Counselor Task Items Rated 5, 4, or 3[1] for Use of CRT[2] to Perform the Task by ≥ 50% Combined Panelists (N = 21)

C[3]	F[4]	Counselor Task Category	Counselor Task Item	% C[5]	% F[6]	f-C[7]	f-F[8]	M-C[9]	M-F[10]
6	6	Marketing	01—Advertising preparation	95%	100%	20	21	3.90	4.95
16	14		02—Advertising delivery	91%	100%	19	21	3.16	4.86
20	21		47—List of services/self-help guides	100%	100%	21	20	3.10	4.15
12	27		03—Community service presentations	80%	100%	17	21	3.24	4.05
13	11	Record-keeping	04—Externally required forms	86%	100%	18	21	3.17	4.90
11	12		06—Internal/Counselor-generated forms	91%	100%	19	21	3.32	4.86
14	13		05—Client-generated forms	86%	100%	18	21	3.17	4.86
24	23		48—Case management organizer	95%	100%	20	21	3.05	4.14
18	19	Therapy	24—Follow-up	76%	100%	16	21	3.13	4.71
25	22	—Initial evaluation	12—Client demographics	91%	100%	19	21	3.05	4.14
26	28		18—Homework assignments	91%	100%	19	21	3.00	4.05
	35	—Initial evaluation	13—Personal/family history		95%		20		3.95
	37	—Initial evaluation	14—Clinical history		95%		20		3.90
	39	—Interventions	23—Other		86%		18		3.17
	40	—Interventions	21—Behavioral		91%		19		3.16
	41		10—Group prescreening		95%		19		3.11
	42	—Initial evaluation	11—Presenting problem		91%		19		3.11
	43	—Interventions	20—Cognitive		86%		18		3.11
	44		07—Establish rapport		76%		16		3.06
	46		16—Develop treatment plan		95%		20		3.05
	47	—Interventions	22—Combined		95%		20		3.05
	48		09—Overview of problem		95%		20		3.00
	49		15—Establish goals		91%		19		3.00
2	5	Assessment	26—Test scoring	91%	100%	19	21	4.00	4.95
10	10		25—Test administration	86%	100%	18	21	3.83	4.90
9	20		27—Test interpretation	91%	100%	19	20	3.84	4.70
15	30		28—Diagnosis (DSM-IV)	90%	95%	18	20	3.17	4.00
3	8	Consultation	29—Networking	95%	100%	20	21	3.95	4.90
19	15		30—Referrals	91%	100%	19	21	3.11	4.86

17	18	Supervision	35—Conduct training workshops	95%	100%	20	20	3.15	4.75
29	25		33—of site supervisors	91%	95%	19	20	3.00	4.10
28	29		32—of supervisors	86%	96%	18	20	3.00	4.05
27	31		31—of students	91%	96%	19	20	3.00	4.00
	36		34—Live supervision		91%		19		3.95
1	1	Professional Development	42—Professional writing	95%	100%	20	21	4.05	5.00
4	2	—Self-study	39—Web-based research	100%	100%	21	21	3.95	5.00
7	3	—Self-study	40—Programs/software	91%	100%	19	21	3.89	5.00
8	4	—Self-study	38—Computer-related information/research	100%	100%	21	21	3.86	5.00
21	7	—Self-study	36—legal/ethical issues	95%	100%	20	21	3.10	4.95
5	19		43—Professional listservs	91%	100%	19	21	3.95	4.90
22	16	—Self-study	37—reading books/journals	95%	100%	20	21	3.10	4.86
23	17		41—Licensure/credentialing	81%	95%	17	19	3.06	4.79
	24		49—Continuing Education		100%		21		4.14
31	32		46—Self-evaluation/report	81%	91%	17	19	3.00	4.00
	33		45—Peer group supervision		91%		19		4.00
30	34		44—Attend workshops/conventions	76%	95%	16	20	3.00	3.95
	26	Professional Accountability—Report ethical violations	50—to licensing boards		86%		18		4.06
	38		53—Therapeutic effectiveness reports		95%		19		3.53
	45		52—Peer reviews of competency		90%		18		3.06

[1]5 = Essential 4 = Very Helpful 3 = Helpful [2]CRT (computer-related technology) [3] rank-ordered mean current ratings [4]rank-ordered mean future ratings
[5]Total % responding 5, 4, or 3 for current use [6]Total % responding 5, 4, or 3 for future use [7]frequency count for current ratings [8]frequency count for future ratings
[9]mean current ratings [10]mean future ratings

For current ratings, 80-100% of combined panelists suggested all tasks related to marketing/client recruitment as accomplished with the help of CRT. In addition, all counselor tasks were rated as currently utilizing CRT in: report and record-keeping (paperwork) by 86-95 % of panelists; clinical assessment/testing by 86-91% of panelists; and consultation and referral by 91-95% of panelists. For supervision/training, 86-95% of panelists selected four of five tasks, and 76-100% of panelists selected 10 of 12 tasks in professional development. In the category of in-session intervention/therapy/counseling, 76-91% of panelists selected only three of 18 tasks. No tasks in professional accountability were rated as currently accomplished with use of CRT by 50% or more of combined panelists.

At least 50% of combined panelists selected 22 counselor tasks they believe counselors are *not* currently using CRT to accomplish, but would like to (a rating of "2"). These included: most of the in-session intervention/therapy/counseling tasks (15 of 18), selected by 5-95% of panelists; one of five tasks in the category of supervision/training, selected by 76% of panelists; two of 12 tasks in the category of professional development, selected by 81-90% of panelists; and all four tasks in the category of professional accountability, selected by 10-86% of panelists (Table 4).

Table 4

Round 3—Current (C) and Future (F) Ratings for CRT Non-Use

Counselor Task Items Rated as "2 = [CRT[1]] not used, but would like to" by Combined Panelists (N = 21)

C[2]	F[3]	Counselor Task Category	Counselor Task Item	*f*-C[4]	*f*-F[5]	% C[6]	% F[7]
1		Therapy—Interventions	21—Behavioral	20		95%	
2		—Initial evaluation	11—Presenting problem	19		91%	
3		—Initial evaluation	14—Clinical history	19		91%	
4			16—Develop treatment plan	19		91%	
5		—Interventions	22—Combined	19		91%	
7			15—Establish goals	18		86%	
8		—Interventions	23—Other	18		86%	
11	3		17—Determine length of treatment	17	13	81%	62%
12			09—Overview of problem	17		81%	
13			10—Group prescreening	17		81%	
14		—Interventions	20—Cognitive	17		81%	
18	1	—Interventions	19—Affective	15	15	71%	71%
19			07—Establish rapport	14		67%	
20		—Initial evaluation	13—Personal/family history	10		53%	
22	4		08—Confidentiality discussions	1	4	5%	19%
16		Supervision	34—Live supervision	16		76%	
6		Professional Development	45—Peer group supervision	18		90%	
15			49—Continuing Education	17		81%	
9		Professional Accountability—Report ethical violations	50—to licensing boards	18		86%	
10			52—Peer reviews of competency	17		86%	
17			53—Therapeutic effectiveness reports	15		75%	
21	2	—Report ethical violations	51—to public	2	15	10%	71%

[1]CRT (computer-related technology) [2] rank-ordered mean current ratings [3]rank-ordered mean future ratings [4]frequency count for current ratings
[5]frequency count for future ratings [6]Total % responding 5, 4, or 3 for current use [7]Total % responding 2 for future use

When counselor and technologist ratings were examined separately, the only counselor task category in which differences in final current ratings emerged was in-session intervention/therapy/counseling (see Appendix G, Tables G1 and G2). Counselors selected follow-up and initial evaluation—personal/family history tasks as currently accomplished with the help of CRT, while technologists rated these tasks as "2 = [CRT] not used, but would like to". Additionally, counselors rated confidentiality discussions as "2".

Current Rating Changes After Feedback.

During the final Round 3 current ratings, panelists changed their ratings for five counselor task items from "2 = [CRT] not used, but would like to" to a *use* (5, 4, or 3) rating (see Appendix G, Tables G3 & G4). These changes included three items from the counselor task category of supervision/training and two counselor tasks from professional development. Another shift occurred in strength of agreement on ratings among panel members. The number of items on which counselors and technologists agreed by at least 70% increased from a total of 17 in Rounds 1 and 2-A to 31 in the Round 3 current ratings, from 10 to 20 tasks with 80% or higher agreement, and from 2 to 22 tasks with at least 90% agreement among all panelists.

Future Use of CRT.

The number of counselor tasks rated as using CRT increased from 31 in the final current ratings to 49 for the year 2008, with mean ratings for 38 tasks ≥ 3.50, indicating high use of CRT for those tasks items (see Table 3). For future ratings, 100% of combined panelists selected all counselor tasks in the categories of marketing/client recruitment, report and record-keeping (paperwork), and consultation and referral.

Additionally, all tasks were rated as accomplished with CRT in the task categories of: clinical assessment/testing by 95-100% of panelists; supervision/training by 91-100% of panelists; and professional development by 86-95% of panelists, as being accomplished with the use of CRT. All but three tasks in the category of in-session intervention/therapy/counseling were rated by 76-100% of panelists as accomplished with use of CRT by the year 2008. These three tasks were rated as "2" by 19-71% of panelists: confidentiality discussions, interventions—affective, and determine length of treatment (see Table 4). Finally, all but one task in professional accountability were selected by 86-95% of panelists as using CRT in the future. The counselor task of reporting ethical violations—to the public was rated as "2 = not currently using CRT [for this task], but would like to" by 71% of the Delphi panelists for the year 2008. When counselors and technologists responses were separated, no differences were found in their final selections of counselor tasks with respect to use of CRT (see Appendix G, Tables G1 and G2).

Future Rating Changes After Feedback.

The Delphi panel changed their responses for three of the counselor tasks when responding to the final future ratings (see Appendix G, Tables G5 and G6). One task item previously rated as "2 = do not use, but would like to" during Rounds 1 and 2-A future ratings changed to a use rating during the Round 3 final future ratings: in-session intervention/therapy/counseling—establish rapport. Interestingly, two tasks changed from use to a rating of "2". These task items were in-session intervention/therapy/counseling—determine length of treatment and professional accountability—reporting ethical violations—to the public.

At least 70% of counselors and technologists agreed on their ratings of 46 counselor tasks during Rounds 1 and 2-A future ratings. This number increased to 49 tasks for the final future ratings of Round 3. When agreement of at least 80% among panelists' ratings was examined, the number of tasks increased from 41 during Rounds 1 and 2-A to 48 for Round 3. For 90% or more agreement, the numbers changed from 30 tasks to 45, and from 19 to 25 tasks for 100% agreement among panelists.

Round 3 Current/Future Ratings Compared.

The most noticeable change in consensus from final current to future ratings occurred in 100% agreement by panelists for only 3 counselor task items in current ratings to 25 tasks in future ratings. Of the 18 counselor tasks that changed from non-use to use items when panelists rated counselor tasks for final current, then future use, 12 were from the in-session intervention/therapy/counseling category. Eight of those 12 therapy items concerned initial evaluation and intervention (excluding affective). Other task items that changed from non-use to use in the final future ratings included one task item from the category of supervision/training, two from professional development, and three tasks in professional accountability.

Round 1, Part B—Specific Examples of CRT Use

In Round 1, Part B of the Delphi questionnaire, specific examples were provided by the researcher on how computer-related technology is currently used and may be used in the next ten years to accomplish each of the categories of tasks that counselors and counselor educators perform in their work. Panelists were asked to type in new examples that the researcher had not considered. It was hoped that panelists would provide

examples of ways they had observed counselors using CRT in their work, and to stimulate the creative input of these experts concerning how computer technology might be of use to counselors in the future.

Of the 30 panelists who responded in Round 1, 15 counselors and 5 technologists provided 73 specific examples of current and 79 examples of future CRT use for each of the 7 counselor task categories. These examples, given in narrative form by the panelists, were summarized for similarity in response and organized by the researcher.

Current Examples of CRT Use

Marketing/client recruitment examples provided by panelists were primarily concerned with the use of computer software and the World Wide Web (WWW) for development and distribution of marketing information, e.g., "using DTP software to develop promotional items and brochures detailing services offered by the agency". Report and record-keeping (paperwork) examples included CRT for statistical reports, software for coordinating client appointments, billing, and organization of client records, and client record transfers, e.g., "Using Filemaker Pro 4.0 with all forms to develop an electronic record keeping system. This includes patient data, goals, objectives, dx, progress notes, termination summaries, etc."

In-session intervention/therapy/counseling examples focused on using the Internet, particularly e-mail and chatrooms, e.g., "Some counselors are using the Net for inter-session checkups. Clients e-mail their therapist in-between sessions, and receive replies. Some counselors are using email for extended aftercare consultations, or to continue to treat a client that has moved". It is important to note that security of data

transmission was emphasized by many of those giving Web-related examples for this category. Clinical assessment/testing examples suggested current use of CRT by counselors for test administration and scoring and use of software for cross-referencing presenting problems with treatment planning, e.g., “Administering SII and MMPI-2 on the computer & use computer scoring software.”

Examples given by Delphi panelists for consultation and referral included consultation via chatrooms, teleconferencing, e-mail in secure listservs, and utilizing a searchable database for practitioner demographics and qualifications, e.g., “Secure listservs and chat room type interactions that can occur in real time with two or more professionals for consultation”. Supervision/training examples included use of e-mail, listservs, and chatrooms, posting workshops on the Web, “real-time” supervision via computer video camera and keyboard chat, teleconferring via camcorders, training Web sites, and distance learning for didactic aspects of counselor education, e.g., “there is also ‘real time’ supervision using a camera connected to a laptop for the supervising instructor to ‘sit-in’ on a group or session led by a student counselor and provide feedback via ‘chat’ capability”.

Finally, in the category of professional development, panelists’ examples centered on listservs, networking on the Internet, use of professional journals online, using e-mail for collaboration on book and journal writing, online exams for counselor certification and/or licensure, and online continuing education courses and workshops, e.g., “taking workshops and courses on the Web for professional development (continuing education) purposes. Use of technology (PowerPoint, Internet, etc.) in making conference presentations.”

Future Examples of CRT Use

Marketing/client recruitment examples provided by panelists for future use of CRT suggested increased use of the WWW for advertising services, e.g., "advertisements of 'search' web sites that display the advertisement when pre-selected keywords are searched". Report and record-keeping (paperwork) examples focused on client demographic databases and creation and management of all paperwork/documentation with CRT, e.g., "All (or most) of the paperwork done directly into the CRT, No Paper"

In-session intervention/therapy/counseling examples focused on increases in self-help/psychoeducation, Web-based interactions between client(s) and therapist, and utilization of databases for research and statistics, e.g., "Video counseling, supervision, and group therapy". Clinical assessment/testing examples suggested future use of CRT by counselors for all test administration and scoring, increased test interpretation and diagnostics, and a shift toward more self-assessment by clients via CRT, e.g., "Voice input and all done directly to CRT. Scored and interpreted"

Examples given by Delphi panelists for consultation and referral suggested more use of Web-based methods of communicating with other counseling professionals for the future, e.g., "Consulting with a colleague about a client via a Quick Cam or another audio/video device. Referring a client to a practitioner in the community by communicating with them via the audio/video device." Supervision/training examples focused on use of remote monitoring of student counseling sessions, e.g., "Cyberspace supervision where students work at one site while supervisor is at another site. Remote interactive processes allow for cooperative group participation and leadership."

Finally, in the category of professional development, panelists' examples centered on use of the WWW, particularly for continuing education, e.g., "Nearly all continuing education will be done online and experts worldwide will be available for continuing education opportunities."

Round 2, Part B—Current Use of CRT Tools

Round 2, Part B was developed to examine kinds of CRT being used by the counselor experts who were members of the Delphi panel. In addition, these professionals were asked to provide information about the frequency of their personal use of CRT, as well as which categories of counselor tasks they were accomplishing with the help of CRT. Panelists who were technologists continued to give their opinions about counselors and counselor educators in general.

Summarized Instructions

In Round 2, Part B, counselor panelists were asked to indicate how often they, personally, used the following ten specific CRT tools for each of the seven counselor task categories by choosing "NA" for not applicable, "D" for Daily use, "W" for Weekly use, "O" for Occasional use, or "N" for Never use: e-mail, word processor, web, spread sheet, project management, graphics, animation, simulation, statistics software, or other. Technologist panel members were asked to indicate how often they felt counseling professionals were using each of the CRT tools.

Process for Summarizing CRT Tool Usage

The response ratings for the seven counselor task categories and ten CRT tools were summarized using the following four steps:

1. The response options were given a numerical value of 5 for Daily use, 4 for Weekly use, 3 for Occasional use, 2 for Never, and 1 for Not Applicable. Each CRT tool rating was summarized for percent of panelists responding with each of the five possible ratings. Percent ratings for responses of 5, 4, or 3 were then grouped together to form an overall *use* rating for each CRT tool. Percent ratings for responses of 2 or 1 were grouped together to form an overall *non-use* rating for each CRT tool.
2. Mean ratings and total frequencies of panelists responding were calculated for CRT tools selected by at least 50% of Delphi.
3. Next, CRT tools that panelists rated as being used by counselors were rank-ordered according to mean rating in descending order from 5.00 to 3.00 with highest ratings of CRT tools listed first. Panel responses were then grouped according to counselor task category. Finally, panel responses were grouped according to CRT tool category.
4. This process was repeated for counselors and technologists combined, counselors as a separate group, and technologists as a separate group.

Counselor and Technologist Ratings Compared for Current CRT Tool Use

Counselor mean ratings for CRT tools chosen to accomplish tasks were 3.50 or higher for 16 of the 24 use ratings made by this group, indicating daily or weekly use of

those CRT tools by panelists who were counselors. Of the total 16 CRT tool use ratings made by technologists, 15 were rated 3.50 or higher, indicating frequent use.

CRT Tools Used by Counselors

When counselor and technologist responses were grouped by CRT tool item, 50-100% of counselors reported the Web as a tool they used in all counselor task categories. In addition, 72-100% of the study's counselors indicated their use of word processing for six categories of counselor tasks, and 61-100% use e-mail for five task categories (Table 5). Project management was used by 56-67% of counselor panelists, and statistics software was used by 50-67% of counselor panelists. Both of these CRT tools were used for two categories of counselor tasks. Graphics was selected by 83% of counselor panelists for one task category. Finally, counselors selected the spread sheet tool again for one task category.

Technologists were generally more conservative in the selection of CRT tools they believed were currently used by counselors to do their work. Technologists (57-86%) chose e-mail to help accomplish all categories of tasks except clinical assessment/testing. Word processor was chosen by 57-86% of technologists as used by counselors for five categories. Finally, 57-86% of technologists selected the Web for four task categories and 57% of technologists selected graphics only for the category of marketing/client recruitment.

Table 5

Round 2-B—CRT Tools Used to Perform Counselor Tasks Grouped by Tool Item

CRT[1] Tools Rated 5, 4, or 3[2] for Use of CRT to Perform Counselor Tasks by ≥ 50% Panelists
Counselor (C) and Technologist (T) Ratings Comparison[3] (Total N=25)

C[4]	T[5]	CRT Tool Item	Counselor Task Category	% C[6]	% T[7]	*f*-C[8]	*f*-T[9]	M Rating-C[10]	M Rating-T[11]
7	12	01—e-mail	Record-keeping	67%	57%	12	4	3.92	3.75
8	11		Marketing	61%	57%	11	4	3.82	3.75
9	2		Professional Development	100%	86%	18	6	3.78	4.50
10	13		Supervision	72%	57%	13	4	3.77	3.75
	14		Therapy		57%		4		3.75
19	6		Consultation	89%	86%	16	6	3.38	4.00
1	1	02—word processor	Record-keeping	100%	86%	18	6	4.50	4.83
	3		Therapy		57%		4		4.50
3	4		Marketing	89%	86%	16	6	4.19	4.19
5			Supervision	83%		15		4.00	
6			Professional Development	83%		15		3.93	
14	15		Assessment	72%	72%	13	5	3.62	3.60
16	7		Consultation	89%	57%	16	4	3.56	4.00
2	9	03—web	Marketing	89%	86%	16	6	4.31	4.00
4	5		Professional Development	100%	86%	18	6	4.06	4.33
11	16		Supervision	67%	57%	12	4	3.67	3.25
13			Record-keeping	50%		9		3.67	
21	8		Consultation	78%	72%	14	5	3.29	4.00
22			Therapy	61%		11		3.27	
24			Assessment	50%		9		3.00	
18		04—spread sheet	Record-keeping	83%		15		3.40	
15		05—project management	Record-keeping	56%		10		3.60	
23			Marketing	67%		12		3.25	
17	10	06—graphics	Marketing	83%	57%	15	4	3.40	4.00
12		09—statistics software	Marketing	50%		9		3.67	
20			Record-keeping	67%		12		3.33	

[1]CRT (Computer-Related Technology) [2]5 = Daily use; 4 = Weekly use; 3 = Occasional use [3]counselor n=18; technologist n=7
[4]rank-ordered mean Counselor ratings [5]rank-ordered Technologist ratings [6]Total % Counselors responding [7]Total % Technologists responding

[8]Counselor rating frequency count [9]Technologist rating frequency count [10]mean Counselor ratings [11]mean Technologist ratings

When counselor and technologist responses were grouped by counselor task category, counselors reported the largest *variety* of CRT tools was used by them to accomplish marketing/client recruitment and report and record-keeping (paperwork) tasks. Six CRT tools were selected for each of these categories (Table 6). Counselors selected three tools each for consultation and referral, supervision/training, and professional development. Only two CRT tools were chosen for clinical assessment/testing and one for in-session intervention/therapy/counseling tasks.

When technologists ratings were examined by counselor task category, four tools were chosen by 57-86% of technologists for marketing/client recruitment, and three for consultation and referral by 72-86% of technologists. Two CRT tools were selected for each of the following: report and record-keeping by 57-86% of technologists; in-session intervention/therapy/counseling by 57% of technologists; supervision/training by 57% of technologists; and professional development by 86% of technologists. Only one CRT tool was selected by 72% of technologists for the counselor task category of clinical assessment/testing.

Table 6

Round 2-B—CRT Tools Used to Perform Counselor Tasks Grouped by Task Category

CRT[1] Tools Rated 5, 4, or 3[2] for Use of CRT to Perform Counselor Tasks by ≥ 50% Panelists
Counselor (C) and Technologist (T) Ratings Comparison[3] (Total N=25)

C[4]	T[5]	Counselor Task Category	CRT Tool Item	% C[6]	% T[7]	*f*-C[8]	*f*-T[9]	M Rating-C[10]	M Rating-T[11]
2	9	Marketing	03—web	89%	86%	16	6	4.31	4.00
3	4		02—word processing	89%	86%	16	6	4.19	4.33
8	11		01—e-mail	61%	57%	11	4	3.82	3.75
12			09—statistics software	50%		9		3.67	
17	10		06—graphics	83%	57%	15	4	3.40	4.00
23			05—project management	67%		12		3.25	
1	1	Record-keeping	02—word processing	100%	86%	18	6	4.50	4.83
7	12		01—e-mail	67%	57%	12	4	3.92	3.75
13			03—web	50%		9		3.67	
15			05—project management	56%		10		3.60	
18			04—spread sheet	83%		15		3.40	
20			09—statistics software	67%		12		3.33	
22		Therapy	03—web	61%		11		3.27	
	3		02—word processing		57%		4		4.50
	14		01—e-mail		57%		4		3.75
14	15	Assessment	02—word processing	72%	72%	13	5	3.62	3.60
24			03—web	50%		9		3.00	
16	7	Consultation	02—word processing	89%	57%	16	4	3.56	4.00
19	6		01—e-mail	89%	86%	16	6	3.38	4.00
21	8		03—web	78%	72%	14	5	3.29	4.00
5		Supervision	02—word processing	83%		15		4.00	
10	13		01—e-mail	72%	57%	13	4	3.77	3.75
11	16		03—web	67%	57%	12	4	3.67	3.25
4	5	Professional Development	03—web	100%	86%	18	6	4.06	4.33
6			02—word processing	83%		15		3.93	
9	2		01—e-mail	100%	86%	18	6	3.78	4.50

[1]CRT (Computer-Related Technology) [2]5 = Daily use; 4 = Weekly use; 3 = Occasional use [3]counselor n=18; technologist n=7
[4]rank-ordered mean Counselor ratings [5]rank-ordered Technologist ratings [6]Total % Counselors responding [7]Total % Technologists responding

[8]Counselor rating frequency count [9]Technologist rating frequency count [10]mean Counselor ratings [11]mean Technologist ratings

Round 3—Reasons

After Delphi panelists had given their final rating of each counselor task for use of CRT to accomplish the task, they were asked to select reasons for their final ratings. Panelists' responses for reasons were summarized using the following four steps:

1. Responses to questions concerning "how CRT helps accomplish the task NOW and will help IN THE YEAR 2008" were summarized for percent of panelists responding with each of three possible choices: E = Efficiency, Q = Quality, and O = Opportunity.
2. Next, responses to questions concerning "reason(s) CRT has not helped accomplish the task in the PRESENT and will not help accomplish it IN THE YEAR 2008" were summarized for percent of panelists responding with each of five possible choices: T = lack of Training to use, C = Costs of soft/hardware, S = no available Software, I = CRT is Inappropriate to task, or O = Other, please write in.
3. Counselor tasks for which at least 50% of responding panelists selected reasons for using CRT to accomplish were summarized, then grouped according to counselor task category.
4. Summary data were compiled for counselors and technologists combined, counselors as a separate group, and technologists as a separate group.

Reasons for Using CRT—Present and Future

There were 21 counselor and technologist panelists who selected reasons for their final ratings of CRT use to accomplish counselor tasks. The most frequently selected reason for current and future use of CRT by the majority of counselors and technologists

combined, as well as counselors and technologists as separate groups, was efficiency (Tables 7 and 8). The second most frequently selected reason was opportunity, followed by quality. When reasons for currently using CRT were grouped by counselor task category, 57-76% of combined panelists chose efficiency, while 57% selected quality for the category of marketing/client recruitment. Efficiency was selected by 57-76% and opportunity by 52% of panelists for tasks related to report and record-keeping (paperwork). Efficiency was given as the reason for CRT use by 57% of panelists in-session intervention/therapy/counseling activities, and by 57-67% of panelists for clinical assessment/testing tasks. Efficiency and opportunity were reasons cited by 57% of panelists for tasks in consultation and referral, while 57% of panelists selected opportunity as the sole reason for using CRT in supervision/training. Finally, efficiency was chosen by 52-67% of panelists, quality by 67% of panelists, and opportunity by 52-57% of panelists as current reasons for using CRT to accomplish tasks in professional development.

Both groups, combined and separately, indicated a significant increase in selection of all three reasons for using CRT to accomplish more counselor tasks for the year 2008. Reasons given by panelists for future use of CRT in marketing/client recruitment tasks included efficiency (67-86% of panelists), quality (62% of panelists), and opportunity (62-90% of panelists). Efficiency was selected by 67-81% of panelists, quality by 52-62% of panelists, and opportunity by 57% of panelists for report and record-keeping tasks. Reasons cited for CRT use for in-session intervention/therapy/counseling tasks in the future, included efficiency by 52-71% of panelists and opportunity by 52-62% of panelists. Efficiency was the only reason selected by 57-71% of panelists for clinical

assessment/testing activities. Panelists selected efficiency (52-57%) and opportunity (62%) as future reasons to use CRT for consultation and referral tasks. Supervision/training tasks received ratings for efficiency by 62-67%, quality by 52%, and opportunity by 57% of panelists. Efficiency was selected by 52-76% of panelists, quality by 52-67%, and opportunity by 52-62% for professional development activities. Finally, 57% of panelists chose efficiency and opportunity as reasons for CRT use in professional accountability tasks by the year 2008.

Table 7

Round 3—Current Reasons for Using CRT[1]

Responses by ≥ 50% Combined Panelists

		Reasons for Using CRT					
		Efficiency		Quality		Opportunity	
Counselor Task Category	Counselor Task Item	f[3]	%[4]	f[5]	%[6]	f[7]	%[8]
Marketing	01—Advertising preparation	16	76%	12	57%		
	02—Advertising delivery	13	62%			15	71%
	03—Community service presentations	12	57%				
Record-keeping	04—Externally required forms	12	57%			11	52%
	05—Client-generated forms	15	71%				
	06—Internal/Counselor-generated forms	16	76%				
	48—Case management organizer	15	71%				
Therapy—Initial evaluation	12—Client demographics	12	57%				
	24—Follow-up	12	57%				
Assessment	25—Test administration	12	57%				
	26—Test scoring	14	67%				
	27—Test interpretation	13	62%				
Consultation	29—Networking					12	57%
	30—Referrals	12	57%				
Supervision	35—Conducting training workshops					12	57%
Professional Development—Self-study	36—legal/ethical issues					11	52%
—Self-study	37—reading books/journals	11	52%				
—Self-study	38—Computer-related information/research	13	62%				
—Self-study	39—Web-based research	14	67%			12	57%
—Self-study	40—Programs/software	11	52%				
	42—Professional writing	13	62%	14	67%		
	43—Professional listservs					11	52%
	44—Attending workshops/conventions					12	57%

[1]CRT (Computer-related Technology) [2]total N = 21 [3]frequency count for Efficiency [4]total % responding for Efficiency
[5]frequency count for Quality [6]total % responding for Quality [7]frequency count for Opportunity [8]total % responding for Opportunity

Table 8

Round 3—Future Reasons For Using CRT[1]

Responses by ≥ 50% Combined Panelists

		Reasons for Using CRT					
		Efficiency		Quality		Opportunity	
Counselor Task Category	Counselor Task Item	f[3]	%[4]	f[5]	%[6]	f[7]	%[8]
Marketing	01—Advertising preparation	18	86%	13	62%	13	62%
	02—Advertising delivery	15	71%			19	90%
	03—Community service presentations	15	71%	13	62%	13	62%
	47—List of services/self-help guides	14	67%			13	62%
Record-keeping	04—Externally required forms	16	76%	13	62%	12	57%
	05—Client-generated forms	17	81%				
	06—Internal/Counselor-generated forms	14	67%	11	52%		
	48—Case management organizer	17	81%				
Therapy	10—Group prescreening	14	67%				
—Initial evaluation	12—Client demographics	15	71%			11	52%
—Initial evaluation	14—Clinical history	15	71%				
	16—Develop treatment plan	11	52%				
	18—Homework assignments	12	57%			13	62%
	24—Follow-up	11	52%				
Assessment	25—Test administration	14	67%				
	26—Test scoring	15	71%				
	27—Test interpretation	13	62%				
	28—Diagnosis (DSM-IV)	12	57%				
Consultation	29—Networking	11	52%			13	62%
	30—Referrals	12	57%			13	62%
Supervision	33—of site supervisors	13	62%				
	35—Conducting training workshops	14	67%	11	52%	12	57%
Professional Development—Self-study	36—legal/ethical issues			11	52%	11	52%
—Self-study	37—reading books/journals	12	57%			13	62%
—Self-study	38—Computer-related information/research	15	71%	12	57%	12	57%
—Self-study	39—Web-based research	16	76%	12	57%	13	62%
—Self-study	40—Programs/software	14	67%	14	67%		

	41—Licensure/credentialing	15	71%				
	42—Professional writing	15	71%	13	62%	11	52%
	43—Professional listservs					13	62%
	44—Attending workshops/conventions					12	57%
	45—Peer group supervision	12	57%				
	46—Self-evaluation/report					12	57%
	49—Continuing Education	11	52%			12	57%
Professional Accountability—Report ethical violations	50—to licensing boards	12	57%			12	57%

[1]CRT (Computer-related Technology) [2]total N = 21 [3]frequency count for Efficiency [4]total % responding for Efficiency
[5]frequency count for Quality [6]total % responding for Quality [7]frequency count for Opportunity [8]total % responding for Opportunity

There were no reasons given for *not* using CRT to accomplish counselor tasks by at least 50% of counselors and technologists combined, nor technologists as a separate group for current or future ratings. At least 50% of counselors as a separate group gave reasons for current use of CRT for only one of the eight counselor task categories: in-session intervention/therapy/counseling (Table 9). The two reasons selected for currently not using CRT for this category were "no available software" by 50% of counselor panelists, and "CRT is inappropriate to the task" by 50-57% of counselor panelists. For the year 2008, counselors reduced their reasons for not using CRT to one counselor task: in-session intervention/therapy/counseling—confidentiality discussions (Table 10). The reason selected by 50% of counselor panelists was CRT would be inappropriate to the task.

Table 9

Round 3—Current Reasons For Not Using CRT[1]

Responses by ≥ 50% Counselor Panelists

		Reasons for Not Using CRT									
		O[3]		T[4]		C[5]		S[6]		I[7]	
Counselor Task Category	Counselor Task Item	f[8]	%[9]	f[10]	%[11]	f[12]	%[13]	f[14]	%[15]	f[16]	%[17]
Therapy	07—Establish rapport									8	57%
	08—Confidentiality discussions									7	50%
—Initial evaluation	11—Presenting problem									8	57%
	17—Determine length of treatment							7	50%		
—Interventions	19—Affective									7	50%
—Interventions	20—Cognitive							7	50%		
—Interventions	21—Behavioral							7	50%		
—Interventions	22—Combined							7	50%		

[1]CRT (Computer-Related Technology) [2]counselor N=14 [3]O = Other [4]T = lack of Training to use [5]C = Cost of available soft/hardware
[6]S = lack of available Software [7]I = CRT is Inappropriate to the task [8]frequency count for "O" [9]total % responding "O"
[10]frequency count for "T" [11]total % responding "T" [12]frequency count for "C" [13]total % responding "C" [14]frequency count for "S"
[15]total % responding "S" [16]frequency count for "I" [17]total % responding "I"

Table 10

Round 3—Future Reasons For Not Using CRT[1]

Responses by ≥ 50% Counselor Panelists

		Reasons for Not Using CRT									
		O[3]		T[4]		C[5]		S[6]		I[7]	
Counselor Task Category	Counselor Task Item	f[8]	%[9]	f[10]	%[11]	f[12]	%[13]	f[14]	%[15]	f[16]	%[17]
Therapy	08—Confidentiality discussions									7	50%

[1]CRT (Computer-Related Technology) [2]counselor N=14 [3]O = Other [4]T = lack of Training to use [5]C = Cost of available soft/hardware
[6]S = lack of available Software [7]I = CRT is Inappropriate to the task [8]frequency count for "O" [9]total % responding "O"
[10]frequency count for "T" [11]total % responding "T" [12]frequency count for "C" [13]total % responding "C" [14]frequency count for "S"
[15]total % responding "S" [16]frequency count for "I" [17]total % responding "I"

Table 11

Processes for Summarizing Delphi Results

Rounds 1-A, 2-A, and 3—Summarization of Counselor Task Ratings for Use of Computer-related Technology (CRT)
For each task item:
1. Percent of panelists responding with each of 5 possible Likert-type scale ratings calculated. Ratings of 5, 4, or 3 grouped together to form *current use of CRT* classification (Table 3, pp. 63-64; Appendix G, Table G1, pp. 205-206 and G2, pp. 207-208).
2. Mean ratings and total frequencies calculated for *use of CRT* items selected by ≥ 50% panelists.
3. Use of CRT items rank-ordered by descending means from 5.00 to 3.00, and grouped by task category.
4. Percent of panelists responding with ratings of "2" or "1" grouped together for *non-use* of CRT classification (Table 4, p. 66)
5. Mean ratings and total frequencies calculated for *non-use of CRT* items selected by ≥ 50% panelists.
6. Non-use items specifically rated "2" rank-ordered by descending percentage of ratings, and grouped by task category.
7. Use vs. non-use categorizations repeated for counselors, technologists, and both groups combined.
8. Steps 1-7 repeated for *future* ratings.
Round 1-B current and future written examples summarized for similarity in response and organized by researcher (pp. 69-73).
Round 2-B—Summarization of CRT Tool Usage
For response ratings of 7 counselor task categories and 10 CRT tools:
1. Percent of panelists responding with each of 5 possible Likert-type scale ratings calculated. Ratings of 5, 4, or 3 grouped to form *use of CRT* tool classification, while 2 or 1 ratings grouped to form *non-use* classification for each CRT tool.
2. Mean ratings and total frequencies calculated for CRT tools selected by ≥ 50% panelists.
3. CRT tools selected as used by counselors rank-ordered by descending means from 5.00 to 3.00, and grouped by CRT tool category (Table 5, p. 76-77) and counselor task category (Table 6, pp. 79-80).
4. Use vs. non-use categorizations repeated for counselors, technologists, and both groups combined.
Round 3—Summarization of Reasons for CRT Use/Non-use
For each current and future final task rating:
1. Percent of panelists' responses for *how* CRT helps/will help accomplish the task were calculated and summarized for each of 3 possible Likert-type scale choices (Table 7, p. 84; Table 8, p. 85-86).
2. Percent of panelists' responses for reason(s) CRT *does/will not* help accomplish the task were calculated and summarized for each of 5 possible Likert-type scale choices (Tables 9, p. 88 and 10, p. 89).
3. Tasks for which ≥ 50% responding panelists selected reasons were summarized, then grouped by task category.
4. Summarizations were made for counselors, technologists, and both groups combined.

CHAPTER FIVE

Discussion

Introduction

This chapter provides a summary of the study by reviewing the results through the use of research questions, conclusions, discussion, implications and recommendations for future research.

Summary

This study was designed to assess which aspects of counselor work-related tasks are accomplished with the help of computer-related technology, which computer-related tools counselors are utilizing to accomplish these tasks, and how much counseling professionals rely on computer-related technology (CRT) to accomplish their work. A review of the literature revealed no studies that specifically addressed these concerns. Each of these issues was explored for the present time frame and for expected use of CRT in the next ten years through a series of questionnaires, referred to as a Delphi process. The Delphi was administered on the World Wide Web to five groups of experts, including one group of counselor educators, three groups of counselor practitioners, and one group of computer technologists.

This Delphi study addressed four research questions. Major results are summarized below.

1. How much do counselors and counselor educators rely on computer-related technology to complete job-related tasks today?

The experts in this Delphi inquiry indicated that counselors currently find CRT helpful in making 40% of generic work-related tasks (31 of 53 tasks) easier to accomplish, e.g., professional writing, preparation and delivery of advertising, and test administration and scoring. In addition, the experts believe CRT to be very helpful in significantly decreasing effort, increasing efficiency, or improving the quality or services of another 19% (10 of 53) of work-related activities. In all, the experts indicated that counselors and counselor educators currently rely on CRT to complete more than half (59%) of job-related tasks. In addition, counselor experts who participated in this study reported at least weekly use of a variety of CRT tools in their work.

2. Which counselor-related tasks are counseling professionals currently accomplishing with the help of CRT?

   The experts in this Delphi study rated CRT use helpful in making the following tasks easier to perform: all counselor tasks listed related to marketing/client recruitment, report and record-keeping (paperwork), clinical assessment/testing, and consultation and referral; all but one task in supervision/training; and all but two tasks in professional development. Half (50-57%) of the counselor experts expressed the opinion that CRT is not currently being utilized by professional counselors for most therapeutic intervention tasks, such as establishing rapport with clients, confidentiality discussions, evaluating presenting problems, and utilizing affective interventions, because CRT is inappropriate for these tasks. In addition, these experts indicated therapeutic tasks involving the determination of treatment length and interventions using cognitive, behavioral, or a combination of therapeutic techniques

were not currently being accomplished with the help of CRT due to a lack of available software, i.e., the software to perform these tasks does not currently exist.

In all, only 3 of 18 in-session intervention/therapy/counseling tasks and no tasks in professional accountability were thought to be currently accomplished with use of CRT. However, the panel of experts suggested counselors would like to use CRT for these tasks if the technology or skills were available.

3. What are specific ways in which counselors and counselor educators are currently using CRT in performing job-related tasks?

   Delphi panelists gave 73 specific examples of current CRT use by counselors and counselor educators for work-related activities. These examples fell into three main categories. The first category included the use of software for word processing, spreadsheets, statistical analysis, and publishing for tasks in marketing/client-recruitment, report and record-keeping, in-session intervention/therapy/counseling, clinical assessment/testing, and professional development. The second category of examples included use of e-mail, both private and on professional listservs, for activities in therapy, consultation and referral, supervision/training, and professional development. The third category of CRT examples involved use of the WWW, including websites, chatrooms, and teleconferencing, for tasks in marketing, therapy, consultation and referral, supervision/training, and professional development.

   Panelists expressed caution about current CRT security issues where client data is concerned.

4. How much and in what ways will CRT be used by counselors and counselor educators to do their work in the next ten years?

The Delphi experts indicated they believe counselors will find CRT very helpful in significantly decreasing effort, increasing efficiency, or improving the quality of services for 72% (38 of 53) of counselor tasks by the year 2008. CRT will be helpful in making their job easier to perform for another 21% (11 of 53) of work-related tasks. In all, counselor and technologist panel members agreed that 92% of the work counselors do in 2008, including all task categories, i.e., marketing/client recruitment, report and record-keeping (paperwork), in-session intervention/therapy/counseling, clinical assessment/testing, consultation and referral, supervision/training, professional development, and professional accountability, and all but 4 individual generic tasks, will be accomplished with the help of CRT. Three of the tasks for which panelists believe CRT will not be used were therapeutic activities, while the fourth concerned professional accountability. However, experts in this study suggested that if the technology or skills were available in 2008, counselors would use CRT to accomplish these tasks as well. The only reason given by half of the counselor experts for not using CRT in 2008 was that CRT is inappropriate for the specific task of confidentiality discussions with clients.

Finally, panelists gave 79 specific examples of how they believe CRT will be used by counselors in the near future. Panelists forecast increased software development and use of the WWW for the following: marketing of counseling services; demographic databases for research and statistics; electronic test administration, scoring, and diagnosis, as well as development of more self-assessment software; activities related to consultation and referral, supervision/training, and professional development; and therapy, both professionally and through psychoeducation/self-help. In addition,

panelists indicated their beliefs that: (1) audio/visual equipment will become more commonplace in web communications, and (2) expressed more optimism toward security issues related to future CRT use. Although not explicitly stated by panelists, the occurrence of these two forecast events would alleviate most of the current objections to web use in therapy, and may explain the significant increase in future ratings of CRT use for therapeutic interventions/counseling/therapy work-related activities.

Conclusions

Conclusion 1: It has been proposed that CRT can be used to assist counseling professionals in numerous ways (McFadden, 2000; Sampson, et al., 1997; Lundberg & Cobitz, 1999; King, Engi, & Poulos, 1998; Wilson, et al., 1997; Stone & Turba, 1999; Hayes, 1999; and Steven & Lundberg, 1998). The data from this study suggest counselors and counselor educators are using CRT to assist them in over half of job-related tasks today. All categories of work-related tasks are represented in current CRT use assessment with the exception of tasks concerning professional accountability.

Conclusion 2: Various CRT tools have been explored in the literature as potentially useful to mental health professionals in their work (Sampson, et al., 1997; Wilson, et al., 1997; Harper, 1999; and Myrick & Sabella, 1995). Results of this Delphi study indicate counselors and counselor educators are utilizing a large variety of CRT tools in their work, including word processors, spread sheets, statistics software, project management software, and other software programs, e-mail, teleconferencing software and equipment, chatrooms, listservs, databases, and other web-related tools.

Conclusion 3: The experts in this study forecast a significant increase in use of CRT by professional counselors in the near future. It is expected that counselors will be utilizing CRT for at least 90% of their work, in all categorical aspects, including professional accountability.

Conclusion 4: It has been established in Conclusions 1 and 2 that CRT is currently an important and highly utilized part of professional counseling. The results of this study suggest counselors are using a wide variety of CRT tools to accomplish tasks in many different aspects of the work they perform in helping others, including those involving therapeutic intervention. However, due to the lack of skills training in CRT use, counselor training programs are producing graduates unprepared to effectively utilize the technology that is becoming such an integral part of the work performed by professional counselors. As Stamm (1998), Lundberg & Cobitz (1999), Davidson & Jackson (1996), and Galinsky, et al. (1997) have suggested, there is a pronounced need for increased computer skills training of counselor graduates.

Conclusion 5: Given Conclusions 1, 2, and 4, we are currently producing professional counselors who lack the necessary background skills in CRT to be able to adequately evaluate and/or guide the appropriate development of CRT used by counseling professionals. Counselors endowed with appropriate CRT skills could become valuable teammates with computer programmers and technicians in creating and improving the quality and effectiveness of software and hardware used by counseling professionals and their clients.

Conclusion 6: The literature is replete with calls for research to investigate potential important differences between therapeutic work accomplished with the help of

CRT and traditional therapy, i.e., face-to-face therapy, in which technology is not utilized (Huang & Alessi, 1996; King, Engi, & Poulos, 1998; Wilson, Jencius, & Duncan, 1997; Sussman, 1998; Morrissey, 1997; Sampson, et al., 1997; Harper, 1999; and Myrick & Sabella, 1995). Conclusions 1, 2, and 4 confirm the pressing need for research into these concerns. We cannot, however, expect counselors who have been inadequately trained in CRT use to be able to conduct or produce qualitative research investigating these issues.

Conclusion 7: The results of this study indicate that counseling via the Internet is an important concern for mental health professionals and the public they serve. As Wilson, et al., 1997; Sampson, et al., 1997; Sussman, 1998; Morrissey, 1997; Cohn, 1997; Huang & Alessi, 1996; King, et al., 1999; Hayes, 1999; Harper, 1999; Myrick & Sabella, 1995; Hackerman & Green, 2000; and Delmonico, et al., 2000 point out, there are many issues related to Internet counseling that need to be investigated through formal research. Many of these issues relate to legal/ethical concerns where no legal precedents exist to guide professionals or their clientele. In addition, there are many questions concerning quality of service delivery when using a technological medium such as the Internet. Use of the Internet for counseling services is likely to increase as technological improvements are made in the quality of Internet service delivery, and as continually lowered prices make access to computer technology more widespread. Increased bandwidth transmission, enhanced video capabilities, and improved security, will help calm some current objections to Internet counseling. With increased Internet counseling, as forecast by this study's experts, the need for answers to questions of ethics and efficacy standards will become increasingly important. This study provides the foundation for

much needed research investigating the issues raised through Internet use by mental health professionals.

Conclusion 8: There has been a plea for more CRT skills training of student and professional counselors (McFadden, 2000; Sampson, et al., 1997; Eriksen, et al., 1997; King, et al., 1998; Hayes, 1999; Lundberg & Cobitz, 1999; and Stevens & Lundberg, 1998). As Stone & Turba (1999) point out, counselor education programs are not currently incorporating minimal computer literacy standards or providing coursework to optimally train counselors in technological skills. Counselors will need these skills in order to be proactive in developing the professional roles they play in the future. By producing counselors inadequately trained in CRT use, we place them at a professional disadvantage in competing with, or being able to work in conjunction with, other mental health professionals who have acquired and are utilizing CRT to perform in what is increasingly becoming a technologically-driven society. This study establishes the need to implement and promote computer skills training and competency assessments in counselor education programs.

Conclusion 9: All of the previous conclusions will become even more important to counseling professionals in the near future when CRT use, as forecast by this study's experts, becomes even more vital to the field of professional counseling.

Discussion

There were four purposes of this study stated in Chapter Two:

1) To assess which aspects of counseling work-related tasks are currently being accomplished with the help of CRT

2) To explore how much counselors and counselor educators currently rely on various CRT tools
3) To explore the kinds of CRT counselors and counselor educators are likely to use in their work in the near future
4) To forecast the extent of CRT use for counseling work-related tasks by counseling professionals in the next ten years

The Conclusions of this study address the study's purposes in the following four ways:

1) The experts in this Delphi study have expressed their belief that professional counselors are currently utilizing CRT to help them perform work-related activities from all categories of tasks except professional accountability. Although counselors are utilizing CRT in the task category of therapeutic intervention, experts believe its use is primarily centered on activities involving collection of client demographic information, therapeutic homework, and follow-up. Other therapeutic activities are not being accomplished with CRT, because the software is not available, or its use is inappropriate for these kinds of tasks.
2) The results of this study indicate that CRT is used by counselors to make at least half of the work they do easier, more efficient, or qualitatively better. Counselors are using a variety of software and Internet-based tools to organize, promote, maintain, develop, and conduct the business of counseling and counselor education. This study's experts believe CRT has become an integral part of how we perform our jobs as professional counselors.

3) By the year 2008, experts forecast increased software and hardware development and Internet-based opportunities for the expansion of CRT use by professional counselors. They suggest more use of e-mail; video-enhanced communications, such as video conferencing; databases for client information/research/statistics; and software development for graphical interfaces, project management and counseling-specific activities.
4) This study suggests that by 2008, counselors will utilize CRT in most all aspects of their work, with only a very few exceptions. These exceptions include determining the length of treatment for clients, using affective therapeutic interventions, conducting confidentiality discussions, and reporting ethical violations of counselors to the public. The Delphi panel indicated, however, if the technology were available, counselors would like to use CRT for all but one of these tasks—confidentiality discussions. The panelists believe use of CRT is, and will continue to be, inappropriate for this counselor task in the near future.

Implications and Recommendations

There are several recommendations based on the unique aspects of this Delphi study. One of the most challenging aspects of the preliminary phase of this research was the development of the list of generic tasks that Counselors perform in their work that was used throughout the study. Whatever the occupation, to ask a professional to compose such a list of tasks is an implied request to define what one does in their work.

Although not a specific goal of this research, the list of generic counselor work-related tasks developed in this study and utilized in the Delphi process, may provide guiding steps toward resolution of long-standing turf wars that have raged among mental health professionals in counseling, psychology, and clinical social work concerning proposed unique and exclusive merits to each of these professions. It is suggested similar lists of generic tasks could be generated in future research from experts in psychology and clinical social work. A comparative analysis of the lists could be performed to explore similarities, differences, and the relative importance of each in ways that may distinguish, or point out the lack of any significant distinctions, between the three professions.

Secondly, utilizing the Internet for this Delphi study presented some unique benefits and challenges. Although organization is vitally important to the smooth and efficient execution of any Delphi study, the relatively rapid nature in which panel input may be retrieved by the researcher when using the Internet makes the position of mediator more challenging, and requires extremely well-prepared plans for the capture, analysis, and timely feedback of data. Much of this can be accomplished in the programming design of the study. If programming is done by someone other than the researcher, such as a computer program specialist, it is extremely important that the researcher and programmer be able to communicate in a clear and precise manner concerning details of the study in order to assure accurate transmission of the traditional paper and pen method of conducting a Delphi to that of an electronic medium.

A pilot study in which study design problems and programming glitches, e.g., panelists' browser capacities to download information from the study's web site, may be worked out prior to engaging the panel of experts, and is highly recommended. To have

achieved expert status in one's field, generally implies an individual in high demand and with busy schedules. It is unfair and unrealistic to expect such professionals to keep themselves on call for a research procedure that is plagued by technical difficulties that cause delays and that could have been corrected during a preliminary execution of the study.

The benefits of utilizing computer technology for this Delphi study included extraordinarily low costs, relative ease in collecting and organizing data and feedback, and great reductions in the time normally required to complete the Delphi Rounds of questions. The cost benefits were primarily due to the academic setting in which the study was conducted, giving the researcher access to facilities and expertise that may be costly outside such a setting. With the exception of a very few phone calls, and two mailed consent forms from panel members, all communications with panelists who participated in this Delphi were conducted through e-mail. Since the researcher for this study already possessed e-mail and Web service, there were no additional costs for these services. This eliminated the primary expenses and delays of traditional Delphi's conducted via regular (snail) mail and telephone.

In addition, questionnaires were sent, data were collected, organized, and retrieved, and feedback median responses were calculated and inserted into questionnaires via a Web-accessible database. Since this study was conducted in an academic program, the need to pay for use of a Web-accessible database was alleviated. Because there were no publications and guidelines of any prior Delphi conducted completely via the Web, the study's programming was extremely challenging and time-consuming. Particularly in a non-academic setting, hiring a professional to design a

Delphi program capable of performing the functions described in this study could prove very costly. It is also important to note that the written responses typed in by panelists were not suitable for computer organization and analysis.

When considering the Delphi methodology, either traditionally administered or through an electronic medium, it is important to understand that the Delphi is a group process in every sense of the term. Creation of questionnaires and summarizations of panel responses require group effort. In addition, although administration of questionnaires and analysis of final data may be accomplished by a single individual, it is not highly recommended. Delphi may appear deceptively simple in concept, and can be a truly rewarding experience for both researcher and participants. However, if conducted properly, the Delphi process can generate a high volume of complex data that novice Delphi researchers may find overwhelming.

It is important to remember this was a selective study in that it looked at targeted groups of counselors, i.e., mental health counselors and counselor educators, and did not include counselors from other groups, such as school or career counselors. It is recommended that counselors for other areas may want to investigate CRT use within their respective fields and make recommendations based on their observations.

The experts in this Delphi study have expressed their beliefs that the following conditions exist in professional counseling concerning current and future use of CRT:

1. Professional counselors are utilizing a variety of CRT tools to help them accomplish the majority of their work today.

2. The use of CRT by professional counselors will continue to increase to the extent that by 2008, almost all aspects of the work counselors do will be accomplished with the help of CRT.

Based on these conditions, the following recommendations are made:

1. Counselor education programs need to recognize the importance of CRT use by professional counselors in the work they do. Counselors are not currently receiving the training they need to utilize the technology available to them in ways that could result in making counselor tasks easier to perform and able to be more efficiently accomplished, and result in the production of qualitatively better service delivery. Programs that are not providing adequate CRT training are producing graduates who begin their work as professional counselors at a distinct disadvantage to other health care providers endowed with appropriate technological skills. Those graduates must be burdened with the task of acquiring the technological skills they need on their own, in whatever haphazard manner they can, depending on available time and resources.
2. Although counselors are currently using CRT in limited ways to accomplish tasks involving therapeutic intervention, it is realistic to expect more extensive use of CRT in therapeutic tasks in the near future. This presents counseling professionals with the need to conduct research investigating potential effects CRT use may have on the therapeutic process. Herein lies a double challenge for mental health professionals. Before we can research comparative differences in outcome effectiveness between therapy conducted with and therapy conducted without the use of CRT, we must have a) *a priori*, clear-cut descriptions of which aspects of therapeutic interventions most likely produce specific outcome effects, and b) ways to objectively gauge therapeutic

outcome effectiveness. Increasing use of CRT offers both challenges and opportunities for us to expand our understanding of the therapeutic process by requiring us to closely examine which aspects of effective therapeutic intervention are uniquely "human" and why. This understanding can help us develop objective criteria for training mental health professionals to help others, as well as provide us with valuable information concerning which techniques clients can learn to help themselves. In addition, by more precisely defining the processes of therapeutic intervention, counselors can more objectively measure outcome effectiveness associated with a given technique.

Graduates of counseling programs cannot easily accomplish the above goals without increased development of CRT skills. In order to ensure competent and standardized acquisition of the technological skills important to the work of counseling professionals, both now and in the future, counselor training programs must adopt mandatory evaluation of continuously updated minimal computer skills. By so doing, professional counselors and counselor educators will be in a better position to take advantage of the opportunities offered by new technologies, to remain professionally competitive in an increasingly technological world, and begin meaningful research to proactively guide technology's development and use by mental health professionals.

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Appendix A

Letter Requesting Nominees for Counselors and Counselor Educators

We are entering a new era of technology as this century comes to an end and a new one is about to begin. For those of us prepared with the necessary skills to make the transition, the prospects of what can be are exciting. For those of us who are unprepared, the rapid changes toward increased technology promised in the new millennium may be viewed with a sense of discomfort and fear.

A study is being conducted at Virginia Polytechnic Institute and State University to answer questions concerning the impact that computers and computer-related technology are having and may continue to have in the next ten years on the way Counselors do their work. We need to understand these changes in order to develop training programs that will adequately prepare Counselors to perform their jobs in the most efficient ways possible. There is no known research to date that has examined how computer-related technology is affecting the ways Counselors and Counselor Educators perform their work. The problems created by these changes are we do not know to what extent and in what ways:

1. computer-related technology is currently being utilized by Counselors and Counselor Educators?
2. Counselors and Counselor Educators will use computer-related technology in their work in the next ten years?

The answers to these questions are important to those in the field of Counseling who are practicing professionals, educators, college and university program developers, and Counseling agency directors, and will provide the focus for this modified Delphi study. The answers may, also, prove helpful to computer technologists and software developers in designing more efficient tools to be used by Counseling professionals.

We are asking for your participation in this study as an expert in the area of Counseling and computer-related technology. An expert may be defined as someone with special skills or knowledge evidenced by leadership in professional organizations, holding office in professional organizations, presenter at national conventions, published in recognized journals, etc. Your experiences, insights, and opinions concerning the issues being explored will provide valuable and useful information. Participants in the study must be Counselors that meet the requirements for and hold the title of National Certified Counselor and/or Licensed Professional Counselor in their state of practice or who have held such titles, and who have counseled individuals on issues of mental health for a period of at least five years. We are looking for individuals with expertise in each of the following four Counselor categories:

1. Counselor Educators defined as persons currently employed by an accredited college or university to instruct Master's and/or Doctoral-level students in Counseling.
2. Counselors who work in agency settings such as state mental hospitals, community mental health agencies, or large, corporate-owned mental health agencies.
3. Counselors who work in private practice, either as an individual or with other individuals.
4. Counselors who work in college or university counseling centers that help students with a variety of mental health issues.

This study will be conducted in three Rounds of questionnaires, and will take place entirely on the internet. After receipt of the enclosed Consent Form, you will receive an e-mail message informing you of the URL, or web address, where you will find the first Round of questions. You will receive a code number for access to the Web questionnaires. Simple and specific instructions will be provided for the questions. You will remain anonymous to the 30-35 other members of the Delphi panel throughout the study, and only the researchers will be able to identify your specific answers. Your name will be used only in the list of contributors to the study. All other information provided by you will remain anonymous.

Participants in this study will be allowed up to three days to submit their answers for each round. The study is scheduled to be completed in nine days for all three rounds. The amount of time necessary for completion of each round will vary with each panelist, but should range from approximately one and one-half hours for Round 1, five to fifteen minutes for Round 2, and one and one-half hours for Round 3. There are no right or wrong answers to the questions. This study is seeking your expert opinion. We think you will find the process interesting. Results will be made available to you at the conclusion of this study.

Enclosed is a Consent Form acknowledging your acceptance of participation in this study. We sincerely hope you will agree to participate. Thank-you for your consideration. If you have any questions, please e-mail [researcher's e-mail address] or call (804) [researcher's phone number].

Sincerely yours,

Katherine Cabaniss	Dave Hutchins, Ph.D.
Doctoral Research Associate	Associate Professor

Please copy and paste the following consent form to indicate your willingness to participate as a Delphi expert panelist into an e-mail message to be returned to:

[researcher's e-mail address]

If you prefer, you may print the form and snail mail it to:

Katherine Cabaniss
Delphi Consent Form
[researcher's address]

Thank-you in advance for your acceptance to participate in this research.

Consent Form for Participation in Research
I am acknowledging my consent to the following:

I am willing to participate in all three rounds of the study.

I understand that I may withdraw from the study at any time, but that the success of this study depends on all participants completing all three rounds by the dates specified.

I understand there is no monetary compensation for participation.

I have access to the Internet, and am familiar with how to access web pages.

I meet the criteria outlined in this notice. The category that best describes my current work is (please type in the category as Counselor Educator, Agency Counselor, Private Practitioner, or University Counselor):

I understand that information relayed via the Internet can never be guaranteed secure, but that the researchers of this study will make every effort to maintain anonymity with respect to responses.

I am not willing to participate in this study. Please tell me your reason in the space below:

Letter Requesting Nominees for Technologists

We are entering a new era of technology as this century comes to an end and a new one is about to begin. For those of us prepared with the necessary skills to make the transition, the prospects of what can be are exciting. For those of us who are unprepared, the rapid changes toward increased technology promised in the new millennium may be viewed with a sense of discomfort and fear.

A study is being conducted at Virginia Polytechnic Institute and State University to answer questions concerning the impact that computers and computer-related technology are having and may continue to have in the next ten years on the way Counselors do their work. We need to understand these changes in order to develop training programs that will adequately prepare Counselors to perform their jobs in the most efficient ways possible. There is no known research to date that has examined how computer-related technology is affecting the ways Counselors and Counselor Educators perform their work. The problems created by these changes are we do not know to what extent and in what ways:

1. computer-related technology is currently being utilized by Counselors and Counselor Educators?
2. Counselors and Counselor Educators will use computer-related technology in their work in the next ten years?

The answers to these questions are important to those in the field of Counseling who are practicing professionals, educators, college and university program developers, and Counseling agency directors, and will provide the focus for this modified Delphi study. The answers may, also, prove helpful to computer technologists and software developers in designing more efficient tools to be used by Counseling professionals.

We are asking for your participation in this study as an expert in the area of computer-related technology. An expert may be defined as someone with special skills or knowledge evidenced by leadership in professional organizations, holding office in professional organizations, presenter at national conventions, published in recognized journals, degreed professional, licensed professional, etc. Your experiences, insights, and opinions concerning the issues being explored will provide valuable and useful information.

Skills in computer-related technology may include, but are not limited to, designing and/or developing web pages, computer programming, software development, knowledge of Operating Systems, Network Administrators, persons with Computer Science degrees, persons with Engineering backgrounds, Instructional Technologists, Information Systems managers, or Database Administrators.

Familiarity of Counseling may involve, at a minimal level, a very general knowledge of the tasks that Counselors perform in their work such that a layperson would possess.

Persons with more advanced knowledge of Counseling, such as Counselors, Psychologists, Psychiatrists, Licensed Clinical Social Workers, or Psychiatric Nurses, who also possess advanced computer-related skills, are qualified to participate as panelists.

This study will be conducted in three Rounds of questionnaires, and will take place entirely on the Internet. After receipt of the enclosed Consent Form, you will receive an e-mail message informing you of the URL, or web address, where you will find the first Round of questions. You will receive a code number for access to the Web questionnaires. Simple and specific instructions will be provided for the questions. You will remain anonymous to the 30-35 other members of the Delphi panel throughout the study, and only the researchers will be able to identify your specific answers. Your name will be used only in the list of contributors to the study. All other information provided by you will remain anonymous.

Participants in this study will be allowed up to three days to submit their answers for each round. The study is scheduled to be completed in nine days for all three rounds. The amount of time necessary for completion of each round will vary with each panelist, but should range from approximately one and one-half hours for Round 1, five to fifteen minutes for Round 2, and one and one-half hours for Round 3. There are no right or wrong answers to the questions. This study is seeking your expert opinion. We think you will find the process interesting. Results will be made available to you at the conclusion of this study.

Enclosed is a Consent Form acknowledging your acceptance of participation in this study. We sincerely hope you will agree to participate. Thank-you for your consideration. If you have any questions, please e-mail [researcher's e-mail address] or call (804) [researcher's phone number]

Sincerely yours,

Katherine Cabaniss	Dave Hutchins, Ph.D.
Doctoral Research Associate	Associate Professor

Thank-you in advance for your acceptance to participate in this research.

Consent Form for Participation in Research
I am acknowledging my consent to the following:

I am willing to participate in all three rounds of the study.

I understand that I may withdraw from the study at any time, but that the success of this study depends on all participants completing all three rounds by the dates specified.

I understand there is no monetary compensation for participation.

I meet the criteria outlined in this notice. The category that best describes my current work is (Please type in all categories that apply to you, such as Psychologist, Psychiatrist, Counselor, LCSW, WebMaster, Programmer, Computer Scientist, Software Developer, Database Administrator, Information Systems Manager, etc.):

I understand that information relayed via the Internet can never be guaranteed secure, but that the researchers of this study will make every effort to maintain anonymity with respect to responses.

I am not willing to participate in this study. Please tell me your reason in the space below:

Appendix B

Letter of Introduction, Request for Participation, and Consent Form for Counselors

Dear [Panel Nominee],

We are entering a new era of technology as this century comes to an end and a new one is about to begin. For those of us prepared with the necessary skills to make the transition, the prospects of what can be are exciting. For those of us who are unprepared, the rapid changes toward increased technology promised in the new millennium may be viewed with a sense of discomfort and fear.

A study is being conducted at Virginia Polytechnic Institute and State University to answer questions concerning the impact that computers and computer-related technology are having and may continue to have in the next ten years on the way Counselors do their work. We need to understand these changes in order to develop training programs that will adequately prepare Counselors to perform their jobs in the most efficient ways possible. There is no known research to date that has examined how computer-related technology is affecting the ways Counselors and Counselor Educators perform their work. The problems created by these changes are we do not know to what extent and in what ways:

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2. Counselors and Counselor Educators will use computer-related technology in their work in the next ten years?

The answers to these questions are important to those in the field of Counseling who are practicing professionals, educators, college and university program developers, and Counseling agency directors, and will provide the focus for this modified Delphi study. The answers may, also, prove helpful to computer technologists and software developers in designing more efficient tools to be used by Counseling professionals.

We are asking for your participation in this study as an expert in the area of Counseling and computer-related technology. An expert may be defined as someone with special skills or knowledge evidenced by leadership in professional organizations, holding office in professional organizations, presenter at national conventions, published in recognized journals, etc. Your experiences, insights, and opinions concerning the issues being explored will provide valuable and useful information. Participants in the study must be Counselors that meet the requirements for and hold the title of National Certified Counselor and/or Licensed Professional Counselor in their state of practice or who have held such titles, and who have counseled individuals on issues of mental health for a period of at least five years. We are looking for individuals with expertise in each of the following four Counselor categories:

1. Counselor Educators defined as persons currently employed by an accredited college or university to instruct Master's and/or Doctoral-level students in Counseling.
2. Counselors who work in agency settings such as state mental hospitals, community mental health agencies, or large, corporate-owned mental health agencies.
3. Counselors who work in private practice, either as an individual or with other individuals.
4. Counselors who work in college or university counseling centers that help students with a variety of mental health issues.

This study will be conducted in three Rounds of questionnaires, and will take place entirely on the Internet. After receipt of the enclosed Consent Form, you will receive an e-mail message informing you of the URL, or web address, where you will find the first Round of questions. You will receive a code number for access to the Web questionnaires. Simple and specific instructions will be provided for the questions. You will remain anonymous to the 30-35 other members of the Delphi panel throughout the study, and only the researchers will be able to identify your specific answers. Your name will be used only in the list of contributors to the study. All other information provided by you will remain anonymous.

Participants in this study will be allowed up to three days to submit their answers for each round. The study is scheduled to be completed in nine days for all three rounds. The amount of time necessary for completion of each round will vary with each panelist, but should range from approximately one and one-half hours for Round 1, five to fifteen minutes for Round 2, and one and one-half hours for Round 3. There are no right or wrong answers to the questions. This study is seeking your expert opinion. We think you will find the process interesting. Results will be made available to you at the conclusion of this study.

Enclosed is a Consent Form acknowledging your acceptance of participation in this study. We sincerely hope you will agree to participate. Thank-you for your consideration. If you have any questions, please e-mail [researcher's e-mail address] or call (804)[researcher's phone number].

Sincerely yours,

Katherine Cabaniss	Dave Hutchins, Ph.D.
Doctoral Research Associate	Associate Professor

Please copy and paste the following consent form to indicate your willingness to participate as a Delphi expert panelist into an e-mail message to be returned to:

[researcher's e-mail address]

If you prefer, you may print the form and snail mail it to:

Katherine Cabaniss
Delphi Consent Form
[researcher's address]

Thank-you in advance for your acceptance to participate in this research.

Consent Form for Participation in Research
I am acknowledging my consent to the following:

I am willing to participate in all three rounds of the study.

I understand that I may withdraw from the study at any time, but that the success of this study depends on all participants completing all three rounds by the dates specified.

I understand there is no monetary compensation for participation.

I have access to the Internet, and am familiar with how to access web pages.

I meet the criteria outlined in this notice. The category that best describes my current work is (please type in the category as Counselor Educator, Agency Counselor, Private Practitioner, or University Counselor):

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I am not willing to participate in this study. Please tell me your reason in the space below:

Letter of Introduction, Request for Participation, and Consent Form for Technologists

Dear [Panel Nominee],

We are entering a new era of technology as this century comes to an end and a new one is about to begin. For those of us prepared with the necessary skills to make the transition, the prospects of what can be are exciting. For those of us who are unprepared, the rapid changes toward increased technology promised in the new millennium may be viewed with a sense of discomfort and fear.

A study is being conducted at Virginia Polytechnic Institute and State University to answer questions concerning the impact that computers and computer-related technology are having and may continue to have in the next ten years on the way Counselors do their work. We need to understand these changes in order to develop training programs that will adequately prepare Counselors to perform their jobs in the most efficient ways possible. There is no known research to date that has examined how computer-related technology is affecting the ways Counselors and Counselor Educators perform their work. The problems created by these changes are we do not know to what extent and in what ways:

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2. Counselors and Counselor Educators will use computer-related technology in their work in the next ten years?

The answers to these questions are important to those in the field of Counseling who are practicing professionals, educators, college and university program developers, and Counseling agency directors, and will provide the focus for this modified Delphi study. The answers may, also, prove helpful to computer technologists and software developers in designing more efficient tools to be used by Counseling professionals.

We are asking for your participation in this study as an expert in the area of computer-related technology. An expert may be defined as someone with special skills or knowledge evidenced by leadership in professional organizations, holding office in professional organizations, presenter at national conventions, published in recognized journals, degreed professional, licensed professional, etc. Your experiences, insights, and opinions concerning the issues being explored will provide valuable and useful information.

Skills in computer-related technology may include, but are not limited to, designing and/or developing web pages, computer programming, software development, knowledge of Operating Systems, Network Administrators, persons with Computer Science degrees, persons with Engineering backgrounds, Instructional Technologists, Information Systems managers, or Database Administrators.

Familiarity of Counseling may involve, at a minimal level, a very general knowledge of the tasks that Counselors perform in their work such that a layperson would possess. Persons with more advanced knowledge of Counseling, such as Counselors, Psychologists, Psychiatrists, Licensed Clinical Social Workers, or Psychiatric Nurses, who also possess advanced computer-related skills, are qualified to participate as panelists.

This study will be conducted in three Rounds of questionnaires, and will take place entirely on the Internet. After receipt of the enclosed Consent Form, you will receive an e-mail message informing you of the URL, or web address, where you will find the first Round of questions. You will receive a code number for access to the Web questionnaires. Simple and specific instructions will be provided for the questions. You will remain anonymous to the 30-35 other members of the Delphi panel throughout the study, and only the researchers will be able to identify your specific answers. Your name will be used only in the list of contributors to the study. All other information provided by you will remain anonymous.

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Enclosed is a Consent Form acknowledging your acceptance of participation in this study. We sincerely hope you will agree to participate. Thank-you for your consideration. If you have any questions, please e-mail [researcher's e-mail address] or call (804)[researcher's phone number].

Sincerely yours,

Katherine Cabaniss	Dave Hutchins, Ph.D.
Doctoral Research Associate	Associate Professor

Please copy, fill in blank spaces, and paste the following consent form to indicate your willingness to participate as a Delphi expert panelist into an e-mail message to be returned to: [researcher's e-mail address]

If you prefer, you may print the form and snail mail it to:

Katherine Cabaniss
Delphi Consent Form
[researcher's address]

Thank-you in advance for your acceptance to participate in this research.

Consent Form for Participation in Research
I am acknowledging my consent to the following:

I am willing to participate in all three rounds of the study.

I understand that I may withdraw from the study at any time, but that the success of this study depends on all participants completing all three rounds by the dates specified.

I understand there is no monetary compensation for participation.

I meet the criteria outlined in this notice. The category that best describes my current work is (Please type in all categories that apply to you, such as Psychologist, Psychiatrist, Counselor, WebMaster, Programmer, Computer Scientist, etc.):

I understand that information relayed via the Internet can never be guaranteed secure, but that the researchers of this study will make every effort to maintain anonymity with respect to responses.

I am not willing to participate in this study. Please tell me your reason in the space below:

Appendix C

List of Delphi Panelists

Counselors and Counselor Educators:

Edward S. Beck, Ed.D., CCMHC, NCC
Director, Beck Associates at the Susquehanna Institute
Harrisburg, PA

Michael R.Gore, Ph.D., LPC
Counselor, Thomas E. Cook Counseling Center
Virginia Tech
Blacksburg, VA

Wayne King, M.Ed., NCC, LPC
Counselor
Johnston Community College
Smithfield, NC

Wayne Lanning, Ed.D.
Associate Dean for Graduate Studies and Research
College of Education
325H Willard Hall
Oklahoma State University
Stillwater, OK 74078-4033

Larry Long, Ph.D.
Executive Director of Wellness & Career Development
Tarleton State University
Stephenville, TX

Joseph R. Manduchi, Ed.D., LPC
Clinical Manager
Center for Behavioral Health
Lewistown Hospital
152 E. Market St.
Lewistown, PA 17044

Robert D. Myrick, Ph.D.
Professor, Counselor Education Department
College of Education
University of Florida
Gainesville, FL 32611

Laura A Packer, MA, LPC, CCHT, CCRC

Clinical Supervisor/ Clinical Therapist
The Counseling Center, LTD
Dayton, OH

John M. Rinke, Ed..D., LPC
Director of Counseling, Career Planning and Placement
Washtenaw Community College
Ann Arbor, MI

Mark Vardell, M.A., LPC, LMFT, LCDC
Private Practice Counseling and Psychotherapy
Sherman, TX

Darra-Lee Walker, LPC, NCC
Private Practice and Professor, Rochester College
800 W. Avon Road
Rochester, Hills, MI 48307

Dr. Charles Whisenhunt, LPC
Relationship Consultants
Missoula, MT

Dr. Richard Wilmarth, LPC, NCC, CCMHC
Private Practitioner
Professor
Troy State University, AZ

Cathy Woodyard, Ed.D., LPC
Texas Woman's University
Denton, TX

Technologists:

Brenda K. Gillingham, M.S.
Certified Consultant/Trainer: Organizational Change Mgmt.
Adv. Degree Practitioner: Project Management of Technology
Sr. Project Manager, Information Systems
M.I.T.
Cambridge, MA

Dr. Kevin Grold
President, 1-800-therapist.com referral network

Dr. John Hall
Psychologist/Web Master
Charlotte, NC

Georgie Johnson, M.A.
Web Master, Professional Graphic Designer
LeRoy, IL

Arthur E. Jongsma, Jr., Ph.D.
Psychology Software Developer
Psychological Consultants
Grand Rapids, MI

Storm King, M.S., Clinical Psychology
Web Master
Past-president, International Society for Mental Health Online (ISMOH)
Springfield, MA

Michael Momparler, M.S., ABECSW, AASECT
Counseling Services
Eastern CT State University
Willimantic, CT 06226

List of Delphi Questionnaire Development Committee Members

Tom Agnew, Ph.D.
School Counselor
Andrew Lewis Middle School
Salem, VA

David R. DeLorenzo, Ph.D.
Career Counselor
Georgia Perimeter College
Dunwoody, GA

Edward R. Fox, Ph.D.
Professor, Department of Computer Science
Virginia Tech
Blacksburg, VA 24061 USA

Hildy Getz, Ph.D.
Professor, Counselor Education
Virginia Tech
Blacksburg, VA

William Holbach
Assistive Technologies Coordinator
Virginia Tech
Blacksburg, VA

Dave E. Hutchins, Ph.D.
Professor of Counselor Education
Virginia Tech
310 E. Eggleston
Blacksburg, VA 24061-0302

Sherry K. Lynch, Ph.D., LPC
Counselor, Thomas E. Cook Counseling Center
Viriginia Tech
Blacksburg, VA

Virginia Reilly, Ph.D.
Interim Director EOAA
ADA Coordinator
Virginia Tech
336 Burruss Hall
Blacksburg, VA 24061-0216

List of Committee to Organize Delphi Round 2, Part A Questionnaire

Shannon Coppedge, M.S., Counseling
Longwood College
Farmville, VA

Judy Henry, M.S., Counseling
Longwood College
Farmville, VA

Timothy Seitzinger, M.S., Counseling
Special Education Teacher
Adjunct Professor
Southside Virginia Community College
Alberta, VA

Pilot Panelists

Susan Angle, Ph.D., NCC
Assistant Dean of Students
Services for Students with Disabilities
Virginia Tech
152 Henderson Hall
Blacksburg, VA 24061-0255

Gary Bennett, Ph.D.
Staff Psychologist, Thomas E. Cook Counseling Center
Virginia Tech
Blacksburg, VA

Cynthia Dowdy, M.S., LPC, NCC
Ph.D. Doctoral Candidate, Counseling and Educational Psychology
Kansas State University
Manhattan, KS

F. Robert Wilson, Ph.D.
Professor of Counseling
Dvsn Human Services
University of Cincinnati
Cincinnati, OH 45221-0002

Appendix D

Appendix D includes panel notification e-mail documents and online web pages for the Delphi Round 1 questionnaire.

Notice to Begin Round 1

Dear [Participant],

Thank-you for agreeing to participate in the Delphi study being conducted at Virginia Tech to examine how computer-related technology (referred to in the study as CRT) is affecting the ways Counselors and Counselor Educators do their work now and ten years from the present. This study will consist of three Rounds of questionnaires.

ROUND 1
Part A
We will first ask you to assess the extent to which you believe Counselors utilize CRT for specific tasks in the present. We are not asking how much you use CRT as an individual. We are interested in your expert opinion about how much Counselors in general use CRT in their work for the specific tasks listed.

Panelists who are not professional Counselors are not expected to understand all the tasks that Counselors perform. Again, just give your opinion about how much you think Counselors use CRT in their work for the tasks as you perceive them. Remember--there are no right or wrong answers in stating opinions.

The name Delphi comes from the Greek oracle that predicted future events. As the name implies, you will be asked, as experts in your respective fields, to predict changes in use of CRT by Counselors in their work for the near future, specifically, ten years from now.

Therefore, you will be rating each Counselor task twice in Part A—for the present and for the year 2008.

Part B
In Part B, we want to give you the opportunity to include any categorical headings for the list of tasks that Counselors perform as well as specific tasks that you feel were not covered and are important to add.

We would, also, like to have you include specific examples of how CRT is used in the present to accomplish tasks that Counselors and Counselor Educators perform in their work. We have provided examples to stimulate your thinking. We hope that you will provide us with examples that we have not considered.

Finally, we would like to have you give us your creative input by providing examples of how CRT will be used by Counselors ten years from the present.

The web questionnaire is now available for Round 1. All panelists will be able to submit responses until [time and date of closing]. It is very important that all responses to Round 1 be submitted prior to that time.

CAUTION!! Clicking the Reset button will completely erase all responses you have made. Be very sure this is your intent when clicking the Reset button.

You will find detailed instructions prior to the first page of each Round of questionnaires. You may want to print these instructions for reference while completing the questionnaire. In addition, summary instructions will accompany each part of the Round of questions.

Again, Round 1 questionnaire is now available. Please remember, the questionnaire will be available to you until [time and date of closing]. The web site for the questionnaire is located at:

http://www.vitae.vt.edu/delphi/

There will be a preliminary questionnaire that will provide us with useful information for our analysis. Please answer all questions prior to beginning the study.

YOUR PERSONAL CODE FOR THIS STUDY IS _____

Please keep this code for use throughout the Delphi study. You will not be allowed access to the web questionnaires without providing this code. If you should lose it, e-mail a request for its replacement to:
[researcher's e-mail address]

Once, again, thank-you very much for helping with this important research.

Sincerely,
Katherine Cabaniss

Welcome to *Delphi On-line*

Katherine Cabaniss, Glen A. Holmes, et al. Virginia Tech

Step 1. If your personal code begins with the letter, "T", please click here to register. Otherwise, please click here to register.

Step 2. If you have already registered, you may proceed with logging in.

*Note: This is a secure Web-site. Access is limited to **authorized users only**. Please enter and submit the items below to log in.*

Round No 1 ◉ 2 ○ 3 ○

First Name Last Name

First Name | Last Name

Personal Code | Personal Code

Login Reset

DELPHI ONLINE -- COUNSELOR DEMOGRAPHICS

Welcome CodeName: C01 The system has detected this is your first time logging in. Please enter the items below . Click the submit at the bottom of the page when finished.

1	First Name First Name	Last Name Last Name
2	Address	Address
3	Please indicate your gender	○ Female ○ Male
4	Please tell us your age range	Scroll Down to Select
5	Phone	(540) 555-5555
6	E-mail address	panelist@email.com
7	Licensure/ title: (check all that apply)	Scroll Down To Select
8	Primary work setting: (please check only one)	Scroll Down To Select

If your are a practicing Counselor, answer items 9-11. If not, go to item 12.

9	If you are a practicing Counselor, how many Mental Health Practitioners (LPC's, LCSW's, Licensed Psychologists, Psychiatrists) are in your work setting, including self?	Scroll Down To Select
10	If you are a practicing Counselor in an agency or university setting, what is the average total number of clients that are being helped by the agency or center at any given time?	Scroll Down To Select
11	If you are a practicing Counselor, what is the average number of clients you personally see each week:	Scroll Down To Select

	Which of the following best describes your theoretical/methodological orientation to Counseling? You may indicate multiple orientations by choosing more than one. Indicate your	Behavioral	0 ○ 1 ○ 2 ○ 3 ○ 4 ○

12	predominant orientation by choosing 1, secondary orientation by choosing 2, etc. Choose 0 if you do not use or adhere to a particular theoretical orientation. Examples: If your orientation is Cognitive/Behavioral, you would select 1 for Cognitive and 2 for Behavioral and 0 for Affective and Systems. If your orientation is Systems/Affective/Cognitive, you would select 1 for Systems, 2 for Affective, 3 for Cognitive and 0 for Behavioral.	Affective	0 ○ 1 ○ 2 ○ 3 ○ 4 ○
		Cognitive	0 ○ 1 ○ 2 ○ 3 ○ 4 ○
		Systems	0 ○ 1 ○ 2 ○ 3 ○ 4 ○

13	How many years of experience have you had as a Counselor?	Scroll Down To Select
14	Highest earned degree:	Scroll Down To Select
15	Have you conducted research, published, or made presentations in the field of Counseling?	Yes ○ No ○
16	If applicable, how many years experience have you had as an Educator?	Scroll Down To Select
17	If you work in a College/ University setting, what is the size of the institution?	Scroll Down To Select
18	If you work in a College/ University setting, which of the following best describes that setting:	Scroll Down To Select

Register Reset (USE WITH CAUTION)

DELPHI On-line -- TECHNOLOGIST DEMOGRAPHICS

Welcome T01 The system has detected this is your first time logging in. Please enter the items below . Click the submit at the bottom of the page when finished.

1	First Name [First Name]	Last Name [Last Name]
2	Please indicate your gender	○ Female ○ Male
3	Please tell us your age range	[Scroll Down to Select]
4	Address	[Address]
5	Phone	[(540) 555-5555]
6	E-mail address	[panelist@email.com]
7	Title	[Scroll Down To Select]
	Other Title (Write In)	[ ]
8	Degree of familiarity with tasks that Counselors perform in their work:	[Scroll Down To Select]
9	Highest degree earned:	[Scroll Down To Select]
10	Have you conducted research , published, or made conference/ workshop presentations related to your field	Yes ○ No ○
11	How many years of experience have you had with computer-related technology?	[Scroll Down To Select]

[Register] [Reset (USE WITH CAUTION)]

Delphi— Round 1, Instructions . .

[Round 1 Instructions] [Round 1 Part A] [Round 1 Part B]

Thank-you for agreeing to serve on the panel of experts to explore ways that **computer-related technology (CRT)** is being used by Counselors and Counselor Educators in their work **today** and will be used **ten years from now**. We hope that you will find this study interesting and enjoyable. Your opinion is very valuable to us.

This Modified Delphi study will consist of three rounds of questionnaires. Please read the directions carefully before answering the questions. We suggest that you print this page of instructions for ease of reference throughout this Round of questions.

Round 1, Part A

1. Click the cell beneath the number that best describes how much you believe Counselors and Counselor Educators **Currently** use CRT to accomplish a particular task they perform in their work. You may select one number for each task listed. Please use the following scale to rate current use of CRT:

   5 = Essential if it allows Counselors to do things they never could do before.

   4 = Very Helpful if it significantly decreases effort, makes things much more efficient, or improves the quality of the product or service.

   3 = Helpful if it makes the job easier to perform, but is not essential.

   2 = Not used, but would like to if CRT and/or the skills to use it are not currently available, but would be used if they were available.

   1 = Not used, and no need for if there is no interest in using CRT for the task, its use would be inappropriate for the task, or no desire to use.

2. Using the same scale described above, rate each task again with your projections for how much you believe Counselors and Counselor Educators will use CRT to accomplish a particular task **ten years from now**. Again, you may select one number for each task listed.

Round 1, Part B

1. Next, we would like for you to add any tasks that Counselors and Counselor Educators perform in their work that you feel need to be added that are not included. You may do so by first selecting the appropriate category from the drop down menu of categorical headings. A categorical heading of OTHER has been included for you to type in

suggestions for another category if none of those listed seems appropriate. Once you have selected a category, please type in the task you feel needs to be added for that category. You will have 57 spaces in which to word the new task. The tasks added by panelists will constitute Round 2 of the study, and will be rated by panelists in the same manner as those of Round 1.

2. We would like to have your input on **examples** of how CRT is being used **today** to accomplish these tasks. Please write in your ideas in the space provided. We would, also, like creative ideas from you about how you think CRT will be used by Counselors and Counselor Educators to perform the tasks **ten years from now**. Again, write your examples in the space provided. We have included suggestions that we hope you will find helpful.

[Round 1 Instructions] [Round 1 Part A] [Round 1 Part B]

Delphi On-Line Round 1, Part A . . .

[Round 1 Instructions] [Round 1 Part A] [Round 1 Part B]

Please give each task below 2 separate ratings according to the following values: **5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used**. The first rating is for PRESENT use of computer-related technology by Counselors and Counselor Educators to do these tasks. Secondly, rate how much Counselors and Counselor Educators will use computer-related technology to accomplish these tasks IN THE YEAR 2008.

	Tasks that counselors perform in their work	Rate PRESENT use of computer-related technology to accomplish this task						Rate use of computer-related technology to do these tasks IN THE YEAR 2008				
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Marketing/ Client Recruitment	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
1	Advertising preparation (ex.: flyers, letters, videos, web pages)											
2	Advertising delivery (e.g., t.v., radio, internet, print media, mail)											
3	Community service presentations											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Report and Record-keeping (paperwork)	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
4	Externally required forms (e.g., insurance forms, releaseof information forms, informed consent forms)											
5	Client-generated forms (e.g., problem checklist, clerical intake information, informed consent forms)											
6	Internal/ Counselor-generated forms (ex.: scheduling forms, personal/family history/ information forms, confidentiality forms, clinical history forms, treat- ment plan forms, intake notes, progress/session notes, termination summary notes, referral letters)											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	In-session Intervention/ Therapy/ Counseling	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
7	Establish rapport/ relationship											
8	Confidentiality discussions											
9	Overview of problem											
10	Group prescreening											

		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Initial evaluation											
11	Presenting problem											
12	Client demographics											
13	Personal/family history											
14	Clinical history											
15	Establish goals											
16	Develop a treatment plan											
17	Determine length of treatment											
18	Homework assignments											
	Implementing therapeutic interventions/strategies	**5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used**										
19	Affective interventions/strategies											
20	Cognitive interventions/strategies											
21	Behavioral interventions/strategies											
22	Combined strategies (ex., cognitive-behavioral)											
23	Other interventions/strategies											
24	Follow-up											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Clinical Assessment/Testing	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
25	Test administration											
26	Test scoring											
27	Test interpretation											
28	Diagnosis (DSM_IV)											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Consultation and Referral	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
29	Networking											
30	Referrals											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Supervision/ Training	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
31	Supervision/ training of intern/ practicum students											
32	Supervision/ training of supervisors											
33	Supervision/ training of site supervisors											
34	Live supervision											
35	Conducting training workshops											
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Professional Development	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**

	Self-study											
36	Keeping up w/ legal and ethical issues and practices											
37	Reading books and journals											
38	Computer-related information and research											
39	Web-based research and data-base/ library research											
40	Programs/ software											
41	Licensure/ credentialing											
42	Professional writing											
43	Professional listservs											
44	Attending workshops/ conventions											
45	Peer group supervision											
46	Self-evaluation/ report											

Please identify yourself by entering your personal code -- E01

This completes Round 1, **Part A Only**. Proceed to Part B after submitting.

[Round 1 Instructions] [Round 1 Part A] [Round 1 Part B]

Delphi On-Line Round 1, Part B . . .

[Round 1 Instructions] [Round 1 Part A] [Round 1 Part B]

If you feel there are new generic categories of tasks or generic tasks within categories that need to be added to the list in Round 1, Part A, you may add them here by typing in the appropriate spaces. You will have limited space to type your suggestions. Try to be as specific as possible in your wording. Please remember these are generic categories and tasks.

Item	Category	Task Suggestion/Comments
1	Marketing/ Client Recruitment	
2	Report and Record-keeping (paperwork)	
3	In-session Intervention/ Therapy/ Counseling	
4	Clinical Assessment/Testing	
5	Consultation and Referral	
6	Supervision/ Training	
7	Professional Development	
8	OTHER (specify)	
9	OTHER (specify)	
10	OTHER (specify)	
11	OTHER (specify)	
12	OTHER (specify)	

CURRENT TECHNOLOGY USE

For each of the following categories, examples have been give concerning how computer-related technology (CRT) is **PRESENTLY** used to accomplish tasks that Counselors and Counselor Educators perform in their work. Please add new examples that we have not considered. Do not repeat given e

Marketing/Client Recruitment

Examples of how computer-related technology is presently being used in marketing/client recruitment include counselors in agencies, private practice, and university counseling centers utilizing the World Wide Web to post information about the services they offer, hours of business/ operation, contact phone numbers, fees charged, and areas of specialization.

Report and Record-keeping (paperwork)

Examples of how computer-related technology is presently being used in report and record-keeping are software programs such as TheraScribe and Microsoft Project which can create customized reports for health care providers on patient data, goals and objectives, DSM-IV diagnoses, treatment modalities, suggested interventions, progress notes, etc., and the use of computing software, such as Microsoft Word, Excel, and Project for office management.

In-session Intervention/ Therapy/ Counseling

An example of how computer-related technology is presently being used in intervention is some counselors are using the Web to initiate therapeutic contact with clients. After filling in a client information questionnaire that includes a disclosure statement, payment information, disclaimers, and emergency contact information, clients write a brief summary of issues or problems they would like to have help about or specific questions they would like to ask the therapist. This information is electronically sent to the therapist, usually by e-mail, and the therapist e-mails responses to the client within a specified time. Here is a URL (Web address) for such a service http://www.response-net.com/onlinex4.htm

Clinical Assessment/ Testing

An example of how computer-related technology is presently being used in clinical assessment/ testing is software programs that allow you to administer, score, interpret and report psychological tests. There are, also, Web counselors who have Web pages that advertise the ability to take tests such as the MBTI on the internet, and receive results through the internet.

Consultation and Referral

An example of CRT that is presently being used by Counselors and Counselor Educators is use of e-mail to consult with other professionals about specific client issues. Clients must be unidentifiable due to the non-secure nature of the internet.

Supervision/ Training

An example of computer-related technology that is presently being used by Counselors and Counselor Educators is the use of e-mail by intern/ practicum students to contact supervisors about counseling issues that occur between classroom sessions.

Professional Development

Examples of computer-related technology that are presently being used by Counselors and Counselor Educators for professional development are professional listservs on the internet where counselors can discuss current issues of interest to practicing professionals, such as: http://behavior.net/; using the internet to receive information about and to register for workshops and conventions; using word-processing software, such as Microsoft Word, for professional writing; performing Web-based research about topics of professional interest.

IN THE YEAR 2008

For each of the following categories, examples have been given concerning how computer-related technology (CRT) will be used to accomplish tasks that Counselors and Counselor Educators perform in their work IN THE YEAR 2008. Please add new examples that we have not considered. Do not repeat the given examples.

Marketing/ Client Recruitment (2008)

An example of how computer-related technology could be used in marketing/ client recruitment IN THE YEAR 2008 by Counselors and Counselor Educators is e-mail to targeted groups. For ex., e-mail to groups after layoffs, natural disasters, hospital visits, entering school, etc.

Report and Record-keeping (paperwork) (2008)

Examples of how computer-related technology could be used in report and record-keeping by Counselors and Counselor Educators IN THE YEAR 2008 are session notes could be replaced by having computers record each session and allow audio input from the counselor about the session, or voice recognition for data entry and recording (typed dictation). Form completion could be accomplished in the same way.

In-session Intervention/ Therapy/ Counseling (2008)

An example of how computer-related technology could be used in intervention by Counselors and Counselor Educators IN THE YEAR 2008 is to record intervention/ outcome pairings, hook these up in databases, and use this database to generate suggestions for intervention that have historically been found as likely to work.

Clinical Assessment/ Testing (2008)

Examples of how computer-related technology could be used in clinical assessment/ testing by Counselors and Counselor Educators IN THE YEAR 2008 are to have computers record and analyze sessions, identify anomalies, summarize them, and hook them up to databases to find similar cases. Human behavior metrics can be recorded for assessment/ testing by Counselors. Video/ voice and other non-evasive test methods (such as voice stress testing, timed delivery of speech patterns, repetitive or compulsive behavior patterns, retinal movement, etc.) may be used to confirm, support, and identify behaviors and variances in behaviors.

Consultation and Referral (2008)

We do not have an example for you for this category.

Supervision/ Training (2008)

An example of computer-related technology that could be used by Counselors and Counselor Educators for supervision/ training IN THE YEAR 2008 is simulation-based training that would make it possible to rehearse intervention sessions prior to live intervention with human subjects. The simulated virtual patient sessions would be based on real-life (historical) Counseling sessions and programmed outcomes based on empirical data of human behavior.

Professional Development (2008)

Examples of computer-related technology that could be used by Counselors and Counselor Educators for professional development are Counselors could participate in workshops and seminars through two-way computer interaction in a manner that is similar to video conferencing.

Please identify yourself by entering your personal code -- E01

Thank you for completing Round 1, Part B. **STOP. This concludes Round 1**.

Appendix E

Appendix E includes panel notification e-mail documents and online web pages for the Delphi Round 2 questionnaire.

Round 2 Begin Notice for Counselors

Dear Panel Members,

Please confirm receipt of this message.

Thank-you very much for your responses to Round 1 of this modified Delphi study. Below is a brief description of the Round 2 questionnaire.

Part A
Your responses to the first section of Round 1, Part B have been summarized and organized into additional tasks and categories that you have suggested. These new tasks and categories are to be rated using the same procedure and scale you used for Round 1, Part A. You will, first, be assessing the extent to which you believe Counselors in general utilize CRT for specific tasks in the present, then for the future. Just as in Round 1, each new task and category of tasks will receive two ratings.

Part B
In Part B, we would like to know what kinds of CRT tools you are using in your work. In addition, we would like to know how often you use each of the CRT tools listed.

The web questionnaire is now available for Round 2. All panelists will be able to submit responses until [time and date of closing]. It is very important that all responses to Round 2 be submitted prior to that time.

CAUTION!! Clicking the Reset button will completely erase all responses you have made. Be very sure this is your intent when clicking the Reset button.

You will find detailed instructions prior to the first page of each Round of questionnaires. You may want to print these instructions for reference while completing questionnaires. In addition, summary instructions will accompany each part of the Round of questions.

Again, the Round 2 questionnaire is now available. Please remember, the questionnaire will be available to you until [time and date of closing]. The web site for the questionnaire is located at:

http://www.vitae.vt.edu/delphi/

You may access the questionnaire using your personal code. Please keep your code for use in the third, and final, Round of questions. If you have lost your code, please e-mail a request for it as soon as possible to allow more time for response to:
[researcher's e-mail address]

Once, again, thank-you very much for helping with this important research.

Sincerely,
Katherine Cabaniss

Round 2 Begin Notice for Technologists

Dear Panel Members,

Thank-you very much for your responses to Round 1 of this modified Delphi study.

Throughout the study, we would like to remind panelists who are not professional Counselors that you are not expected to understand all the tasks that Counselors perform. We know this may be challenging for you at times. It is important for us to be able to compare your responses to those of professional Counselors. Therefore, your input is extremely valuable. Again, just give your opinion about how much you think Counselors use CRT in their work for the tasks as you perceive them. Remember--there are no right or wrong answers in stating opinions.

Part A
Your responses to the first section of Round 1, Part B have been summarized and organized into additional tasks and categories that you have suggested. These new tasks and categories are to be rated using the same procedure and scale you used for Round 1, Part A. You will, first, be assessing the extent to which you believe Counselors in general utilize CRT for specific tasks in the present, then for the future. Just as in Round 1, each new task and category of tasks will receive two ratings.

Part B
In Part B, we would like to know what kinds of CRT tools you believe Counseling professionals are using in their work. In addition, we would like to know how often you believe Counselors use each of the CRT tools listed.

The web questionnaire is now available for Round 2. All panelists will be able to submit responses until [time and date of closing]. It is very important that all responses to Round 2 be submitted prior to that time.

CAUTION!! Clicking the Reset button will completely erase all responses you have made. Be very sure this is your intent when clicking the Reset button.

You will find detailed instructions prior to the first page of each Round of questionnaires. You may want to print these instructions for reference while completing questionnaires. In addition, summary instructions will accompany each part of the Round of questions.

Again, Round 2 questionnaire is now available. Please remember, the questionnaire will be available to you until [time and date of closing]. The web site for the questionnaire is located at:

http://www.vitae.vt.edu/delphi/

You may access the questionnaire using your personal code. Please keep this code for use in the third, and final, Round of questions. If you have lost your code, please e-mail a request for it as soon as possible to allow more time for response to:
[researcher's e-mail address]

Once, again, thank-you very much for helping with this important research.

Sincerely,
Katherine Cabaniss

Welcome to *Delphi On-line*

Katherine Cabaniss, Glen A. Holmes, et al. Virginia Tech

Note: This is a secure Web-site. Access is limited to authorized users only. Please enter and submit the items below to log in.

Round No 1(closed) 2◉ 3○

Personal Code P01

Login Reset

Delphi On-Line, ROUND 2, INSTRUCTIONS . . .

Your personal code is T01

Thank-you for your prompt responses to Round 1. The second round includes tasks and categories that panelists felt were important to add to the list of tasks that Counselors and Counselor Educators perform in their work. We suggest that you print this page of instructions for ease of reference throughout this Round of questions.

Round 2, Part A

Please rate each task twice (present and future) following the same directions and scale that you used in Round 1**.**

1. Click the circle beneath the number that best describes how much you believe Counselors and Counselor Educators *in general* **Currently** use computer-related technology (CRT) to accomplish a particular task they perform in their work. You may select one number for each task listed. Please use the following scale to rate current use of CRT:

   5 = Essential if it allows Counselors to do things they never could do before.

   4 = Very Helpful if it significantly decreases effort, makes things much more efficient, or improves the quality of the product or service.

   3 = Helpful if it makes the job easier to perform, but is not essential.

   2 = Not used, **but would like to** if CRT and/or the skills to use it are not currently available, but would be used if they were available.

   1 = Not used, **and no need for** if there is no interest in using CRT for the task, its use would be inappropriate for the task, or no desire to use.

2. Using the same scale described above, rate each task again with your projections for how much you believe Counselors and Counselor Educators will use CRT to accomplish a particular task **ten years from now**. Again, you may select one number for each task listed.

Round 2, Part B

Finally, we would like to know the kinds of CRT you are using and how often. Please indicate how often you use specific CRT tools for each of the Counselor task categories by choosing **"NA" for not applicable, "D" for Daily use**, **"W" for Weekly use**, **"O" for Occasional use**, or **"N" for Never use**.

Your personal code is T01

GO TO ROUND 2, PART A

Delphi On-Line **Round 2, Part A . . .**

Your personal code is T01

Please give each task below 2 separate ratings according to the following values: **5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used**. The first rating is for PRESENT use of computer-related technology by Counselors and Counselor Educators to do these tasks. Secondly, rate how much Counselors and Counselor Educators will use computer-related technology to accomplish these tasks IN THE YEAR 2008.

	Tasks that counselors perform in their work	Rate PRESENT use of computer-related technology to accomplish this task						Rate use of computer-related technology to do these tasks IN THE YEAR 2008				
		5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used										
	Marketing/ Client Recruitment	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
47	List of counseling services and self-help guides	○	○	○	○	○		○	○	○	○	○
	Report and Record-keeping (paperwork)	**5**	**4**	**3**	**2**	**1**		**5**	**4**	**3**	**2**	**1**
48	Case management organizer	○	○	○	○	○		○	○	○	○	○
	Professional Development											
49	Continuing Education (e.g., home study, distance education, site-based education)	○	○	○	○	○		○	○	○	○	○
	Professional Accountability											
	Reporting ethical violations											
50	to licensing boards	○	○	○	○	○		○	○	○	○	○
51	to the public	○	○	○	○	○		○	○	○	○	○
52	Peer reviews of competency	○	○	○	○	○		○	○	○	○	○
53	Reporting client feedback on therapeutic effectiveness	○	○	○	○	○		○	○	○	○	○

Your personal code is T01

Submit Round 2-- Part A | RESET THIS PAGE (USE WITH CAUTION)

Delphi On-Line **Round 2, Part B . . .**

Your personal code is T01

	Please indicate how often you use the following CRT tools for the task categories shown to the left, where **NA= not applicable, D = Daily; W = Weekly ; O = Occasionally; N = Never**									
TASK CATEGORY	e-mail	word process	web	spread sheet	project mngmt	graphics	animation	simulation	stat software	other
Marketing/ Client Recruitment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Report and Record-keeping (paperwork)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
In-session Intervention/ Therapy/ Counseling	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TASK CATEGORY	e-mail	word process	web	spread sheet	project mngmt	graphics	animation	simulation	stat software	other
Clinical Assessment/ Testing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Consultation and Referral	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Supervision/ Training	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Professional Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Your personal code is T01

Submit Round 2-- Part B | RESET THIS PAGE (USE WITH CAUTION)

Delphi On-line

Katherine Cabaniss, Glen A. Holmes, et al. Virginia Tech

This concludes ROUND 2 of the DELPHI. THANK YOU for your participation. You will be notified when Round 3 begins.

Appendix F

Appendix F includes panel notification e-mail documents and online web pages for the Delphi Round 3 questionnaire.

Round 3 Begin Notice for Counselors

Dear Panel Members,

To avoid duplicate copies, PLEASE CONFIRM receipt of this message.

Thank-you very much for your prompt responses to Round 2 of this modified Delphi study. Below is a brief description of the Round 3 questionnaire. This is the final Round of the study. We sincerely appreciate your dedication in completing all three rounds of the study.

In this Round, we would like for you to rate each Counselor task one final time for Present and Future use of CRT. You will mark your responses just as you did in Rounds 1 and 2. If you do not feel confident in making a judgment about a particular item, it is preferable that you leave it blank. The difference for this rating is that you are asked to consider the median rating (located in the second column following the task) by all panelists prior to making your final response.

In addition, you will be asked for your opinion concerning HOW CRT does or does not help accomplish the tasks that Counselors perform in their work.

The web questionnaire for Round 3 is now available. The questionnaire will remain available until [time and date of closing]. Please try to respond by this time.

The web site for the questionnaire is located at:

http://www.vitae.vt.edu/delphi/

When you arrive at the web site, please select Round 3. You may access the questionnaire using your personal code. If you have lost your code, or have any questions, please e-mail a request for it or call as soon as possible to allow more time for response to:
[researcher's e-mail address]
(804) [researcher's phone number]

CAUTION!! Clicking the Reset button will completely erase all responses you have made. Be very sure this is your intent when clicking the Reset button.

You will find detailed instructions prior to the first page of the Round 3 questionnaire. You may want to print these instructions for reference while completing the questionnaire. In addition, summary instructions will accompany each part of Round 3.

Thank-you, again, so very much for the dedication you have shown by responding to all Rounds of questions in this study. We sincerely appreciate the valuable time you have give us from your busy schedules. We hope you have found the process interesting and enjoyable. Results will be made available to you upon the study's completion.

Sincerely,
Katherine Cabaniss

Round 3 Begin Notice for Technologists

Dear Panel Members,

To avoid duplicate copies, PLEASE CONFIRM receipt of this message.

Thank-you very much for your prompt responses to Round 2 of this modified Delphi study. Below is a brief description of the Round 3 questionnaire. This is the final Round of the study. We sincerely appreciate your dedication in completing all three rounds of the study.

Please remember that if you are not a professional Counselor, you are not expected to understand all the tasks that Counselors perform. If you do not feel confident in making a judgment about a particular item, it is preferable that you leave it blank.

In this Round, we would like for you to rate each Counselor task one final time for Present and Future use of CRT. You will mark your responses just as you did in Rounds 1 and 2. If you do not feel confident in making a judgment about a particular item, it is preferable that you leave it blank. The difference for this rating is that you are asked to consider the median rating (located in the second column following the task) by all panelists prior to making your final response.

In addition, you will be asked for your opinion concerning HOW CRT does or does not help accomplish the tasks that Counselors perform in their work.

The web questionnaire for Round 3 is now available. The questionnaire will remain available until [time and date of closing]. Please try to respond by this time.

The web site for the questionnaire is located at:

http://www.vitae.vt.edu/delphi/

When you arrive at the web site, please select Round 3. You may access the questionnaire using your personal code. If you have lost your code, or have any questions, please e-mail a request for it or call as soon as possible to allow more time for response to:
[researcher's e-mail address]
(804) [researcher's phone number]

CAUTION!! Clicking the Reset button will completely erase all responses you have made. Be very sure this is your intent when clicking the Reset button.

You will find detailed instructions prior to the first page of the Round 3 questionnaire. You may want to print these instructions for reference while completing the questionnaire. In addition, summary instructions will accompany each part of Round 3.

Thank-you, again, so very much for the dedication you have shown by responding to all Rounds of questions in this study. We sincerely appreciate the valuable time you have give us from your busy schedules. We hope you have found the process interesting and enjoyable. Results will be made available to you upon the study's completion.

Sincerely,
Katherine Cabaniss

Welcome to *Delphi On-line*

Katherine Cabaniss, Glen A. Holmes, et al. Virginia Tech

Note: This is a secure Web-site. Access is limited to authorized users only. Please enter and submit the items below to log in.

Round No 1(closed) 2○ 3◉

Personal Code P01

Login Reset

DELPHI ONLINE

ROUND 3, INSTRUCTIONS

YOUR PERSONAL CODE IS P01

Thank-you for your prompt responses to Round 2. This is the third and final round. We sincerely appreciate the dedication you have given to this study. Round 3 will be an attempt to reach consensus among panelists on their previous ratings for Present and Future use of computer-related technology (CRT) to accomplish tasks that Counselors and Counselor Educators perform in their work. Please read all directions carefully before answering the questions. We suggest that you print this page of instructions for ease of reference throughout this Round of questions.

Following each task is a number in the first column (yellow) that represents your previous rating for that task. The number in the next column (fuchsia) represents the median, or mid-range response, of all panelists for that task. Please give consideration to the median rating of all panelists.

If you disagree with the median result for the group or do no feel it is reasonable, click on the same number you rated before. Please express your reason for not changing your response in the space provided below the task (**200 character limit**). If you feel the median vote is as acceptable as your original vote, please change your vote to that value. If your previous rating is more acceptable to you than the group median, keep your original vote by clicking on the same number as your previous rating.

For example, if the group median rating for a particular task is 3 for Current Use of a task , and your previous rating is 1, click on 1 to maintain your previous response. Then, you may type in your reason for not changing to the median response in the space below the scale. If the Future Use median rating for that same item is 3, and you wish to change your previous response of 1 to the median response, click 3 to indicate a final rating of 3 for Future Use of CRT by most Counselors for that item. In this example, your screen would look like this:

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used, and no need to. **BLOCK 2:** **E**=efficiency; **Q**=quality; **O**=opportunity. BLOCK 3: O = Other, please write in; T = lack of training to use; C = costs of soft/hard ware; S = lack of available software; I = CRT is inappropriate to task.

TASK	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
Therapeutic Strategies	1	3	○	○	◉	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

--- OR ----

click on 1 to indicate non-consensus, and write your reason for maintaining

your previous response in the space provided below the task. In this event,

your response for that same task may look like this:

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; 4 = Very useful; 3 = Helpful; 2 = Not used, but would like to; 1 = Not used, and no need to. **BLOCK 2:** **E**=efficiency; **Q**=quality; **O**=opportunity. BLOCK 3: O = Other, please write in; T = lack of training to use; C = costs of soft/hard ware; S = lack of available software; I = CRT is inappropriate to task.

TASK	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
Therapeutic Strategies	1	3	○	○	○	○	◉	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .	

Next, for those tasks that you rated as 5, 4, or 3, please indicate <u>how</u> CRT helps accomplish the task NOW and will help IN THE YEAR 2008. Choose as many as apply from the following scale:

E = Efficiency means able to produce more with less effort

Q = Quality means able to produce a superior product or service; can do the job

better than it was previously done

O = Opportunity means able to do things that may not have been previously

possible

For example, if in the In-session **Intervention/Therapy/Counseling**, Therapeutic strategies category, you rated the task, Affective as 5, 4, or 3 to indicate that using computer-related technology will be Essential, Very useful, or Helpful for accomplishing this task IN THE YEAR 2008, you might use the following parameters for deciding how CRT will help:

E = Efficiency if computer-related technology will enable Counselors who use cognitive therapeutic interventions to help their clients in ways that are less costly, more accessible, or easier to implement.

Q = Quality if CRT will allow Counselors to use cognitive therapeutic interventions to increase the effectiveness of therapy or service delivery

O = Opportunity If using CRT will help Counselors who use cognitive therapy do so in ways that were previously not possible

Finally, for those tasks that you rated as 1 or 2, please indicate reason(s) CRT has not helped accomplish the task in the PRESENT and will not help accomplish it IN THE YEAR 2008. Choose as many as apply from the following scale:

O = Other, please write in

T = lack of **Training** to use

C = Costs of soft/ hardware

S = no available **Software**

I = CRT is **Inappropriate** to task

For example, if in the In-session **Intervention / Therapy / Counseling**, Therapeutic strategies category, you rated the task, Affective as 2 to indicate that using computer-driven technology is Not used, but could be for accomplishing this task in the PRESENT, you might use the following parameters in choosing reason(s) CRT does NOT help:

O = Other, if a reason is not listed

T = Training, if Counselors do not have adequate training to use CRT to help with this task

C = Costs, if the costs of CRT are too high to allow its use to help with this task

S = Software, if software for CRT is unavailable to help with this task

I = Inappropriate, if CRT is inappropriate for use with this task

Summary for Delphi—Round 3 directions

For CURRENT/FUTURE use of CRT to accomplish tasks:

1. Observe your previous rating for the task in the first column.
2. Observe panelists' median response in the second (fuchsia) column.
3. Rate the task again by changing to the median response, or keep your previous rating by choosing the same rating as you chose before.
4. For each final rating of 5, 4, or 3, choose **E**, **Q**, and/or **O** to tell us HOW CRT helps accomplish the task. Choose all that apply.
5. For each final rating of 1 or 2, choose **O**, **T**, **C**, **S**, or **I** to tell us why CRT is NOT helpful for the task. Choose all that apply.

YOUR PERSONAL CODE IS P01

CLICK HERE TO START ROUND 3

DELPHI ONLINE

ROUND 3, ITEMS 1-27

YOUR PERSONAL CODE IS: P01

INSTRUCTIONS

1. Please note the median response of all panelists for each task, and change your response to the median (***Note: 0.5 or greater, round up***), or write in your reason for not changing it. **5 = Essential** if it allows Counselors to do things they never could do before. **4 = Very Helpful** if it significantly decreases effort, makes things much more, efficient, or improves the quality of the product or service; **3 = Helpful** if it makes the job easier to perform, but is not essential; **2 = Not used**, **but would like to** if CRT and/or the skills to use it are not currently available, but would be used if they were available; **1 = Not used**, **and no need for** if there is no interest in using CRT for the task, its use would be inappropriate for the task, or no desire to use.
2. For each final rating of 5, 4, or 3, please select **E** = efficiency, **Q** = qualtiy, and/or **O** = opportunity for **HOW** computer-related technology (CRT) currently helps with the task.
3. For each final rating of 1 or 2, please select **O** = other **(please write in)**; **T** = lack of training to use; **C =** cost of soft/hard ware; **S** = lack of available software; or **I** = CRT is inappropriate to task as reason(s) for **NOT** using computer-related technology (CRT) to accomplish the task. Choose as many as apply.

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
1. Advertising preparation (ex.: flyers, letters, videos, web pages)		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
1. Advertising preparation (ex.: flyers, letters, videos, web pages)		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 1

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
2. Advertising delivery (e.g., t.v., radio, internet, print media, mail)		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
2. Advertising delivery (e.g., t.v., radio, internet, print media, mail)		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 2

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
3. Community service presentations		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
3. Community service presentations		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 3

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
4. Externally required forms (e.g., insurance forms, release of information forms, informed consent forms)		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
4. Externally required forms (e.g., insurance forms, release of information forms, informed consent forms)		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 4

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
5. Client-generated forms (e.g., problem checklist, clerical intake information, informed consent forms)		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
5. Client-generated forms (e.g., problem checklist, clerical intake information, informed consent forms)		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 5

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
6. Internal/ Counselor-generated forms (ex.: scheduling forms, personal/family history/ information forms, confidentiality forms, clinical history forms, treat- ment plan forms, intake notes, progress/session notes, termination summary notes, referral lette		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
6. Internal/ Counselor-generated forms (ex.: scheduling forms, personal/family history/ information forms, confidentiality forms, clinical history forms, treat- ment plan forms, intake notes, progress/session notes, termination summary notes, referral lette		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 6

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
7. Establish rapport/ relationship		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I

7. Establish rapport/ relationship		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□		

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 7

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
8. Confidentiality discussions		1.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
8. Confidentiality discussions		1.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 8

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
9. Overview of problem		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
9. Overview of problem		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 9

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
10. Group prescreening		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Intervention /Therapy /Counseling	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
10. Group prescreening		3.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 10

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
11. Presenting problem		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
11. Presenting problem		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 11

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
12. Client demographics		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
12. Client demographics		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 12

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
13. Personal/family history		2.5	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
13. Personal/family history		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 13

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
14. Clinical history		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
14. Clinical history		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 14

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
15. Establish goals		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
15. Establish goals		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 15

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
16. Develop a treatment plan		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
16. Develop a treatment plan		3.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 16

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I

17. Determine length of treatment		**2.0**	○	○	○	○	○	□	□	□	□	□	□	□	□	Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
17. Determine length of treatment		**2.0**	○	○	○	○	○	□	□	□	□	□	□	□	□	Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 17

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
18. Homework assignments		**3.0**													Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Initial evaluation	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
18. Homework assignments		**4.0**													Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 18

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
19. Affective interventions/strategies		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
19. Affective interventions/strategies		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 19

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
20. Cognitive interventions/strategies		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
20. Cognitive interventions/strategies		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 20

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
21. Behavioral interventions/strategies		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
21. Behavioral interventions/strategies		3.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 21

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
22. Combined strategies (ex., cognitive-behavioral)		2.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
22. Combined strategies (ex., cognitive-behavioral)		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 22

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
23. Other interventions/strategies		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
23. Other interventions/strategies		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 23

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
24. Follow-up		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Interventions/strategies	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
24. Follow-up		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 24

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
25. Test administration		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
25. Test administration		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 25

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
26. Test scoring		4.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
26. Test scoring		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 26

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
27. Test interpretation		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
27. Test interpretation		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 27

DELPHI ONLINE

Round 3, Items 1-27 Have Been Saved.

Continue to Items 28-53, Round 3 | Reset

DELPHI ONLINE ROUND 3, ITEMS 28-53

YOUR PERSONAL CODE IS: P01

INSTRUCTIONS

1. Please note the median response of all panelists for each task, and change your response to the median (***Note: 0.5 or greater, round up***), or write in your reason for not changing it. **5 = Essential** if it allows Counselors to do things they never could do before. **4 = Very Helpful** if it significantly decreases effort, makes things much more, efficient, or improves the quality of the product or service; **3 = Helpful** if it makes the job easier to perform, but is not essential; **2 = Not used**, **but would like to** if CRT and/or the skills to use it are not currently available, but would be used if they were available; **1 = Not used**, **and no need for** if there is no interest in using CRT for the task, its use would be inappropriate for the task, or no desire to use.
2. For each final rating of 5, 4, or 3, please select **E** = efficiency, **Q** = qualtiy, and/or **O** = opportunity for **HOW** computer-related technology (CRT) currently helps with the task.
3. For each final rating of 1 or 2, please select **O** = other **(please write in)**; **T** = lack of training to use; **C =** cost of soft/hard ware; **S** = lack of available software; or **I** = CRT is inappropriate to task as reason(s) for **NOT** using computer-related technology (CRT) to accomplish the task. Choose as many as apply.

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
28. Diagnosis (DSM_IV)		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Clinical Assessment/Testing	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
28. Diagnosis (DSM_IV)		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 28

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Consultation and Referral	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
29. Networking		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Consultation and Referral	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
29. Networking		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 29

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Consultation and Referral	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
30. Referrals		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Consultation and Referral	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
30. Referrals		5.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 30

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
31. Supervision/ training of intern/ practicum students		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
31. Supervision/ training of intern/ practicum students		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 31

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
32. Supervision/ training of supervisors		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
32. Supervision/ training of supervisors		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 32

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
33. Supervision/ training of site supervisors		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
33. Supervision/ training of site supervisors		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 33

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
34. Live supervision		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
34. Live supervision		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 34

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
35. Conducting training workshops		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Supervision/ Training	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
35. Conducting training workshops		5.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 35

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
36. Keeping up w/ legal and ethical issues and practices		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
36. Keeping up w/ legal and ethical issues and practices		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 36

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
37. Reading books and journals		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
37. Reading books and journals		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 37

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
38. Computer-related information and research		4.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
38. Computer-related information and research		5.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 38

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
39. Web-based research and data-base/ library research		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
39. Web-based research and data-base/ library research		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 39

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
40. Programs/ software		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
40. Programs/ software		5.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 40

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
41. Licensure/ credentialing		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
41. Licensure/ credentialing		5.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 41

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
42. Professional writing		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
42. Professional writing		5.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 42

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
43. Professional listservs		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
43. Professional listservs		5.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 43

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
44. Attending workshops/ conventions		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
44. Attending workshops/ conventions		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 44

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
45. Peer group supervision		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
45. Peer group supervision		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 45

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
46. Self-evaluation/ report		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Prof Development Self-study	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
46. Self-evaluation/ report		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 46

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/ Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
47. List of counseling services and self-help guides		3.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Marketing/ Client Recruitment	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
47. List of counseling services and self-help guides		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 47

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
48. Case management organizer		3.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Report and Record-keeping (paperwork)	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
48. Case management organizer		4.0	○	○	○	○	○	☐	☐	☐	☐	☐	☐	☐	☐

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 48

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Development	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
49. Continuing Education (e.g., home study, distance education, site-based education)		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Development	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
49. Continuing Education (e.g., home study, distance education, site-based education)		4.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)	

END OF ITEM: 49

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability: Reporting ethical violations	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
50. to licensing boards		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)	

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability: Reporting ethical violations	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
50. to licensing boards		4.0													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 50

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability: Reporting ethical violations	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
51. to the public		1.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability: Reporting ethical violations	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
51. to the public		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 51

CURRENT USE OF TECHNOLOGY

BLOCK 1: **5** = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2:** **E = efficiency; Q = quality; O = opportunity.** **BLOCK 3:** **O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
52. Peer reviews of competency		2.0													

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
52. Peer reviews of competency		3.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 52

CURRENT USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
53. Reporting client feedback on therapeutic effectiveness		2.0	○	○	○	○	○	□	□	□	□	□	□	□	□

Other (specify below)

I did not change my response to the median response because . . . (200 char limit)

FUTURE USE OF TECHNOLOGY

BLOCK 1: 5 = Essential; **4** = Very useful; **3** = Helpful; **2** = Not used, but would like to; **1** = Not used, and no need to. **BLOCK 2: E = efficiency; Q = quality; O = opportunity. BLOCK 3: O** = Other, please write in; **T** = lack of training to use; **C** = costs of soft/hard ware; **S** = lack of available software; **I** = CRT is inappropriate to task.

Professional Accountability	YOUR ORIG	Panl MED	5	4	3	2	1	E	Q	O	O	T	S	C	I
53. Reporting client feedback on therapeutic effectiveness		3.5													

Other (specify below)

I did not change my response to the median response because . . .(200 char limit)

END OF ITEM: 53

Submit Items 28-53, Round 3 | Reset

Delphi On-line

Katherine Cabaniss, Glen A. Holmes, et al. Virginia Tech

This concludes ROUND 3 of the DELPHI. This is the third, and final round. Again, THANK YOU for your participation.

Appendix G

Table G1

Round 3—Current (C) and Future (F) Ratings by Counselors

Counselor Task Items Rated 5, 4, or 3[1] for Use of CRT[2] to Perform the Task by ≥ 50% Counselor Panelists (N = 14)

C[3]	F[4]	Counselor Task Category	Counselor Task Item	% C[5]	% F[6]	*f*-*C*[7]	*f*-*F*[8]	M-C[9]	M-F[10]
6	8	Marketing	01—Advertising preparations	100%	100%	14	14	3.86	4.93
11	11		02—Advertising delivery	93%	100%	13	14	3.23	4.86
25	22		47—List of services/self-help guides	100%	100%	14	13	3.07	4.15
13	29		03—Community service presentations	79%	100%	11	14	3.18	4.00
14	12	Record-keeping	04—Externally required forms	86%	100%	12	14	3.17	4.86
15	13		05—Client-generated forms	86%	100%	12	14	3.17	4.86
18	15		06—Internal/Counselor-generated forms	93%	100%	13	14	3.15	4.79
26	24		48—Case management organizer	100%	100%	14	14	3.07	4.14
19	20	Therapy	24—Follow-up	93%	100%	13	14	3.15	4.57
24	23	—Initial evaluation	12—Client demographics	93%	100%	13	14	3.08	4.14
27	27		18—Homework assignments	93%	100%	13	14	3.00	4.07
16	30	—Initial evaluation	13—Personal/family history[a]	50%	93%	6	13	3.17	4.00
	36	—Initial evaluation	14—Clinical history		93%		13		3.85
	39	—Interventions	23—Other		79%		11		3.27
	40	—Interventions	21—Behavioral		86%		12		3.25
	41	—Interventions	20—Cognitive		79%		11		3.18
	42	—Initial evaluation	11—Presenting problem		86%		12		3.17
	43		10—Group prescreening		93%		13		3.15
	44		07—Establish rapport		79%		11		3.09
	45	—Interventions	22—Combined		93%		13		3.08
	47		09—Overview of problem		93%		13		3.00
	48		15—Establish goals		86%		12		3.00
	49		16—Develop treatment plan		93%		13		3.00
1	1	Assessment	26—Test scoring	93%	100%	13	14	4.00	5.00
10	10		25—Test administration	86%	100%	12	14	3.75	4.86
7	17		27—Test interpretation	93%	100%	13	13	3.85	4.77
22	31		28—Diagnosis (DSM-IV)	85%	100%	11	14	3.09	4.00

3	6	Consultation	29—Networking	100%	100%	14	14	3.93	4.93
17	14		30—Referrals	86%	100%	12	14	3.17	4.86
12	18	Supervision	35—Conduct training workshops	100%	100%	14	13	3.21	4.69
30	25		33—of site supervisors	100%	100%	14	14	3.00	4.14
29	28		32—of supervisors	93%	100%	13	14	3.00	4.07
28	32		31—of students	100%	93%	14	13	3.00	4.00
	37		34—Live supervision		93%		13		3.85
2	2	Professional Development	42—Professional writing	100%	100%	14	14	4.00	5.00
4	3	—Self-study	39—Web-based research	100%	100%	14	14	3.93	5.00
8	4	—Self-study	40—Programs/software	93%	100%		14	3.85	5.00
9	5	—Self-study	38—Computer-related information/research	100%	100%	14	14	3.79	5.00
5	7		43—Professional listservs	93%	100%	13	14	3.92	4.93
20	9	—Self-study	36—legal/ethical issues	100%	100%	14	14	3.14	4.93
21	16	—Self-study	37—reading books/journals	100%	100%	14	14	3.14	4.79
23	19		41—Licensure/credentialing	79%	100%	11	13	3.09	4.69
	21		49—Continuing Education		100%		14		4.21
32	33		46—Self-evaluation/report	86%	100%	12	14	3.00	4.00
	34		45—Peer group supervision		93%		13		4.00
31	35		44—Attend workshops/conventions	79%	100%	11	14	3.00	3.93
	26	Professional Accountability—Report ethical violations	50—to licensing boards		93%		13		4.08
	38		53—Therapeutic effectiveness reports		100%		13		3.54
	46		52—Peer reviews of competency		92%		12		3.08

[1]5 = Essential 4 = Very Helpful 3 = Helpful [2]CRT (computer-related technology) [3] rank-ordered mean current ratings [4]rank-ordered mean future ratings
[5]total % responding 5, 4, or 3 for current use [6]total % responding 5, 4, or 3 for future use [7]frequency count for current ratings [8]frequency count for future ratings
[9]mean current ratings [10]mean future ratings [a]counselor responses split 50/50 for Use/Non-Use

Table G2

Round 3—Current (C) and Future (F) Ratings by Technologists

Counselor Task Items Rated 5, 4, or 3[1] for Use of CRT[2] to Perform the Task by ≥ 50% Panelists (N=7)

C[3]	F[4]	Counselor Task Category	Counselor Task Item	% C[5]	% F[6]	*f-C*[7]	*f-F*[8]	M-C[9]	M-F[10]
2	2	Marketing	01—Advertising preparations	86%	100%	6	7	4.00	5.00
17	17		02—Advertising delivery	86%	100%	6	7	3.00	4.86
12	23		03—Community service presentations	86%	100%	6	7	3.33	4.14
16	24		47—List of services/self-help guides	100%	100%	7	7	3.14	4.14
11	7	Record-keeping	06—Internal/Counselor-generated forms	86%	100%	6	7	3.67	5.00
14	8		04—Externally required forms	86%	100%	6	7	3.17	5.00
15	16		05—Client-generated forms	86%	100%	6	7	3.17	4.86
30	26		48—Case management organizer	86%	100%	6	7	3.00	4.14
	12	Therapy	24—Follow-up		100%		7		5.00
18	25	—Initial evaluation	12—Client demographics	86%	100%	6	7	3.00	4.14
19	28		18—Homework assignments	86%	100%	6	7	3.00	4.00
	33	—Initial evaluation	13—Personal/family history		86%		6		4.00
	34	—Initial evaluation	14—Clinical history		100%		7		4.00
	39		16—Develop treatment plan		100%		7		3.14
	40		07—Establish rapport		71%		5		3.00
	41		09—Overview of problem		100%		7		3.00
	42		10—Group prescreening		100%		6		3.00
	43	—Initial evaluation	11—Presenting problem		100%		7		3.00
	44		15—Establish goals		100%		7		3.00
	45	—Interventions	20—Cognitive		100%		7		3.00
	46	—Interventions	21—Behavioral		100%		7		3.00
	47	—Interventions	22—Combined		100%		7		3.00
	48	—Interventions	23—Other		100%		7		3.00
3	3	Assessment	25—Test administration	86%	100%	6	7	4.00	5.00
4	13		26—Test scoring	86%	100%	6	7	4.00	4.86
10	20		27—Test interpretation	86%	100%	6	7	3.83	4.57
13	27		28—Diagnosis (DSM-IV)	100%	86%	7	6	3.29	4.00
5	14	Consultation	29—Networking	86%	100%	6	7	4.00	4.86
20	18		30—Referrals	100%	100%	7	7	3.00	4.86

24	19	Supervision	35—Conduct training workshops	86%	100%	6	7	3.00	4.86
21	21		31—of students	71%	86%	5	6	3.00	4.17
	22		34—Live supervision		86%		6		4.17
22	29		32—of supervisors	71%	86%	5	6	3.00	4.00
23	30		33—of site supervisors	71%	86%	5	6	3.00	4.00
1	1	Professional Development	42—Professional writing	86%	100%	6	7	4.17	5.00
6	4	—Self-study	38—Computer-related information/research	100%	100%	7	7	4.00	5.00
7	5	—Self-study	39—Web-based research	100%	100%	7	7	4.00	5.00
8	6	—Self-study	40—Programs/software	86%	100%	6	7	4.00	5.00
25	9	—Self-study	36—legal/ethical issues	86%	100%	6	7	3.00	5.00
26	10	—Self-study	37—reading books/journals	86%	100%	6	7	3.00	5.00
27	11		41—Licensure/credentialing	86%	86%	6	6	3.00	5.00
9	15		43—Professional listservs	86%	100%	6	7	4.00	4.86
28	31		44—Attend workshops/conventions	71%	86%	5	6	3.00	4.00
29	32		46—Self-evaluation/report	71%	71%	5	5	3.00	4.00
	35		45—Peer group supervision		86%		6		4.00
	36		49—Continuing Education		100%		7		4.00
	37	Professional Accountability—Report ethical violations	50—to licensing boards		71%		5		4.00
	38		53—Therapeutic effectiveness reports		86%		6		3.50
	49		52—Peer reviews of competency		86%		6		3.00

[1]5 = Essential 4 = Very Helpful 3 = Helpful [2]CRT (computer-related technology) [3] rank-ordered mean current ratings [4]rank-ordered mean future ratings
[5]total % responding 5, 4, or 3 for current use [6]total % responding 5, 4, or 3 for future use [7]frequency count for current ratings [8]frequency count for future ratings
[9]mean current ratings [10]mean future ratings

Table G3

Rounds 1 & 2-A and 3 Compared—Current CRT Use Ratings

Counselor Task Items Rated 5, 4, or 3[1] for Use of CRT[2] to Perform the Task by ≥ 50% Combined Panelists (N = 30)

1[3]	3[4]	Counselor Task Category	Counselor Task Item	% 1[5]	% 3[6]	*f*-1[7]	*f*-3[8]	M-1[9]	M-3[10]
1	6	Marketing	01—Advertising preparation	87%	95%	26	20	3.92	3.90
21	12		03—Community service presentations	70%	80%	21	17	3.43	3.24
14	16		02—Advertising delivery	70%	91%	21	19	3.52	3.16
25	20		47—List of services/self-help guides	80%	100%	20	21	3.25	3.10
7	11	Record-keeping	06—Internal/counselor-generated forms	73%	91%	22	19	3.73	3.32
15	13		04—Externally required forms	70%	86%	21	18	3.48	3.17
6	14		05—Client-generated forms	63%	86%	19	18	3.74	3.17
20	24		48—Case management organizer	76%	95%	19	20	3.47	3.05
18	18	Therapy	24—Follow-up	52%	76%	15	16	3.47	3.13
17	25	—Initial evaluation	12—Client demographics	57%	91%	17	19	3.47	3.05
13	26		18—Homework assignments	50%	91%	15	19	3.53	3.00
2	2	Assessment	26—Test scoring	87%	91%	26	19	3.92	4.00
8	9		27—Test interpretation	79%	91%	23	19	3.70	3.84
16	10		25—Test administration	77%	86%	23	18	3.48	3.83
11	15		28—Diagnosis (DSM-IV)	50%	90%	15	18	3.60	3.17
10	3	Consultation	29—Networking	83%	95%	24	20	3.63	3.95
19	19		30—Referrals	68%	91%	19	19	3.47	3.11
22	17	Supervision	35—Conduct training workshops	57%	95%	17	20	3.35	3.15
	27		31—of students		91%		19		3.00
	28		32—of supervisors		86%		18		3.00
	29		33—of site supervisors		91%		19		3.00
3	1	Professional Development	42—Professional writing	83%	95%	25	20	3.92	4.05
5	4	—Self-study	39—Web-based research	90%	100%	27	21	3.81	3.95
4	5		43—Professional listservs	83%	91%	24	19	3.83	3.95
9	7	—Self-study	40—Programs/software	86%	91%	25	19	3.68	3.89
12	8	—Self-study	38—Computer-related information/research	93%	100%	28	21	3.54	3.86
24	21	—Self-study	36—legal/ethical issues	80%	95%	24	20	3.25	3.10
23	22	—Self-study	37—reading books/journals	60%	95%	18	20	3.28	3.10
	23		41—Licensure/credentialing		81%		17		3.06

26	30		44—Attend workshops/conventions	57%	76%	17	16	3.18	3.00
	31		46—Self-evaluation/report		81%		17		3.00

[1]5 = Essential 4 = Very Helpful 3 = Helpful [2]CRT (computer-related technology) [3] Rounds 1 and 2-A rank-order according to mean rating
[4] Round 3 rank-order according to mean rating [5]total % responding 5, 4, or 3 for Rounds 1 and 2-A [6]total % responding 5, 4, or 3 for Round 3
[7]frequency count for Rounds 1 and 2-A [8]frequency count for Round 3 [9]mean ratings for Rounds 1 and 2-A [10]mean ratings for Round 3

Table G4

Rounds 1 & 2-A and 3 Compared—Current CRT Non-Use Ratings

Counselor Task Items Rated "2 = [CRT[1]] not used, but would like to" by ≥ 50% Combined Panelists (N = 30)

1[2]	3[3]	Counselor Task Category	Counselor Task Item	*f*-1[4]	*f*-3[5]	% 1[6]	% 3[7]
7	1	Therapy—Interventions	21—Behavioral	13	20	43%	95%
10	2	—Initial evaluation	11—Presenting problem	12	19	40%	91%
4	3	—Initial evaluation	14—Clinical history	14	19	47%	91%
5	4		16—Develop treatment plan	14	19	47%	91%
8	5	—Interventions	22—Combined	13	19	43%	91%
18	7		15—Establish goals	10	18	35%	86%
13	8	—Interventions	23—Other	11	18	38%	86%
14	11		17—Determine length of treatment	11	17	37%	81%
24	12		09—Overview of problem	6	17	21%	81%
12	13		10—Group prescreening	11	17	38%	81%
11	14	—Interventions	20—Cognitive	12	17	40%	81%
25	18	—Interventions	19—Affective	6	15	20%	71%
26	19		07—Establish rapport	5	14	17%	67%
3	20	—Initial evaluation	13—Personal/family history	14	10	47%	53%
27	22		08—Confidentiality discussions	5	1	17%	5%
23	16	Supervision	34—Live supervision	8	16	27%	76%
15			31—of students	11		37%	
19			32—of supervisors	10		33%	
21			33—of site supervisors	9		31%	
1	6	Professional Development	45—Peer group supervision	16	18	55%	90%
2	15		49—Continuing Education	12	17	48%	81%
9			41—Licensure/credentialing	12		41%	
6			46—Self-evaluation/report	13		45%	
16	9	Professional Accountability—Report ethical violations	50—to licensing boards	9	18	36%	86%
17	10		52—Peer reviews of competency	9	17	36%	85%
20	17		53—Therapeutic effectiveness reports	8	15	32%	75%
22	21	—Report ethical violations	51—to public	7	2	28%	10%

[1]CRT (computer-related technology) [2] Rounds 1 and 2-A rank-order according to mean rating [3] Round 3 rank-order according to mean rating
[4]frequency count for Rounds 1 and 2-A [5]frequency count for Round 3 [6]total % responding for Rounds 1 and 2-A [7]total % responding for Round 3

Table G5

Rounds 1 & 2-A and 3 Compared—Future CRT Use Ratings

Counselor Task Items Rated 5, 4, or 3[1] for Use of CRT[2] to Perform the Task by ≥ 50% Combined Panelists (N = 21)

1[3]	3[4]	Counselor Task Category	Counselor Task Item	% 1[5]	% 3[6]	f-1[7]	f-3[8]	M-1[9]	M-3[10]
8	6	Marketing	01—Advertising preparation	100%	100%	29	21	4.69	4.95
17	14		02—Advertising delivery	97%	100%	28	21	4.43	4.86
15	21		47—List of services/self-help guides	100%	100%	24	20	4.46	4.15
21	27		03—Community service presentations	100%	100%	29	21	4.34	4.05
11	11	Record-keeping	04—Externally required forms	100%	100%	30	21	4.60	4.90
10	12		06—Internal/counselor-generated forms	100%	100%	30	21	4.60	4.86
14	13		05—Client-generated forms	100%	100%	30	21	4.50	4.86
18	23		48—Case management organizer	100%	100%	24	21	4.42	4.14
37		Therapy	17—Determine length of treatment	62%		18		3.83	
28	19		24—Follow-up	89%	100%	25	21	4.16	4.71
30	22	—Initial evaluation	12—Client demographics	93%	100%	27	21	4.11	4.14
33	28		18—Homework assignments	97%	100%	27	21	4.00	4.05
38	35	—Initial evaluation	13—Personal/family history	90%	95%	26	20	3.77	3.95
35	37	—Initial evaluation	14—Clinical history	86%	95%	25	20	3.88	3.90
42	39	—Interventions	23—Other	74%	86%	20	18	3.70	3.17
39	40	—Interventions	21—Behavioral	83%	91%	24	19	3.75	3.16
49	41		10—Group prescreening	86%	95%	24	19	3.58	3.11
47	42	—Initial evaluation	11—Presenting problem	69%	91%	20	19	3.60	3.11
40	43	—Interventions	20—Cognitive	79%	86%	23	18	3.74	3.11
	44		07—Establish rapport		76%		16		3.06
41	46		16—Develop treatment plan	86%	95%	25	20	3.72	3.05
32	47	—Interventions	22—Combined	79%	95%	23	20	4.05	3.05
43	48		09—Overview of problem	57%	95%	16	20	3.69	3.00
45	49		15—Establish goals	72%	91%	21	19	3.67	3.00
4	5	Assessment	26—Test scoring	100%	100%	30	21	4.73	4.95
13	10		25—Test administration	100%	100%	30	21	4.57	4.90
22	20		27—Test interpretation	100%	100%	30	20	4.27	4.70
29	30		28—Diagnosis (DSM-IV)	90%	95%	27	20	4.11	4.00
9	8	Consultation	29—Networking	100%	100%	29	21	4.62	4.90

16	15		30—Referrals	100%	100%	29	21	4.45	4.86
20	18	Supervision	35—Conduct training workshops	100%	100%	30	20	4.37	4.75
24	25		33—of site supervisors	87%	95%	26	20	4.27	4.10
23	29		32—of supervisors	87%	96%	26	20	4.27	4.05
26	31		31—of students	87%	96%	26	20	4.23	4.00
36	36		34—Live supervision	83%	91%	25	19	3.88	3.95
3	1	Professional Development	42—Professional writing	97%	100%	29	21	4.76	5.00
1	2	—Self-study	39—Web-based research	100%	100%	30	21	4.90	5.00
5	3	—Self-study	40—Programs/software	100%	100%	29	21	4.72	5.00
2	4	—Self-study	38—Computer-related information/research	100%	100%	30	21	4.87	5.00
7	7	—Self-study	36—legal/ethical issues	100%	100%	30	21	4.70	4.95
6	9		43—Professional listservs	100%	100%	30	21	4.70	4.90
12	16	—Self-study	37—reading books/journals	97%	100%	29	21	4.59	4.86
19	17		41—Licensure/credentialing	97%	95%	27	19	4.41	4.79
25	24		49—Continuing Education	100%	100%	24	21	4.25	4.14
27	32		46—Self-evaluation/report	90%	91%	26	19	4.19	4.00
34	33		45—Peer group supervision	90%	91%	27	19	3.93	4.00
31	34		44—Attend workshops/conventions	96%	95%	27	20	4.11	3.95
48	26	Professional Accountability—Report ethical violations	50—to licensing boards	83%	86%	20	18	3.60	4.06
46	38		53—Therapeutic effectiveness reports	88%	95%	21	19	3.67	3.53
44	45		52—Peer reviews of competency	79%	90%	19	18	3.68	3.06
50		— Report ethical violations	51—to public	65%		15		3.47	

[1]5 = Essential 4 = Very Helpful 3 = Helpful [2]CRT (computer-related technology) [3] Rounds 1 and 2-A rank-order according to mean rating
[4] Round 3 rank-order according to mean rating [5]total % responding 5, 4, or 3 for Rounds 1 and 2-A [6]total % responding 5, 4, or 3 for Round 3
[7]frequency count for Rounds 1 and 2-A [8]frequency count for Round 3 [9]mean ratings for Rounds 1 and 2-A [10]mean ratings for Round 3

Table G6

Rounds 1 & 2-A and 3 Compared—Future CRT Non-Use Ratings
Counselor Task Items Rated "2 = [CRT[1]] not used, but would like to" by ≥ 50% Combined Panelists

Rounds 1 & 2-A—N=30 Round 3—N=21

1[2]	3[3]	Counselor Task Category	Counselor Task Item	f-1[4]	f-3[5]	% 1[6]	% 3[7]
3		Therapy	07—Establish rapport	1		3%	
2	1	—Interventions	19—Affective	2	15	7%	72%
	3		17—Determine length of treatment		13		62%
1	4		08—Confidentiality discussions	3	4	11%	19%
	2	Professional Accountability—Report ethical violations	51—to public		15		71%

[1]CRT (computer-related technology) [2] Rounds 1 and 2-A rank-order according to mean rating [3] Round 3 rank-order according to mean rating
[4]frequency count for Rounds 1 and 2-A [5]frequency count for Round 3 [6]total % responding for Rounds 1 and 2-A [7]total % responding for Round 3

VITA

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EDUCATION

Doctorate of Philosophy, Counselor Education, February, 2001
Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA
Dissertation: Counseling and Computer Technology in the New Millennium—An Internet Delphi Study
Co-advisors: David Hutchins and Jimmie Fortune

Master of Science, College and Community Counseling, December, 1992
Longwood College, Farmville, VA

Bachelor of Science, Psychology, August, 1978
Virginia Commonwealth University, Richmond, VA

HONORS/AFFILIATIONS

Licensed Professional Counselor, Board Eligible
National Certified Counselor
National Certified Psychologist
American Counseling Association
American Society of Clinical Hypnosis
Phi Kappa Phi
Chi Sigma Iota
Psi Chi

RESEARCH INTERESTS

- Use of computer technology in therapeutic service delivery
- Measures of therapeutic outcome effectiveness

TEACHING INTERESTS

- Undergraduate counseling and psychology courses, including theory, technique, and measurement
- Graduate counseling and psychology courses

RELATED EXPERIENCE

Teaching

Visiting Professor, Mississippi State University Satellite Graduate Program, Ceiba, Puerto Rico, August, 1999 – December, 1999

- Taught 3 graduate classes in Developmental Psychology, Multicultural Counseling, and Advanced Therapeutic Techniques in C.A.C.R.E.P. counseling program

Doctoral Intern, Virginia Tech, Blacksburg, VA, January, 1997 – August, 1997
- Worked as mental health counselor for University Counseling Center

Adjunct Professor, Virginia Western Community College, Roanoke, VA, August, 1996 – December, 1996
- Taught undergraduate introductory psychology class

Emergency Services Consultant, Southside Community Services, South Hill, VA, September, 1995 – July, 1996
- Clinical evaluations of mental health, mental retardation, and substance abuse emergency calls from local authorities
- Prescreened individuals for state facilities
- Crisis intervention and referrals
- Psychiatric assistance to county jails, hospitals, and other human service agencies
- Participated in clinical staff meetings

Graduate Assistant, Texas A & M, Commerce, TX, August, 1993 – May, 1994
- Taught advanced undergraduate counseling classes
- Maintained office hours for student consultations
- Administered written comprehensive examinations to Master's candidates
- Co-administered oral examinations to Master's candidates

Doctoral Intern, Texas A & M, Commerce, TX, August, 1993 – October, 1993
- Worked as mental health counselor for University Counseling Center
- Conducted intake interviews
- Participated in staff meetings

Counseling Practicum, Longwood College, VA, September, 1992 – December, 1992
- Counseled students at local community college concerning career exploration
- Administered and interpreted assessment instruments, including: Myers-Briggs Type Indicator, Strong Interest Inventory, COPS Educational Interest Inventory, College Placement Tests, Wonderlic, and TABE.
- Preformed individual and group counseling to students enrolled in the Gender Equity Program
- Taught Life Skills classes in which students receiving welfare benefits were instructed in developing coping strategies, support networks, parenting, and study skills
- Worked with program directors to update and complete student files to determine program placement and grant eligibility

Research

Research Assistant, Department of Psychology, Virginia Commonwealth University, Richmond, VA, August, 1977 - May, 1978
- Literature review of research concerning color perception

Research Assistant, Department of Psychology, Virginia Commonwealth University, Richmond, VA, August, 1976 - December, 1977
- Administered and scored psychometric instruments to research participants
- Assisted in data analysis

Grants

Grant Author and Director, VA Tech, 1997-1998

- Wrote and directed, *Collaborative Exploration of Research Problems and Methodologies Related to Human Subjects* for the Research Forum, sponsored by the Collaborative Grants Program at VA Tech

PUBLICATIONS

Cabaniss, Katherine (1998, Spring). Supervision, 2000. *VACES Newsletter, 3* (2), 3-6.