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Faculty

Alice Yick Flanagan, PhD, MSW, received her Master's in Social Work from Columbia University, School of Social Work. She has clinical experience in mental health in correctional settings, psychiatric hospitals, and community health centers. In 1997, she received her PhD from UCLA, School of Public Policy and Social Research. Dr. Yick Flanagan completed a year-long postdoctoral fellowship at Hunter College, School of Social Work in 1999. In that year she taught the course Research Methods and Violence Against Women to Masters degree students, as well as conducting qualitative research studies on death and dying in Chinese American families.

Previously acting as a faculty member at Capella University and Northcentral University, Dr. Yick Flanagan is currently a contributing faculty member at Walden University, School of Social Work, and a dissertation chair at Grand Canyon University, College of Doctoral Studies, working with Industrial Organizational Psychology doctoral students. She also serves as a consultant/subject matter expert for the New York City Board of Education and publishing companies for online curriculum development, developing practice MCAT questions in the area of psychology and sociology. Her research focus is on the area of culture and mental health in ethnic minority communities.

Faculty Disclosure

Contributing faculty, Alice Yick Flanagan, PhD, MSW, has disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Division Planner

Jane C. Norman, RN, MSN, CNE, PhD

Director of Development and Academic Affairs Sarah Campbell

Division Planner/Director Disclosure

The division planner and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience

This course is designed for social workers, therapists, mental health counselors, nurses, and other allied health professionals who work in a clinical practice setting

Accreditations & Approvals



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Course Objective

As Internet technologies continue to expand and become more accessible to the general public, their use in clinical helping professions will surely continue to grow. Due to the increasing prevalence of the Internet and its use in clinical practice, the purpose of this course is to provide an overview of the practice issues, strengths and limitations, and legal and ethical issues pertaining to online counseling.

Learning Objectives

Upon completion of this course, you should be able to:

- 1. Review Internet history and usage trends.
- 2. Define terms associated with online counseling.
- 3. Evaluate different technological applications for online counseling.
- 4. List the advantages and limitations of online counseling.
- 5. Identify sociocultural issues involved with the use of online counseling.
- 6. Discuss ethical and legal issues pertaining to online counseling.
- 7. Describe the empirical literature related to the efficacy of online counseling.
- 8. Discuss clinical practice considerations within the context of online counseling.

INTRODUCTION

Internet technology is a common item for many families and households in the United States. It has and will continue to have a tremendous impact on the economic, social, political, and cultural landscape. Not only has it affected commerce, but the fields of physical health, mental health, social work, and counseling have also incorporated Internet technologies in the delivery of services and resources. As a result, the general public can access services from home within minutes at their convenience. It is inevitable that as the speed of the Internet increases and improves, and as laptops, tablets, and smartphones become more prevalent with applications where individuals can access the Internet almost everywhere instantaneously, more and more health, mental health, and counseling services will be provided via the Internet.

Despite the ubiquitous presence of the Internet, the debate about the strengths and limitations of utilizing Internet technologies in the delivery of mental health services still exists. However, there is a consensus that online counseling and mental health service will continue to be used. Consequently, professionals must understand the clinical, legal, and ethical context of online counseling/therapy. Clinicians should be familiar with the empirical research in order to evaluate the strengths, challenges, and efficacy of online counseling and assist individuals who may be considering online counseling.

AN OVERVIEW OF INTERNET TECHNOLOGIES

BRIEF HISTORY OF THE INTERNET

The Internet's history can be traced to the military and the government [80]. Although the Internet is generally thought of as a recent phenomenon, it actually began during the period after World War II, when the U.S. government began to develop a system to send electronic messages in the event of a nuclear attack [25]. Between 1959 and 1964, engineers at the military think tank Rand began to conceptualize a framework for distributed communication [166]. At that time, it relied on extensive computer systems and was all text-based. It was exclusively used for government purposes, unlike the current mass media the Internet has become [25].

In 1962, a memo by J.C.R. Licklider at the Massachusetts Institute of Technology described a computer network system that was interconnected, allowing individuals to communicate and access data from any location [20]. In 1973, the U.S. Defense Advanced Research Projects Agency started a research program to examine technologies that would allow networked computers to communicate, termed Arpanet [34]. Researchers and academicians in the military used this network system to communicate, exchange files, and connect to remote computers [70]. This was referred to as the Internetting Project, from which the term "Internet" is derived [34].

In 1986, the U.S. National Science Foundation (NSF) began to develop the NSF Network (NSFNet), which provides a major backbone of the communication service for the Internet today [34]. For the most part, the development of the Internet in the United States has been funded by the government and, to a lesser extent, industry [34]. By the late 1980s, the use of the Internet evolved from being solely used by the government to being a tool for industries as well.

It was not until the 1990s when commercial restrictions were removed and there was a rapid explosion of Internet usage in personal, economic, social, religious, and political settings [20; 80]. The Internet as it is now known is the result of the interconnection of commercial (with individual subscription) and noncommercial computer networks [70].

The start of Internet culture as it is known today can be traced to 1995 [166]. During this period, the majority of Internet traffic was routed to interconnected network service providers in the United States. Yahoo was launched, and Internet Explorer became the most commonly used browser [166]. By 1998, Google was founded.

As of 2017, the Internet has gone through two distinct waves: Web 1.0 and Web 2.0. Web 1.0 was the first generation, which began approximately in 1993 and focused on the functionality of accessing information through search engines and hyperlinks, with little interaction [5]. Personal websites, Internet directories, online encyclopedias, Internet browsing, and taxonomies are examples of Web 1.0 technology [6].

Beginning in 2004, the Internet entered Web 2.0, which focuses on the use of Internet applications to facilitate interaction, collaboration, contributions, and dissemination of information. Web 2.0 has been coined the "social web" because it promotes group interaction, collaboration, community, conversations, networking, and connections [6]. Examples of Web 2.0 applications include [6; 16; 18; 19]:

- Blogs
- Wikipedia
- Social networking websites (e.g., Facebook, LinkedIn)
- Wikis
- Social bookmarking (e.g., del.icio.us)
- Podcasts and vodcasts
- Video sharing (e.g., YouTube, Snapchat)
- Photo sharing (e.g., Instagram, Flickr)
- Really Simple Syndication (RSS) feeds
- Google Docs and presentations
- 3-D virtual worlds (e.g., Second Life)

MySpace was introduced in 2003 and Facebook in 2004, paving the era of social networking [2]. Soon after, in 2005, YouTube launched, and in 2006, the first tweet was sent [2].

Not only are people more connected today, but technologic devices can control objects (i.e., turning lights off in a room while the individual is elsewhere). This is a phenomenon referred to as the Internet of Things [29].

GENERAL INTERNET USAGE PATTERNS

In order to understand the impact of the Internet on personal lives, it is important to obtain a brief glimpse of Internet usage. According to the U.S. Census, 82% of American households had an Internet subscription in 2016 [51]. In 2019, 73% of households in the United States had broadband Internet [52]. Today, 90% of American adults use the Internet [52]. Individuals 18 to 29 years of age are the most likely to utilize the Internet (100%), while adults 65 years of age and older are the least likely (73%) [52]. According to the U.S. Census Bureau, being young, White or Asian, with a high income bracket, and more educated predicts Internet use [51]. States in the West and Northeast (particularly metropolitan areas in these regions) tend to have higher rates of high-speed Internet subscriptions [51].

With Web 2.0, more people are using social networking sites and creating and viewing podcasts, vodcasts, and blogs. As of 2019, the top online activity for adult Internet users in the United States was texting, followed by e-mailing [33]. Now social media networking sites are extremely popular. In 2019, 72% of adults were using social networking sites, with those 18 to 29 years of age the most likely to use these platforms [54].

In 2019, an estimated 69% of Americans 18 years of age and older used Facebook; 37% used Instagram; 28% used Pinterest; 27% used LinkedIn; and 22% used Twitter [167]. There is no doubt that Internet technology has become a ubiquitous part of the American landscape. Despite the proliferation and increased use of the Internet, not all social groups have equal access to a home computer and the Internet. The social exclusion and inequality of Internet access, which is influenced by socioeconomic differences among various groups, has been termed the "digital divide" [23]. Wasserman and Richmond-Abbott categorize access into three components: access to the Internet, frequent use of the Internet, and scope of use of the Internet [80]. It is assumed that socioeconomic status plays a role in access, as it is necessary to have the economic resources to purchase a computer and to pay monthly fees to an Internet service provider [80].

Although Internet usage is generally increasing, there are racial differences. In 2019, 66% of African Americans and 61% of Hispanics had broadband Internet at home, rates that were lower than home access among white individuals (79%) [52]. However, Asian Americans are slightly more like (82.7%) to have home access to the Internet than white Americans [62]. As of 2019, ethnic minorities are higher users of smartphones, likely because it is their sole access to the Internet. An estimated 23% of African Americans and 25% of Latinos use their smartphone for Internet access, compared with 12% of white users [52]. Racial/ethnic minorities appear to take full advantage of their cell phone features compared with their white counterparts [77].

INTERNET USAGE PATTERNS FOR HEALTH AND MENTAL HEALTH INFORMATION

Although consumers report preferring to obtain health information from their physicians, more consumers are taking advantage of Internet technology to seek health-related information [78]. In 1998, 50 million adults in the United States had ever gone online to seek health information; slightly more than a decade later, this number jumped to 154 million [83]. According to a 2010 poll, 81% of Internet users sought health information online, and 49% used the Internet to do more research after having seen their physician [83]. A study of adults 18 years

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of age and older found that 65% of Internet users searched for medical information [169]. In a separate 2015 study, 40% of adults used the Internet to search for health information and 3.7% used online health chat rooms [170]. A 2008 study with 569 Internet users found that consumers tended to look for four types of health information online: medical treatment, difficult to discuss health topics, family health, and methods to improve health [78]. A 2016 study found that adults typically sought online medical information on specific diseases, medical treatments, and healthy behaviors [171].

Interestingly, there was a decline in online health information seeking between 2002 and 2012, possibly due to concerns about the validity and reliability of health information on the Internet. This trend of online health information seeking is not limited to the United States. In a study that included 7,934 participants from Norway, Denmark, Germany, Greece, Poland, Portugal and Latvia, 71% of Internet users had used the Internet for health-related activities, particularly to access and read health information [63]. In a Hong Kong survey study involving more than 1,000 respondents, 87% had employed the Internet to find health information and almost 66% searched for health information on the Internet on at least a monthly basis. The most common search was for health-related symptoms [99].

Consumers are also increasingly searching online for information about physicians, experimental treatments, health insurance, medications, fitness, and nutrition [84]. However, it appears that purchasing medications or medical apparatuses is less common. According to a study with 1,428 adults in the United States, only 6.4% had purchased prescription drugs and 2% had purchased medical equipment over the Internet [85]. A 2010 study confirmed this trend. Researchers examined data from the Washington University School of Medicine and found that the primary source of obtaining medications/drugs was through dealers, friends and relatives, and healthcare provider prescriptions; only 3% obtained medications through the Internet [71].

As of 2014, there were more than 100,000 healthrelated websites, government health sites, and sites for professional organizations and journals [86]. It is estimated that 6 million Americans search for information about a health-related topic online every day [86]. In a study of website queries on the Mayo Clinic's consumer health information website, researchers found the most common health queries were about symptoms, followed by "causes" of conditions, and finally "treatment and drugs" [105]. A 2017 meta-analysis found that 35% of adults used the Internet to assess symptom, with rates varying between 23% to 75% depending on sociodemographic variables and the disease/disorder [172]. In one study, 66.2% of participants preferred to use general search engines and 21% preferred Wikipedia to search for health-related information rather than health portals or the websites of hospitals or professional organizations [100]. The participants reported primarily searching for information about mental disorders and medications [100].

Today, consumers not only use the Internet to search for health information, they are interacting with others. One digital marketing firm found that 34% of online health seekers use social media resources to obtain their information [87]. This trend appears to start early. A study involving 218 adolescents between 14 and 16 years of age found that almost a half (48.9%) used a social network site for mental health information [173].

The most commonly used social media resources included Wikipedia (21%), online discussion boards (15%), social networking sites (6%), blogs (4%), and synchronous chat rooms (4%). Another study found that 58% of individuals diagnosed with a chronic illness were enthusiastic about sharing medical information and their experiences with others [84]. Using cell phones to access online health information is becoming increasingly popular. A 2012 survey conducted by the Pew Internet Research Project found that 31% of participants had used their phone to look for health information, compared with 17% in 2010 [88]. In this survey, individuals who were African American, Latino, 18 to 49 years of age, or who had a college degree were more likely to obtain

health information using their phones [124]. Providers have also begun to use phones to disseminate health information. In a study involving community health advisors (paraprofessionals) in the African American community, providers reported that they like the ability to communicate quickly to people about cancer screenings, raising awareness, and providing concrete information about services [130].

There are also specific demographic patterns in Internet health seeking. Compared with men, women tend to search online more for health and medical information [85]. They are particularly more likely to search for information on mental health and psychiatric topics, such as depression [89]. Mothers with young children use the Internet to seek pediatric health information regarding specific health conditions and symptoms and parenting [90].

There are some findings that indicate racial and ethnic differences in attitudes and behaviors related to online health information seeking. Research indicates that African Americans, Latinos, Japanese Americans, and Filipinos are less likely to use the Internet to obtain health and medical information even after controlling for demographic and access-to-care variables [169]. White Americans are more likely to use the Internet to search for health information (57%) compared with their Hispanic counterparts (51%) [91]. Similarly, in a secondary database analysis, Hispanic adults were less likely to have searched on the Internet for health information (28.9%) compared with white adults (35.6%) [92]. Attitudes about online health information were also different between the two groups. For example, Hispanics were more likely to disagree that online health information can improve the lay public's understanding about medical conditions and their treatments, give people a greater sense of empowerment and confidence when interacting with physicians, and assist patients to obtain treatment they may not otherwise obtain; however, they were more likely to agree that online health information could prevent someone from seeing a physician [92]. Some argue that these differences could be attributed to disparities in the access to the Internet due to socioeconomic differences.

In 2020, due to the COVID-19 pandemic, there was a global surge in virtual health and mental health care. Whether this trend continues following required social distancing guidelines remains to be seen [234].

EARLY ROOTS OF INTERNET TECHNOLOGY AND COUNSELING

The terms "therapy" or "counseling" may evoke images of a therapist sitting in a chair and the client sitting or perhaps even lying down on the couch. In other words, the therapeutic or counseling processes are usually considered to be face-to-face. However, the notion of therapy being done at a distance has not always been linked to "technology." For example, some have argued that even Sigmund Freud was involved in distance therapy with clients through written correspondence [135]. Even before the advent of the Internet, other forms of technology, such as telephones, videos, computers, and satellite, had a long history in the fields of counseling, mental health, psychology, and psychiatry. Therapy or counseling has been conducted at a distance for many years in cases when the professional and client were in different geographic areas. Telemedicine and telepsychiatry have been utilized since the 1950s, at which time health services were delivered using different forms of communication technologies, such as video conferencing [41]. In the mid-1950s, the Nebraska Psychiatric Institute delivered psychotherapy through a video system that linked one hospital to a satellite hospital [41]. A study analyzing telepsychiatry found that video conferencing is the most widely utilized mechanism for the delivery of psychiatric services between remote locations [31].

According to Ainsworth, online counseling can be traced back to as early as 1972, when Stanford and UCLA set up a counseling session between computers at the two universities during the International Conference on Computer Communication [1]. Online support groups also began as early as the 1970s, when bulletin systems were used on local computers [1]. In 1986, an e-counseling program called "Ask Uncle Ezra" was implemented at Cornell University. Individuals would access the website and post questions, and a staff person would post responses [168].

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In 1993, "Depression Central," a website begun by Ivan Goldberg, offered an opportunity for the public to seek information about depression and medical treatment [82; 168]. Two years later, John Grohol hosted an online chat about a variety of mental health issues on his website https://psychcentral. com [82]. By the mid-1990s, fee-based mental health services were commonly offered online [82; 168]. The majority of these websites offered advice on various mental health issues for a small fee [1]. By the mid-1990s, more than 300 websites were run by individual counselors or therapists offering clinical counseling services [1]. In 1997, the International Society for Mental Health Online was founded. This nonprofit organization seeks to provide a community for professionals to dialogue about the role of technology in counseling and mental health [93]. Mental health companies have begun to make use of smartphone technology and associated applications. One such company, Talkspace, allows clients and therapists to send texts, videos, and/or voice messages within the same platform [174].

Online counseling has been compared to telephone counseling, as they share similar features. Telephone counseling was initially used for crisis intervention. Examples include suicide, rape, and domestic violence crisis hotlines, operated 24 hours a day, 7 days a week, to meet those who are in crisis and require immediate assistance [61]. Telephone counseling is a viable and valuable option for those who are physically disabled, geographically isolated, or constrained for time, and it is certainly amenable to psychologic disorders that limit contact with others, like agoraphobia [61]. Some who are wary about seeking help may be more likely to seek professional help using the phone because it offers a relative degree of anonymity [61]. In many ways, the debate of whether online counseling is effective and the examination of its strengths and limitations parallel the debate that emerged when telephone counseling became an option in the delivery of mental health services. As of 2009, there were more than 500 therapists offering individual online counseling and more than 300 unique sites offering online counseling [136]. This availability has increased exponentially, and a 2020 Google search of the term "online counseling" returns 2.49 million results.

DEFINITION OF TERMS

It is necessary to define some common terms that have emerged in the literature about online counseling. Online counseling is also referred to as e-therapy, web-based counseling, e-mail therapy, e-mental health, e-social work, cyberspace counseling, and Internet counseling or therapy [179]. Simply put, these terms have been defined as the provision of mental health care and behavioral health services through the Internet using distance communication technologies, whereby the services are delivered as stand-alone services or as a supplement to existing interventions by a licensed practitioner [60; 138; 206].

Asynchronous refers to communications carried out on a non-real-time basis spanning different times and locations. There is usually a gap in time between the responses of the counselor and the client. Synchronous (real-time) refers to communications that are carried out simultaneously, with no gap in time between the responses of the counselor and the client.

Unanimous definitions of online counseling and online therapy are still in debate. For example, does counseling and therapy involve only a professionally trained and licensed individual, or can it involve paraprofessionals [65]?

The term "telemedicine" is also important because online counseling has its roots in telemedicine; some classify online or Internet counseling under the broader heading of telemedicine. Forms of media communications used in telemedicine include closed circuit television, Internet chatrooms, and telephone, video, and audio communications via the Internet [22]. The World Health Organization defines telemedicine as [207]:

The delivery of healthcare services, where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment, and prevention of disease and injuries, research and evaluation, and for the continuing education of healthcare providers, all in the interests of advancing the health of individuals and their communities.

The World Health Organization has identified four key elements in telemedicine [175]:

- Its purpose is to provide clinical support.
- It is intended to overcome geographic barriers, connecting users who are not in the same physical location.
- It involves the use of various types of information and communication technologies.
- Its goal is to improve health outcomes.

Telepsychiatry falls under the larger umbrella of telemedicine. It employs electronic communications and information technologies, such as telephones, faxes, the Internet, and video conferencing, to deliver or support clinical psychiatry services at a distance [32]. This approach may also be used to overcome logistical barriers—reaching clients/ patients that may be otherwise unable to access mental health assistance. One such example is the use of telepsychiatry in Syria to help Syrian refugees, with the involvement of U.S.-based and Syrian-trained psychiatrists [139].

E-health is a term that emerged from the fields of telehealth and telemedicine. It refers specifically to health services that are delivered through the Internet, not other electronic communications [46].

APPLICATIONS OF ONLINE COUNSELING

Online counseling involves understanding how communication tools provide new options for clinicians to enhance, supplement, or offer new avenues of access for those who may not have entry to traditional mental health services [7]. This section reviews various online media that are utilized for the delivery of a variety of mental health and counseling services. It also discusses the classification of these services.

CLASSIFICATIONS OF ONLINE MENTAL HEALTH SERVICES

There are many forms of online mental health services, which differ along a continuum based on the amount of counselor and client interaction, the amount of professional training of the counselor, and the primary task of the services. Online counseling can be classified regarding the basis of information provided as Internet-based, peer-based, trained professional-based, or licensed professionalbased [22; 47; 56].

Internet as a Mechanism for Mental Health Information/Education

With Web 1.0, mental health information was primarily obtained from individual or private nonprofit websites whose primary goal is to disseminate and educate the public on a specific issue or clinical disorder(s). The information is often presented in a reader-friendly manner for easier comprehension. Additional resources, such as websites and contacts, might be offered. Checklists or screening instruments may be posted on these websites to allow individuals to get a general sense of whether they might have a particular disorder. In a large-scale survey study of 1,222 persons diagnosed with bipolar disorder, 77% reported using the Internet primarily to obtain more information on the disorder [176].

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These individuals preferred to use a computer rather than a smartphone for these activities. Factors that initiated Internet searches included a desire to obtain more information about medication side effects, to learn more about the disorder anonymously, and to get help to cope with the disorder.

With Web 2.0, mental health information can be obtained by connecting, interacting, and sharing with other individuals. One of the main benefits of Web 2.0 is being able to harness collective intelligence using dynamic Internet applications [94]. Consumers use these applications not only to find mental health information but to develop communities to support one another, share experiences and information, and evaluate physicians' and healthcare providers' performances [16; 208]. Web 2.0 applications like Twitter and social networking sites may be used to disseminate health promotional messages and reminders. The Centers for Disease Control and Prevention has used Twitter to reach the public with education related to influenza [140]. The proliferation of phone apps has made it easier for individuals to communicate with others in similar health situations and to self-monitor symptoms and health status. This can ultimately enhance health decision-making [208]. Accessing mental health information online has become much easier and more convenient; however, the excessive amount of information individuals are exposed to can be problematic. Information may be conflicting, and individuals must understand that the quality and accuracy of information will vary [56].

This also relates to the concept of health literacy. Health literacy refers to, "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services that they need to make appropriate health decisions" [95]. Literacy is not merely about being able to read the information but also involves being able to recognize social components, create meaning, and apply information to one's own situation [96].

Advice/Information Delivered by Peer or Trained Professional

Services may also be delivered by nonprofessionals or professionally trained and licensed individuals who offer advice and support one-on-one or in a group format through e-mails, chatrooms, and/or discussion forums. Peers who are not professionally trained can offer support and information based on their experiences, and it is this common denominator that may make the client feel comfortable in asking for the peer's advice. Mental health bloggers, for example, write about their experiences, and readers glean information, support, and advice. Bloggers and readers may support each other through online comments and continued interactions [209]. On the other hand, the professionally trained counselor can provide more psychoeducational services, characterized by concrete educational information and supportive services. One of the distinguishing characteristics of nonprofessional and professionalled groups is that professional-led support groups focus more on solving problems and coping with emotions, while nonprofessionals emphasize advocacy [56]. These services might be offered through traditional counseling agencies that provide information via the Internet to supplement traditional counseling. Some of these services are free of charge, others are not.

Professionally Delivered Counseling or Therapy Treatment

Online counseling services or therapeutic services are delivered by professionally trained and licensed individuals. Counseling/therapy is distinguished by an ongoing relationship between the client and the counselor/therapist in which the relationship is moving toward a therapeutic goal. These services may be offered by a private, nonprofit traditional counseling agency or by individual counselors or therapists through either asynchronous or synchronous communication interactions, such as e-mails, e-mail distribution lists, or chatrooms.

ONLINE DELIVERY MEDIUM

E-Mail

E-mail is one of the most common uses of the Internet. It allows an individual to send text messages to another person or to a group rapidly, conveniently, and without incurring long-distance charges [25]. E-mail-based counseling consists of asynchronous interaction between a counselor and client using text-based communications sent electronically. E-mail communications allow the client to exchange brief narratives, while the counselor structures the communication for exploration of the described symptoms with a problem-solving focus [56; 177].

Due to the convenience of e-mails and the ability to aggregate lists of e-mail addresses (e-mail distribution lists), forming groups in which group participants interact through e-mail has proliferated [25]. A single individual can physically set-up distribution lists and send mass e-mails, or the distribution of the e-mails can be moderated through special software. E-mail software application systems are available to handle the task of subscribing or unsubscribing persons from the e-mail distribution list (Listserv) [25]. Such applications are often developed based on disseminating information or providing support for a specific issue [21]. Counseling using e-mails appears to be the most popular form of online counseling [25]. Some argue that e-mail counseling or any type of counseling involving text-based communication can be cathartic for the client. In these situations, the client has control over how much information to disclose and when to disclose it [177].

E-mail has been used in a variety of ways to counsel and provide information. In a project targeted to men who have sex with men, participants received biweekly e-mails with educational content about reducing human immunodeficiency virus (HIV) transmission, correct condom use, HIV testing, and other informative health safety information [97]. They were also asked to complete a log to self-monitor risky behaviors. In another project that used multiple Internet tools as an adjunct for depression treatment, the researchers used RecoverRoad, which is an online program that provides patients' progress reports, online psychoeducational sessions, online diary for self-monitoring, and online cognitive-behavioral based therapy, to reach out to participants [98]. E-mails were automatically sent to patients reminding them to attend their face-to-face sessions with their therapists, and practitioners were able to provide additional supportive e-mail consultations to their patients. Overall, counselors report feeling that they are able to establish rapport and trust via e-mail [177]. In initial encounters, e-mails focus on obtaining information; however, over time, trust is developed and clients are able to delve into deeper issues and share feelings. E-mail counseling can also be used as a journal that may be returned to in the future and is perceived as flexible and accessible [210]. Even with high-risk and sensitive topics, some prefer e-mail or telephone counseling as they may feel better able to express themselves through writing or without being observed [211].

Online Chatting, Texting, and Instant Messaging

Online chatting, texting, and instant messaging refers to the exchange of brief written messages in quasi-real time (i.e., quasi-synchronously) between two phones or computers [177]. Common platforms for online counseling may include Windows Live Messenger, WhatsApp, SMS, or iMessage [178]. Emoticons and emojis, pictorial or graphic icons used to convey feelings, can be interjected by the individual chatting. On average, individuals 18 to 24 years of age send and receive 128 text messages every day [212]. On a monthly basis, some estimate that they receive about 2,000 texts monthly [213]. This compares to 2,240 text messages per month for the next highest users—adults 25 to 34 years of age.

Counseling via chat can be purchased in 30 minute increments [141]. An online chatline, similar to a telephone helpline, may be useful for some patients [101]. The online chat can serve as a form

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of emotional support, an avenue to provide advice, and a forum to provide information. A systematic review noted that instant chatting can be beneficial in producing a positive mood, which is then related to clients' perceived helpfulness [137]. Helplines are often thought of as being phone based, but texting is the second most common way for children to receive help through helplines [214]. In one study, text-based counseling with adolescents frequently focused on emotional states (e.g., depression, anxiety), romance issues, and peer and family relationships [215]. In chats, clients tend to get to the point of the problem more quickly, while in e-mail counseling, clients write longer narratives, detailing the development of the issue [180]. In e-mail counseling, there is more interactional space, while in online chat, there is more real time interaction, even though the narrative may not be lengthy. Some may prefer telephone counseling because instant chatting requires time to compose messages that phone counseling does not. Others will prefer the flexibility that texting offers-the ability to seek help in any setting while simultaneously feeling anonymous and safe [215]. Texting is often used as an adjunct to traditional psychotherapy [216]. Text messages can also increase treatment compliance and rapport between the client and the counselor [216].

Bulletin Boards and Chatrooms

Bulletin boards, threaded discussion forums, or chatrooms are text-based messaging systems individuals may access through a website [70]. These can be either asynchronous or synchronous, and in some cases, facilitators may be present to guide the discussions. These discussion groups are generally based upon specific topics of interest. For example, participants can enter an online discussion forum that targets those who have depression or a certain type of chronic illness. These online discussion boards can reduce feelings of isolation [217]. In a study about a health online forum, participants stated that they valued the peer support offered by other individuals who share the same condition.

Because they too were living with the condition, participants felt these online members truly understood their situation. However, online members acknowledged that the information posted in the online health groups should be evaluated within the context of their own health [102]. In a study of online support groups for various mental illnesses, researchers found that it did not take many active participants to sustain an online group, particularly among rural users [181].

These types of online groups can be excellent supplements to traditional counseling services; however, these forms of communication assume that clients can express themselves well in written format [25]. It has also been observed that as more individuals become proficient and accustomed to using e-mail to communicate, new styles of e-mail communications will emerge and become accepted [56]. Terse or unedited messages, for example, are more socially acceptable, which would not be the case in a faceto-face dialogue [56].

Some chatrooms are synchronous, which can offer immediate communication between two or more individuals regardless of location. The communication may occur synchronously, or real-time [25]. A "conversation" is engaged whereby each individual alternatively types lines of text [47]. In a study of a real-time chatroom offering peer counseling, the counseling was found to be person-centered [142]. The youths who participated were satisfied with the peer counselors' ability to provide support. An advantage of using chatrooms is that transcripts of the discussions exist and can be archived for clinical, educational, legal, or research purposes [25]. However, one of the major limitations of chatrooms is that identity cannot be verified [22]. In addition, it can be difficult for facilitators to "pace" the conversations because several participants can be typing messages at the same time. In a face-to-face group, participants do not talk simultaneously, and therefore, it is easier for facilitators to give participants time to attend and assimilate the information [103].

Video-Based or Video Conferencing

Video-based Internet counseling involves synchronous distance interaction between counselor and client using what is seen and heard via video to communicate. Voice-over Internet protocol (IP) involves a web-based, real-time audio interface between the counselor and the client [47]. A computer, voice-over IP software, headset, and Internet connection are required. The counselor and client are able to talk as if they were on the telephone, but the communication is transmitted over the Internet. This method mimics face-to-face counseling in that a conversation between the counselor and the client can occur and participants can see and hear each other [47]. Practitioners can use the nonverbal cues to enhance the therapeutic process. Video conferencing counseling can be integrated with existing host of services for clients who are stable and can also be used to intensify existing interventions for clients who need additional care [143]. Platforms used for this type of contact include Skype, FaceTime, Zoom, and Google Hangout/Chat [178]. It is important to remember that some platforms do not meet the minimum standards for confidentiality. For example, Skype does not meet the minimum standards for HIPAA compliance, as they do not enter into business associate agreements. These should be considered and resolved prior to beginning distance counseling.

One of the main limitations to video-based counseling are that the video technology may be expensive to implement and maintain and it requires a highspeed Internet connection in order to maximize sound and image [47]. This can be challenging in more remote areas [182]. However, over time, this technology should improve and become more accessible. Another barrier is the multiple technologic difficulties that may emerge in the daily operations of service delivery models that rely on video conferencing for their provision of services [183]. Many social service, health, and counseling agencies do not have the staff to manage and troubleshoot these difficulties. Problems with technology can be a barrier. In an experimental study comparing the feasibility of 12-week web-based counseling via video conferencing for clients diagnosed with opioid dependence and traditional face-to-face counseling, researchers found that urinalysis results, attendance, and satisfaction levels for both groups were similar. However, the withdrawal rate was higher in the video conferencing group, which was speculated to be related to problems with technology [143]. Setting up video conferencing technology can be a challenge for some clients, particularly older individuals [184].

Furthermore, both practitioners and clients must be trained in how to use the technology and in the new "etiquette" standards in providing therapy in this manner [104]. This new "etiquette" may be related to characteristics of the online environment. Experiential activities (e.g., having clients draw) can be done in video conferences, but counselors should be aware that detecting and fully interpreting emotional expressions can be more challenging because of the lag time and should adjust for these limitations. In a study of real-time online group counseling conducted through video conferencing (on Google Hangout), the group participants indicated that the environment felt too artificial [144]. They were not comfortable being at home, despite predicting feeling more safe in the home environment than a counselor's office-perhaps because they could not easily distinguish the boundaries of home life and the counseling environment. Participants also reported feeling that spontaneous conversation was difficult or impossible. Ultimately, they felt that they could not connect with other members in the group and were disengaged [144].

It is also important to consider environment where the video conferencing is being held [182]. Clients should be informed that he/she should choose a space that is private and not distracting. Using video conferencing for mental health and therapeutic services can be particularly beneficial for those who live in remote areas and cannot easily access face-to-face counseling [218].

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3D Virtual Worlds or Environments

3D virtual reality allows for an individual to interact with a world that is digitally generated [185]. 3D virtual environments are game technologies also referred to as massively multiplayer online games that recreate the real world using digital representations [109]. Some call this avatar therapy, offering a safe space in which clients can select an avatar to represent his/her identity and control the avatar in the virtual environment [219].

Second Life is an example of a 3D virtual environment that has been widely utilized in universities and colleges. It provides an immersive, simulated "real life" environment in which individuals can participate via computers [106]. In clinical situations, individuals can enter a virtual world in which there is a digital representation of a therapist's office or a health clinic and avatars representing practitioners and clients/patients [109]. In such an environment, individuals may react and respond to stimuli or scenarios, while the clinician counsels, educates, and/ or coaches [185]. One example is the use of Second Life to work through symptoms of social anxiety, allowing clients to practice interacting with others [145]. The use of the 3D virtual environment offers practitioners the ability to control the environment while simultaneously provide an enriched and "reallife" platform for clients to practice skills [106]. It is possible that using avatars and immersive environments can facilitate client reflection and naming emotions [220].

A pilot study using a virtual environment platform called eMagin HMD was employed to facilitate smoking cessation [107]. A total of 90 regular smokers were randomly assigned to two virtual environment conditions that offered a similar setting; however, one condition offered the ability for participants to virtually crush a cigarette, and the other condition offered participants the ability to grasp and squeeze a ball. In both conditions, participants were involved in six weekly psychoeducational sessions on smoking cessation facilitated by nurses.

Findings indicated that participants in the virtual cigarette crushing condition had lower levels of nicotine addiction and were less likely to drop out of the psychoeducational sessions compared with the participants in the virtual ball condition. The authors speculated that investing time and effort into crushing cigarettes successfully bolstered participants' motivation to quit smoking [107].

Another research group used Second Life virtual reality to provide sexual health education [108]. Visitors interacted with 3D objects, such as virtual condom dispensers offering free condoms and pamphlets of practical information. Visitors were also able to interact with an avatar who discussed sexually transmitted infections and contraception.

More research regarding the effectiveness of 3D virtual interventions is needed [185]. The majority of previous studies have lacked methodologic rigor, with small sample sizes. However, over the years, as these applications advance technologically and become more widely used, it is anticipated that they will begin to inform health and mental health fields.

Social Networking Sites

As noted, social networking sites may be used to effectively disseminate health promotion messages and interact with at-risk populations. For example, the U.S. Department of Health and Human Services and the National Suicide Prevention Lifeline have worked alongside Facebook to prevent suicide [141]. If a Facebook user notices that a "friend" posted a suicidal comment or a post that alludes to suicidal intent, the user can easily report it to the National Suicide Prevention Lifeline throughout Facebook. The "friend" is then contacted by the National Suicide Prevention Lifeline via e-mail or an instant chat [141]. The Italian Service for Online Psychology (SIPO) also employs Facebook as a means to provide free online psychologic consultations [186]. Between November 2011 and June 2014, 284 individuals used Facebook for 30-minute consultations with an SIPO clinician. Depression was the most commonly reported presenting problem. In this example, Facebook chat offers a convenient and nonstigmatizing way to access mental health assistance, thereby eliminating barriers to access to traditional mental health care [186].

Cell Phones

Cell phones appear to have penetrated the digital divide, meaning there appear to be fewer disparities in cell phone ownership than Internet access [110]. Because cell phone/smartphone use is widely accepted and portable, its application in clinical and therapeutic applications can be more easily implemented into clients' everyday lives [110]. In fact, some experts advocate the use of cell phones for ecologic momentary interventions, which is defined as, "the delivery of interventions to people as they go about their daily lives...These interventions are ecologically valid because they occur in the natural environment, and are provided at specifically identified moments in everyday life" [111]. However, scientific evidence about their efficacy is still lacking [187].

Cell phones have been used in many clinical contexts. They have been employed to send reminders to patients or clients about their appointments, to provide tips to clients who are trying to stop smoking or lose weight, or to remind clients to use a relaxation strategy [111; 221]. In one project, adolescents charted their moods on their cell phones in an effort to increase their awareness regarding situations that might trigger certain moods, with the ultimate goal of enhancing coping strategies [112]. Compared with paper charting, participants reported cell phone charting felt less like "homework." Participants were also more likely to backdate their paper charting entries compared with adolescents who used the cell phone charting. Mobile phones may also be used to access mind-mapping programs to supplement rational emotive therapy interventions [145]. With this intervention, clients are given mind mapping assignments to identify thoughts that are triggered when they confront difficult events. Smartphone applications may also be used to help monitor symptoms and medication compliance and to offer strategies for self-help and social support, which in turn can bolster clients' sense of empowerment and self-efficacy [187].

In a smartphone-based intervention program, clients leaving alcohol residential programs received services, such as support from peer and professional counselors, on a smartphone [113]. Participants receive tailored tips and tools to help prevent relapse and reminders to adhere to therapeutic goals. A global positioning system (GPS) service was also added to identify clients entering high-risk areas, who would then be provided with "rescue" resources.

EVALUATING MERITS AND LIMITATIONS OF ONLINE COUNSELING

There remains much controversy about online counseling. Some argue that online counseling is merely the adding of a technologic device to mediate the communication between the practitioner and the client within the traditional therapeutic encounter [138]. However, others argue that online counseling is a distinct therapeutic modality requiring new theoretical frameworks and skills [138]. Furthermore, there is some skepticism about the effectiveness of online counseling. Some practitioners have embraced technology as part of their practices, while others remain cautious. Polarized reactions to technologic change are common, and although more technologic innovative changes will inevitably come, there are both good reasons to consider the use of online counseling as well as reasons to be cautious [114]. Therefore, it is incumbent that clinicians are knowledgeable about emerging technology and are familiar with both the strengths and limitations of online counseling in order to educate clients who may be looking for alternative counseling or mental health options [114; 183].

STRENGTHS OF ONLINE COUNSELING

There is no doubt that online counseling has improved access and opportunity for individuals to obtain counseling and mental health services. Some clients may continue to utilize traditional, face-to-face clinical services and use various forms of online counseling as an addition or supplement [22; 48]. Logistically, online counseling can offer aid to various segments of the population who might otherwise not seek mental health services due to physical, psychologic, geographic, personality, or

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financial barriers. For example, online counseling services are generally less expensive than traditional face-to-face counseling [115]. In a systematic review of 16 studies on the economic implications of Internet interventions, Internet interventions facilitated by a therapist or counselor were more cost-effective than a wait-list, traditional interventions, or placebo [188; 179].

Those who are physically disabled may not be able to travel to a mental health agency or a counselor's office; online counseling allows them the option of accessing services from home [17; 138; 183; 179]. These populations may be at risk for not receiving necessary care, but online counseling may reduce this risk [178]. Even those who may not necessarily face geographic barriers may experience time barriers. In a study of online counseling services provided by a college, 77% of the online inquiries to counselors for assistance were submitted after working hours (i.e., after 5 p.m.) and 29% were submitted during the weekend [116]. Those who have psychologic disorders that may preclude them from traveling or having contact with large groups of people may also benefit from distance counseling [22]. Geographic constraints impede some from seeking traditional mental health services; for example, those who live in rural areas or geographic regions where there are minimal mental health services or those who have difficulty accessing transportation may not have access to care [17; 22; 138; 179]. During the COVID-19 pandemic, online counseling has been necessary, particularly in states with shelter-in-place and social distancing guidelines [222].

Additionally, individuals who are more introverted may find the online environment more appealing [27]. It is also possible that younger individuals ("digital natives") may naturally find online counseling more amenable than traditional counseling [178]. Finally, compared with traditional face-to-face contact, online counseling is less expensive. This could promote greater access to counseling services as finances could be a major barrier to access of mental health resources [22]. Online counseling tends to be less expensive than traditional face-toface therapy/counseling [223].

Unfortunately, there is still a tremendous amount of stigma attached to psychiatric and mental health services. Mental health consumers experience an array of stigma and prejudice, not only from outsiders but also from family, friends, co-workers, the community and church. Individuals may try to conceal their disorders for fear that someone could discover their psychiatric status and treat them unfavorably [79]. Thus, course and recovery can be adversely affected by the stigma [13]. The relative anonymity offered in online environments allows feelings of stigma to be reduced [17; 22; 179]. It is speculated that if the level of stigma is reduced and level of anonymity increases, then the clients' amount of self-disclosure increases. Indeed, there are some studies that indicate greater client self-disclosure with online counseling [48; 146].

The perceived anonymity associated with online environments coupled with the ability to reread and edit messages is thought to produce more thoughtful and insightful responses [57; 189]. Some experts argue that the psychologic anonymity of online counseling is therapeutically beneficial as "it facilitates what seems incompatible in ordinary life: to make contact with a stranger over very personal topics, with a degree of self-revelation that overcomes inhibitions regarding the portrayal of one's problems much more readily than would be the case for a meeting in person" [116]. In a study exploring online counseling for problem gambling, participants stated they preferred online rather than traditional face-to-face counseling because the anonymity made it "less daunting" and they felt less "exposed." For some, it was the first time, they were able to talk about their problem gambling and the related despair [147]. However, other studies have found a preference for in-person counseling due to the greater potential for relationship building. Parks and Roberts, for example, compared online and faceto-face communications and found that participants were equally comfortable and confident in sharing information [57]. However, participants stated that knowing the identity of the person from whom they were receiving information promoted a greater sense of commitment in maintaining the relationship [57].

Obviously, there are characteristics of traditional face-to-face counseling that are difficult to capture in an online environment.

Given the geographic mobility and transient quality of society, online counseling can offer continued support and services if a client or counselor relocates [17]. According to the U.S. Census, 37.5 million people in the U.S. have relocated within the past year [117]. While the majority (69.3%) stay within the same county, 16.7% move to a different county in the same state and 11.5% move to a different state. This can make continuity of care difficult to achieve unless Internet technologies such as online counseling are used.

Social support is vital in positively influencing individuals' subjective well-being, particularly for those who are diagnosed with a clinical disorder [4]. For those who feel psychologically and/or physically isolated, the Internet has opened opportunities to obtain social support either for themselves or for family members. Online support groups create communities that allow individuals to connect with each other based on common experiences, such as similar diagnoses, life situations, stressors, or psychosocial issues [39].

Another advantage of online counseling is that communication in the form of text can be more therapeutic, and for some writing and putting abstract emotions into words can be a cathartic experience [138; 189]. It can also be more efficient, as a client might be more concise in writing than during verbal conversation [65]. Certain online media, such as e-mails, chatrooms, and threaded discussion forums, allow administrative convenience in providing an automatic permanent record of the client/counselor interaction. For example, one can scroll through e-mails to see the beginnings, middle, and conclusion of messages. In discussion forums, one can see the threads of responses. This can be beneficial from a clinical standpoint, as a client can see the evolution of thoughts and feelings. Counselors can go back to clients' verbatim text communications to highlight incremental changes, challenge cognitive assumptions, and monitor progress. These archives of permanent records can also be utilized for clinical supervision [48; 56; 118].

Finally, some argue that online interventions might be advantageous as a supplement to traditional, face-to-face interventions [9]. Supplemental online interventions can be used to expand on any topic or information covered in face-to-face sessions, alleviating time constraints for practitioners and patients [116; 179]. During the week, clinicians can e-mail their clients to reflect on a particular issue, either prior to the next session or after a session as a follow-up. Having e-mail archives can also ensure that permanent records are available, which may be useful for clinical supervision [224]. Consequently, the Internet can serve as a complement to provide more elaboration on issues discussed, or it can be used as a supplement to monitor tasks or homework assignments given to clients [9]. Online counseling could also be viewed as a preventive strategy for certain mental illnesses. For example, if a client has mild depression, online counseling can mitigate symptoms before they become more severe [224].

LIMITATIONS OF ONLINE COUNSELING

As a result of the relatively recent phenomenon of online counseling, some are concerned that most counseling theories apply specifically to face-to-face counseling, not online counseling. As a result, it may not be easy to apply traditional counseling theoretical frameworks and principles to online counseling [9; 134]. However, as online counseling and interventions become more commonplace, more studies will be conducted to evaluate their effectiveness. Over time, a more advanced knowledge base will be in place for clinicians, professionals, and researchers to utilize.

To date, one of the main challenges with the delivery of Internet counseling and mental health services involves the mechanisms for monitoring quality of services and accountability [22]. There is no established monitoring system to track the credibility and legitimacy of counselors' advertisements. There is also no accountability structure to review and monitor the quality and accuracy of information on websites [22]. Some have also wondered about how to monitor the quality of the clinical process.

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These concerns may be amplified in cases of chat rooms or support groups, which may or may not involve a licensed and trained counselor. Even when trained counselors are involved, clear competencies and training standards and guidelines are often lacking [179]. The lack of nonverbal cues (e.g., displayed diploma) may also negatively influence clients' perceptions regarding a therapist's credibility [190]. Just as there are concerns about the identity and the credential of the counselors, there is also concern about the identity of the client. Some have recommended that code words mutually developed by the counselor and client be used in the beginning of each session to verify both parties' identities; requiring the client to summarize the last session can also be used to verify identity [119].

Another concern with online counseling is based on security and privacy issues [222]. Computer hackers, for example, can access particular websites and compromise the confidentiality, privacy, and security of clients' disclosures, as well as payment information, such as credit cards [22]. As online counseling websites become more sophisticated, there is a move toward using the same message security systems utilized by banking institutions [22]. It is important not to use personal e-mail accounts or insecure platforms (e.g., FaceTime) [191].

Online counseling may not be conducive and appropriate for clients with severe emotional problems or who have serious psychiatric problems. In an emergency situation in which a client expresses suicidal or homicidal thoughts, counselors may not know where the client is located and be unable to implement emergency plans [22; 65]. In addition, they may not be able to warn vulnerable third parties [17]. However, similar challenges exist with telephone counseling or crisis hotlines [65]. Counselors may also have difficulty referring clients to appropriate local resources and services [17; 179]. Even when clients share their locations, counselors may be unfamiliar with the range and quality of services in any given geographic area.

Another concern is the absence of nonverbal cues in online environments, such as chatrooms, e-mails, and discussion forums. Counselors have traditionally relied on nonverbal cues to assist in diagnosing. Due to the lack of nonverbal cues, there is a greater likelihood for counselors to misread and misinterpret text messages; therefore, counselors must be careful in interpreting latent meanings [65; 191; 224]. When conducting online counseling through text-based technologies (e.g., instant messaging, e-mail), direct communication is relied upon, and this can have drawbacks [118]. Crying, irritability, and other signs of distress may not be detected, and side effects of medications such as tremors or akathisia are not evident [60; 224]. The online environment for counseling may not be conducive for certain clients who require visual and auditory cues, including clients who have paranoid tendencies or poor ego strength [65].

The lack of nonverbal cues is also a concern in the formation of a therapeutic alliance and establishment of rapport between the counselor and client [179]. Some argue that the anonymity offered by online counseling offsets this concern, as anonymity can promote greater rapport building and selfdisclosure. Furthermore, engaging clients in writing is beneficial in setting clear expectations and goals for both parties [148]. Others believe it is impossible for an effective working alliance to be developed in an online environment [22; 43]. In a 2013 study examining clinicians' ability to develop a therapeutic alliance in an online format, few participants stated they were not confident in relationship-building in online therapy [149]. These same clinicians were self-assured in their ability to develop a therapeutic alliance in face-to-face therapy; not surprisingly, greater years of experience were related to increased confidence [149]. In a 2017 meta-analysis, there was no difference in client-rated scores of the therapeutic alliance in Internet interventions and traditional

face-to-face therapy [192]. At this point, the results are mixed at best. As noted, one of the potential advantages of the online environment is the time delay for both client and counselor responses [65]. It can provide both parties the opportunity to think before they converse, and as a result, the responses may be richer and more thoughtful. However, the downside of this time delay is that some clients may misinterpret the delay as abandonment or inattention, which can trigger anxiety [65]. It may also promote the use of defense mechanisms because clients have more time to think about their responses [115]. Again, online counseling is not suited for everyone. Counselors must properly assess its applicability for each client [183].

Another limitation of online counseling is the potential for technical problems [179]. In a study of graduate counselor interns, participants were asked to engage in online supportive counseling [120]. Some participants had difficulty getting online and were frustrated with the delays resulting from various technologic barriers. Some technologic delays stemmed from the participants' lack of proficiency in using the technology, while others were caused by technical problems. Regardless, the participants felt that the technology interrupted the relationship with the counselor. Online counseling assumes that clients have a certain level of technologic ability and financial means to access and easily utilize various programs [118].

Finally, there are many ethical and legal issues associated with online counseling. Because the Internet is available across state and country boundaries, state and legal jurisdictions by which the counselor practices may not apply [22]. At present, there are minimal regulatory and legal guidelines, which raise many questions that cannot be easily answered [179]. The topic of ethical and legal issues will be discussed in detail later in this course.

ONLINE COMMUNICATIONS AND COUNSELING: A SOCIOCULTURAL CONTEXT

It is crucial to remember that technology is merely a tool to communicate and impart information. As with any form of communication, the sender and recipient of the message operate within a cultural context. Technologies are described as cultural tools that "transform, augment, and support cognitive engagement" [49]. The atmosphere of online groups, for example, is influenced by members' styles of participation, forms of interactions, roles assumed, and power sharing between members and the facilitator, all of which are influenced by the cultural, ethnic, and racial backgrounds of the members and the facilitator [49]. Race, culture, ethnicity, and gender influence communication patterns and attitudes toward technology usage.

RACE, CULTURE, AND ETHNICITY

Johari, Bentley, Tinney, and Chia argue that reasoning pattern differentials and high- and low-context differentials must be taken into account in gaining an understanding of how ethnic minorities and individuals from other cultures assimilate information and communicate through computer technologies [36]. Thinking and reasoning patterns and approaches to problem-solving, for example, vary from culture to culture. Individuals from Western countries like the United States tend to use linear reasoning; individuals from Asia, the Mediterranean, and Latin America are characterized by more nonlinear or circular reasoning patterns [36].

Styles of communication can be classified from highcontext to low-context [73]. High-context cultures are those cultures that disseminate information relying on shared experience, implicit messages, nonverbal cues, and the relationship between the two parties [44]. They tend to focus on "how" something was conveyed [55]. Low-context cultures rely on verbal

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communication and focus on what is explicitly stated in the conversation [44]. Western cultures, including the United States, can be classified as low-context. On the other hand, groups from collectivistic cultures such as Asian/Pacific Islanders, Hispanics, Native Americans, and African Americans are from high-context cultures [73].

Individuals from high-context cultures require more social context in order to understand the meanings of the communication [36]. E-mails, for example, are perceived to be a quick, easy way to communicate, with a focus on words to convey both content and meaning, which may be more amenable to individuals from low-context cultures [36]. Those from high-context cultures may be less likely to initiate communication online or offline due to their adherence to authority structures and tend to be more formal in their communication style; in these cases, the practitioner, as the expert, is expected to initiate communication [121; 150].

In online discussion forums or support groups, individuals from high-context cultures may be less open to disagreeing with other group members for fear of being offensive [121]. Some cultural groups may prefer asynchronous over synchronous communications. For example, Asian groups who are classified as high-context cultures may prefer asynchronous communication tools because it provides more time to carefully think about responses, allowing them to avoid being disrespectful or inadvertently rude [122]. However, this form of communication can place ethnic minorities or individuals from other cultures at a disadvantage. Some experts recommend that when using technology in education and by extension counseling, the facilitator should attempt to increase contextual cues [24]. Counselors may choose to provide biographical information about themselves and encourage brief introductions from everyone in an online support group [24]. This process of setting up rich contextual cues will assist in building rapport as well.

High- and low-context culture differentials can also impact the amount of information that can be assimilated. Individuals from high-context cultures (e.g., Korean, Japanese) may experience information overload compared with those individuals from low-context cultures (e.g., German, American) [40].

A 2016 study analyzed postings from low-context culture (German) and high-context culture (Indian) forums [193]. Indians tended to disclose less private information and use more emoticons compared with postings from German participants. Individuals from low-context cultures tend to write longer e-mails and to be clearer and less polite compared with e-mails from persons from high-context cultures [194]. Counselors should be sensitive to the amount of information a client can process and assimilate.

Other cultural values can influence technology usage. Individuals' attitudes about appropriate uses of time vary from culture to culture [26]. Monochronism refers to preference to perform tasks one at a time; polychronism refers to a preference to parallel task, performing more than one task simultaneously [26]. Certain cultures (e.g., Egyptian, Peruvian) tend to be less concerned with slower technologies with some delay because they adhere to more polychronistic attitudes toward time [40]. Persons from monochronic cultures demonstrate are more concerned with promptness and adherence to schedules [150].

Practitioners who use Internet technology are cautioned to remember that writing styles, writing structure, web design, and multimedia all influence how students process and assimilate information and that the learning process does not exist in a cultural vacuum [37]. The same applies to Internet counseling. Vocabulary and grammar have varying meanings from culture to culture and signify different levels of respect and politeness [37]. For example, some cultures use more formal language to convey respect. Sentence structures, particularly if they are translated from one language into another, can inadvertently convey a completely different message, or they might sound too direct, appearing to be offensive [37]. Web design is also important, and the design should reflect the language of the cultural group. The English language, for example, is read from left to right, but some cultures read right to left. Therefore, icons and images should reflect this norm [37]. It is also important to remember that images are culturally sensitive and can perpetuate stereotypes [37]. For example, emoticons used in an online environment can be interpreted differently from culture to culture [151; 225]. A "thumbs up" emoticon is generally considered positive in American culture, but in Australia, it is considered insulting [123].

Finally, individuals' perceptions of computer technologies may be influenced by cultural and gender role norms, and understanding cultural differences in attitudes toward computers may have implications in online counseling [35]. One would surmise that some ethnic minority groups may have less favorable attitudes toward computer technology in part due to practical barriers, such as cost and access. One ethnographic study revealed that economics is not the only factor; psychosocial barriers can also affect ethnic minority adults' perceptions about computers [74]. Some participants, for example, did not see themselves as the type of person who used computers. Some thought that computers were a luxury item, and their subcultural identity did not include the image of a computer user [74]. Similarly, in Menard-Warwick and Dabach's case studies of two Mexican families, affective factors included fear in using computers and anxiety revolving around a sense of entitlement [50].

Culturally embedded perceptions about gender roles also color attitudes toward computers. Some Hispanic men stated that computers and typing were considered female subjects in school. In other cases, some participants stated that computers were equated with educational success, but educational achievement was not part of their life tasks and roles [74].

GENDER

It has been said that Internet and computer usage is male-dominated and that the Internet was developed by men for men [81]. Yet, some argue that the Internet democratizes and minimizes patriarchal communications between men and women in part because there are less social cues in online communication [66]. Consequently, differential status based on gender may potentially be reduced, ultimately equalizing communication patterns [66].

Those who argue that the Internet is male-dominated and reinforces male patriarchy attribute this to early socialization processes favoring boys/men in computer, math, and science subjects [10; 81]. In terms of Internet usage, there appears to be no gender differences. In 2011, 69.4% of men and 70.1% women accessed the Internet from some location and 27% were able to connect from multiple devices and multiple locations; gender differences appear to be negligible for Internet usage [62; 195]. Yet, it is important to remember that examining the gender digital divide in terms of statistics of usage is misleading because the culture of gender and general societal expectations of men and women continue to influence attitudes toward Internet usage, computer technologies, and communication patterns and styles in online media.

In general, there are gender differences in how the Internet is used. Men are more likely to use the Internet to find news, play games, seek information, and connect to audio broadcasts. Men tend to have more sophisticated web skills, as they are more comfortable and proficient in developing their own websites and changing preferences [81]. In one study, Weiser found gender differences in Internet patterns and applications [81]. Men tend to use the Internet for entertainment and leisure such as pornography, games, and pursuing sexual relationships, while women are more likely to use the Internet for interpersonal communications and education [81]. Women's tendency to use the Internet for education and information seeking seems to also apply crossculturally. In a study of 386 adults in Turkey, women

were more likely than men to rate ease of access to online health information as an important factor. Men are also more likely to use the search engines (88%) compared with women (79%), and they use search engines more frequently (40%) than women (27%) [89]. On the other hand, women appear to use Internet-mediated communications (e.g., social network sites, texting, video chats) slightly more often than men [152].

There are also gender differences in perceived attitudes about Internet usage. In a study of 805 college students in the United States, men reported higher levels of Internet self-efficacy, Internet experience, and Internet information overload compared with their female counterparts [153]. Gender differences are also apparent in the content of Internet communications. When examining text of postings in online forums, women tend to gravitate toward topics that have practical ramifications and consequences and are less inclined to be drawn to topics that are abstract and theoretical [30]. They prefer to discuss personal issues, ask questions to solicit information, and give or garner information [30]. Men also discuss personal issues, but prefer to focus on an issue, give or obtain information, ask questions, and discuss personal matters [30].

In a qualitative study examining gender differences and technology use, particularly women's experiences with the use of the Internet, women were most likely to discuss how e-mail has helped them to keep in touch with family and friends. Instant messaging was also used as a way to keep in touch with children, particularly for single mothers with children at home alone [14]. Men also discussed the ability of the Internet to connect them to family and friends. However, male communication predominantly consisted of providing information, while women connected on a personal level [14]. In a survey study with 488 participants, men were more likely to use social networking sites to obtain information, while women tend to employ these sites to maintain relational ties and obtain social information [196].

Male communications are characterized as being more power conscious; that is, they are more assertive in conveying information and less focused on exchanging information and developing relationships [66]. In a 2012 study comparing male and female postings on two Listservs, men tended to engage in more debates and positioned themselves as experts on a topic more often than women [154]. On the other hand, female communications are described as less power-dominated, as they tend to ask more questions and apologize more often [14]. Postings by female participants in online groups are characterized by more support and encouragement compared with the postings of male participants, who seek and receive information (Table 1) [14]. Women also tend to use more emoticons and emojis [125]. Emoji perception is also influenced by the gender of the sender and receiver. Text messages with "affectionate" emojis that are sent by women tend to be perceived as more likeable and appropriate compared with messages sent by men [226]. When analyzing for gender differences in Web 2.0 communication platforms, women are more likely to express positive and negative emotions compared with their male counterparts [155]. Similarly, Rovai found that the majority of men in online forums tended to utilize an independent voice that was characterized as authoritative, impersonal, and assertive, while the majority of women used a connected voice described as supportive and helpful [67].

Some scholars argue that by emphasizing these dichotomies, stereotypes about women will be reinforced. Instead, it is important to focus on how the Internet serves to equalize interactions and relationships. Others argue that it is too simplistic to maintain that online communications equalize gender relationships due to the promotion of anonymity, as it might actually heighten stereotypical behavior, promote group norms, and trigger an "us" versus "them" behavior [68]. Interestingly, in one study, researchers found that one way to reduce stereotypical behaviors was to reduce the depersonalization and the anonymity of the online environment. Simply having individuals post their photos and share biographies with other participants in the online environment can promote greater personalization [59].

GENDER DIFFERENCES IN COMMUNICATION PATTERNS IN ONLINE MEDIA	
Women	Men
Attenuated assertions	Strong assertions
Apologies	Self-promotion
Explicit justifications	Presuppositions
Questions	Rhetorical questions
Personal orientation	Authoritative orientation
Support for others	Challenges to others
	Use of humor and sarcasm
Source: [30]	Table 1

Regardless of the side of the debate, it is impossible to disregard the power of gender in shaping Internet communications. While some might hail the Internet as democratizing and equalizing gender relations, it is equally crucial to recognize that gender norms and the effects of socialization are equally if not more powerful in the online media. Clinicians should be aware of the effects of gender on communication patterns and styles in individual and group online counseling.

ETHICAL AND LEGAL ISSUES

Various ethical concerns have been raised regarding online counseling. There is some concern that beneficence cannot be fully upheld with the use of electronic communications because the counselor may find it difficult to ensure the client's safety. In part, this safety concern is linked to the issue of privacy and confidentiality. It is nearly impossible to ensure that another party will not intercept the client/counselor interaction or that encryption methods will be foolproof [64]. For example, a client who is accessing the Internet at home could be interrupted by another individual who might see what was written, or an e-mail could be read by other family members, compromising the client's privacy. If a client is using a computer in the workplace, there is a possibility that others may read the online communication. In the United States, an employer has the legal right to read their employees' e-mail communications [9]. In some situations, the compromise of the client's privacy could prove particularly dangerous. Consider a victim of family violence who is caught by the abuser communicating with a counselor or an abuser hacking into the victim's computer system to access private information [64].

Beyond merely ensuring the client's physical safety, some argue it may not be possible for counselors to truly extend beneficence to clients in an online environment because the essence of therapeutic change rests upon the formation of the client-counselor rapport and relationship. However, this argument is based on the belief that a relationship cannot truly be developed in an online environment, an issue that remains controversial [64]. If a therapeutic alliance cannot be optimally developed and nonverbal cues cannot be assessed, the counselor may miss cues of distress, agitation, anger, or anxiety. This could place the client at greater risk and if he/she feels misunderstood [216].

At the heart of the client-counselor relationship is confidentiality. A counselor adheres to the ethical principle that the information provided by the client will remain confidential. Moreover, the Internet does not exist within state or international borders, which then brings legal jurisdictions into question [156; 179]. What regulations about patient/doctor confidentiality will be adhered to, particularly if the counselor resides in one state and the client in another [22; 135]?

As noted, one of the limitations of online counseling is the fact that neither party can be fully confident of the other's identity [22; 179]. However, there are ways to verify identity, including requiring photo identification, a signed declaration of identity, and/ or comparing the IP address with the home address provided [178]. If clients do not give their identity, contact information, or physical location, this has implications regarding ensuring client safety. In a traditional counseling relationship, if the client expresses a desire to hurt him/herself or others, the counselor is obligated to report this to the appropriate authorities. If a client never discloses his/her full name or contact information, then the counselor's ability to intervene or report is limited [64; 72; 135].

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Therefore, it is important to obtain alternate contact information in the event that technology fails [197]. If deemed a dire emergency, the counselor could contact the Internet service provider to obtain the information; however, this would take time, and the counselor could be held liable if the necessary information is not provided to the authorities in time [72]. Shaw and Shaw developed an ethical checklist based on the American Counseling Association (ACA) Ethical Code and reviewed 88 online counseling websites to determine level of ethical practice [72]. In this study, more than half of the online counselors required clients to give their name and address in the event a crisis arose. However, onethird of the practitioners did not provide clients with an alternate way of contacting them in an emergency. In another study, 66 social work online therapy sites were analyzed against the National Association of Social Workers (NASW) Ethical Code [126]. More than half (59%) of the websites discussed procedures in the event an emergency occurred, but only 32% provided information about local contingency services in the event of a crisis or emergency. An emergency protocol should be established with the client [197]. Emergency contact information (e.g., the client's family members, close friends, any other social supports) should be obtained, and the protocol should include law enforcement and emergency medical services.

Another concern revolves around minors who lie about their identity and age and who obtain treatment without parental consent [64; 179]. Despite statements indicating that users must be older than 18 years of age or have parental consent, online counselors should still ask for age and birthdate during the intake process [72]. Although a minor could still lie, the online counselor has then done all that is possible to ensure that the client is not a minor [72]. In Shaw and Shaw's study, fewer than half of the online counseling services required the client to give his or her age or birthdate, and only one-third of the websites explicitly stated that clients must be 18 years or older or have written consent from a legal guardian [72].

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There is also concern about the identity of counselors and their stated qualifications [64]. Online counselors' qualifications vary widely, from unlicensed therapists to licensed social workers, psychologists, and psychiatrists. In terms of communicating professional qualifications and competence, the American Counseling Association (ACA) recommends that clinicians display their information explicitly on their websites so potential clients can easily check their qualifications [189; 197]. Again, questions about licensing requirements across legal jurisdictions arise [65; 227]. There is debate about which authorities and jurisdictions should be recognized for activities occurring on the Internet, as online counseling crosses geographical and governmental boundaries [9]. Normally, malpractice insurance is limited to the state(s) where the clinician is licensed to practice; online, the clinician may not be covered in "interstate" suits [60]. Some contend that if the client has accessed the clinician's website, then the client has actually "traveled" to the clinician's state [60]. In the study of social work online therapy sites, one-third of the websites indicated that the social work therapists would serve clients only from the state in which they held a license to practice; only 9.1% of the social workers held licenses in more than one state [126]. In general, best practice dictates that online counselors and therapists should not only be aware of the licensing requirements in the state in which they practice but also where the client resides [227].

CODES OF ETHICS

Ethics are beliefs about what constitutes correct or proper behavior [12]. All professions translate these ethical principles into codes of ethics that embody the values of the profession and guide behaviors of its members. Because online counseling has become increasingly popular, national counseling and other related professional organizations must develop ethical codes specific to online counseling. Clinicians should be familiar with the code of ethics for online counseling in their professional organization as well as ethical codes in related professional disciplines. The International Society for Mental Health Online (ISMHO), established in 1997, formulated the Suggested Principles for the Online Provision of Mental Health Services, was endorsed by the International Society for Mental Health Online in 2000 [127; 189]. In 2005, the British Association for Counseling and Psychology published their guidelines for Internet therapy, and similarly, the ACA added an addendum to their code of ethics in 1999, and in 2005, finalized comprehensive guidelines for Internet counseling [189]. In 2017, the Standards for Technology in Social Work Practice were published following collaboration with four social work organizations in the United States. These standards address both online counseling and the general use of technology in social work [228]. The NASW, when they revised their Code of Ethics in 2017, also addressed technology-assisted social work practice [229].

The ISMHO principals are divided into three main domains:

- Informed consent
- Standard operating procedures
- Emergencies

In terms of informed consent, it is important that clients are informed of the processes of online counseling [127; 189]. For example, clients should understand that online interactions are different from face-to-face interactions in that there are no nonverbal cues, interactions are often asynchronous, and privacy can be compromised due to technology. These points should be included in the consent form [227]. The consent form should clearly delineate how frequently a counselor/therapist will respond to text messages and/or e-mail and set expectations about the length of messages [227]. Furthermore, despite the fact the client may not be able to see the counselor, the client should still know who the counselor is (i.e., name and credentials). Risks and benefits of online counseling should also be fully explained to the client.

Practitioners and clients should also discuss the specific online modality that will be used and how frequently. Practitioners should also provide information regarding their area(s) of expertise and which problems may not be conducive to online counseling [127]. Similar to face-to-face counseling, online counselors should keep records. If the records involve copies of actual communications, such as e-mails or recordings of phone conversations, the client should be informed.

Finally, a discussion with the client regarding how to deal with emergencies should be held. The client must be aware that there may be a delay in the counselor's response to online communications [127]. As noted, a back-up plan, including when to contact local services, should be established in the event a crisis emerges.

Online counseling consent form templates are available and may be useful for clinicians [198]. In general, for every section of the consent form, information related to general counseling and Internet counseling should be addressed [198].

Manhal-Baugus described two main ethical issues pertinent to online counseling as identified in the ACA's Ethical Standards for Internet On-line Counseling: information that is conveyed to the client about privacy/confidentiality and principles in establishing online relationships [47].

Information Privacy and Confidentiality

The ACA code of ethics highlights specific information that must be conveyed to the client and to the counselor. Counselors, for example, must clearly communicate to clients regarding their identity, qualifications, and areas of expertise. In turn, clients should also provide identification information [47].

Information related to the inherent limitations of using computer technology and how privacy might be affected when transmitting information should be clearly communicated to clients [47]. Counselors must inform clients whether websites are secure and whether e-mail encryption is employed. It is also important to remember that not all technologies are

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equal. For example, it is difficult to assure clients that information communicated on Skype is completely confidential [141]. The client must acknowledge in a waiver that he/she understands that there are risks to confidentiality when information is disseminated over the Internet. Finally, all records and e-mail transcripts should be stored in a secure place [47].

To protect clients' privacy and confidentiality when conducting online counseling, the following steps should be taken [216]:

- Ensure that electronic devices for both parties are password protected.
- If a client loses his/her device, remotely delete data.
- Avoid storing clients' contact information on the phone.
- Encryption services should be utilized and, if possible, a secure portal employed.
- Use password-protected wireless networks.

Establishing Online Relationships

Five principles related to establishing and maintaining online relationships are identified in the ACA's code of ethics [47]:

- Appropriateness of online counseling: Counselors should have an intake process in place that helps assess whether online counseling is appropriate given the client's presenting problems. Clients also should be made aware of situations that might not be amenable to online counseling. In order for clients to make an informed decision about whether to proceed using online counseling, they should be informed about the risks, benefits, and limitations of using online counseling.
- Counseling plans: Intervention plans should be consistent and reflect the client's individual needs. If it is assessed and determined that online counseling is not appropriate, referrals should be made to alternative services.

- Continuing coverage: Counselors should provide schedules, response times, and contact information to the client. If a counselor is not available for any reason, arrangements must be made with another counselor to do any follow-up, and this must be conveyed to the client.
- **Boundaries of competence**: Counselors should only practice within their area(s) of expertise.
- Minors and incompetent clients: Informed consent must be obtained from the parents or legal guardians of clients who are minors.
 For those who are not competent, informed consent must be obtained from the individual who is appointed to give consent.

One of the major advantages of Internet technology is that it can bridge geographic distances. However, the downside is that it can blur boundaries and trigger dual relationships. Texting, for example, can blur boundaries. Clients may feel their counselors/ therapist should be immediately accessible. The boundaries of the professional relationship can gradually disintegrate to become more informal and less professional. Therefore, counselors/therapists should set boundaries regarding the timing of texts and replies and establish reasonable expectations for their clients [216; 223]. Clients may also ask their counselor to "friend" or "connect" with them on Facebook or other social networking sites. This can cause boundary confusion, as it allows the client to have access to the counselor's personal information [141; 227]. Similarly, counselors/therapists should avoid searching for information on clients, as it heightens the risk of boundaries being blurred or crossed [227].

Furthermore, clients may perceive that because of the ease of accessing the Internet communications that the counselor is constantly available and expect an immediate response [156]. If boundaries are not clearly delineated, clients who have terminated services may continue to contact their provider electronically. Overall, it is important to remember that a digital footprint can be easily followed. The regulation of online counseling/therapy varies from state to state. In a review of the websites of state regulatory boards for professional counselors, social workers, psychologists, and marriage and family therapists, 67% provided some direction on online counseling, but 28% relied on the national codes of the various professions to provide guidance [157]. Several states have enacted laws governing the provision of telepsychology and/or distance treatment of substance use disorders. California also has the California Telemedicine Act, which focuses solely on online therapy [135].

As indicated previously, all professional organizations have their own codes of ethics, and many of these ethical principles overlap. It is important to remember that counselors are bound to the general code of ethics, but often, professional organizations will explicitly highlight principles directly related to online counseling. Counselors are encouraged to review and become familiar with other organizations' codes of ethics. Counselors should develop a social media policy that explicitly outlines to clients how electronic communications will be used and how it will affect issues like informed consent, confidentiality, documentation, and interruption of services [141]. This contract can minimize confusion and protect both the client and the practitioner.

EFFICACY STUDIES OF ONLINE COUNSELING

The efficacy of online counseling remains a source of debate. Counselors' anecdotal reports of their experiences in utilizing counseling techniques in an online environment are important. However, there has been increased interest in measuring outcomes in the counseling and mental health fields. The issue of efficacy includes questions such as [45]: What services work for whom and under what conditions? When should they be offered? As competition increases as a result of resource scarcity and financier accountability, there is more emphasis on demonstrating effectiveness of interventions or programs [69]. Studies that systematically measure

outcomes would not only provide helpful information to financiers, managed care organizations, and counselors but also to clients [42].

Efficacy studies, program evaluations, and intervention evaluations are all terms that refer to systematic, empirical procedures used to determine the success of a program or intervention [69]. Efficacy studies are practical in nature, generating findings that have practical ramifications for the intervention or program not merely developing theory [69]. Most efficacy studies use experimental designs or quasiexperimental designs. Experiments or clinical trials involve three components: an experimental group, in which the research participants receive the intervention being evaluated; a control group, in which the research participants do not receive the intervention being evaluated; and randomization of research participants to one of the two groups in order to ensure that both groups are similarly matched [53]. In order for a study to be a true classical experimental design, all three components must exist. Quasi-experimental designs, as the name implies, do not have all three components [53]. Experimental designs are the most rigorous and allow one to infer cause and effect.

This section is not meant to be an exhaustive and comprehensive review of all efficacy studies conducted to examine online counseling or online interventions. Rather, the goal is to provide an overview of empirical studies that have been completed in order to provide a background for counselors and other helping professionals regarding the effectiveness of online counseling in a variety of settings and on a host of health and mental health issues.

OBESITY

Obesity is a major public health concern in the United States. There have been some Internet-based interventions working with individuals who have difficulties maintaining a healthy weight. Studies are slowly emerging to evaluate the effectiveness of these Internet interventions; and these studies have indicated contradictory results. One study, conducted in 2002, did not find positive results [28]. Researchers in this study found that an Internet support group did not appear to be as effective as minimal or frequent intensive in-person therapist support for facilitating the long-term maintenance of weight loss.

Yet, another experimental design indicated that Internet therapy was effective [76]. Researchers in this study recruited and randomly assigned research participants to one of two groups: a basic Internet weight-loss program (the control group) and an Internet weight-loss program plus behavioral e-counseling (the experimental group). The basic Internet program consisted of a tutorial on weight loss. Furthermore, participants were provided with a daily tip about weight loss and a list of Internet weight-loss resources. Each week, participants in this group had to submit their weight by e-mail [76]. Participants in the experimental group e-mailed their weight-loss counselor and reported their calorie and fat intake, exercise energy expenditure, and questions in a web-based diary. Counselors provided feedback on the self-monitoring, offering reinforcements, recommendations, and general support [76]. Participants in both groups were measured at baseline for weight, waist circumference, and fasting blood glucose. Findings show that participants in the Internet weight-loss program with behavioral e-counseling experienced more weight loss and greater reductions in waist circumference at 1 year than the basic program without behavioral e-counseling [76]. The additional feature of e-counseling appeared to be effective in promoting improved eating habits and weight loss.

In a 2007 study of an Internet-based behavioral weight-loss intervention, 62 participants met weekly in an online chatroom to discuss lessons that they reviewed prior to the meeting; a separate control group also had monthly in-person meetings [128]. All participants followed a specific dietary regimen. After 12 months, individuals who received the stand-alone Internet intervention lost as much weight as those in the control group with monthly in-person meetings. A 2013 retrospective study analyzing 1,258 participants' weight loss and its relationship to the use of an online weight-loss program (focused on providing educational information and

self-monitoring of food consumption), individuals who logged in at least four days per week and entered their weight and food consumption lost more weight (an average of 11.2 pounds more) compared with those who did not engage in the same behaviors [158]. In a 2016 study of an Internet-based weightloss program, researchers recruited 75 overweight or obese participants to a 12-week intervention employing self-monitoring and tracking. In general, men lost more weight than women and those who were more educated also lost more than their less educated counterparts [199]. In an Internet-based prevention program that used cognitive-behavioral therapy to promote healthy nutrition, participants in the intervention group received online counseling by nutritionists. After three months, participants in the intervention group had improved high-density lipoprotein cholesterol levels, body mass index, blood pressure, and waist and hip size [230].

EATING DISORDERS

Eating disorders are prevalent among young women and girls. It is estimated that 1% to 2% of the young adult female population in the United States has been diagnosed with bulimia nervosa [15]. Distorted body image, concern about weight and appearance, and messages disseminated from mass media reinforce unhealthy images of beauty, all of which contribute to eating disorders. Psychoeducational interventions have been implemented to raise awareness and foster conversation among young adults about eating disorders, body image, and satisfaction/ dissatisfaction with appearance and weight.

In evaluating one psychoeducational program on eating disorders, researchers compared an 8-week, Internet-based psychoeducational program to reduce participants' body dissatisfaction and concerns about weight with a traditional intervention, which included a face-to-face psychoeducational program in a classroom setting [8]. In both formats, participants received lectures and readings, used diaries to write reflective comments, and convened to discuss topics and issues. The only difference between the two groups was that participants in the Internetbased program utilized e-mails and online discussion groups rather than face-to-face interactions.

Participants were given instruments to measure level of body image dissatisfaction and disordered eating attitudes at baseline and after participation in the programs. Findings showed that the Internet-based program was more effective in reducing body image dissatisfaction and disordered eating attitudes and behaviors compared with the traditional, classroombased psychoeducational program. The traditional classroom-based program also yielded higher dropout rates. Researchers speculated that compliance with the Internet-based program may have been easier because of the convenience and flexibility afforded by electronic communications. Participants could meet the requirements of the program at any time, while the traditional classroom-based program involved a fixed meeting time [8]. However, a 2014 study found no differences in thin-ideal internalization and body dissatisfaction between online and face-to-face groups for eating disorders [159].

In a systematic review of Internet-based interventions for eating disorders, Newton and Ciliska found five studies that used experimental or quasiexperimental designs to evaluate their effectiveness [129]. All of the studies evaluated interventions that were based on social learning, cognitive behavioral, and psychoeducational perspectives, and all included psychoeducational readings, asynchronous online discussion groups, and use of an online-based body image journal. After pooling data from all five studies, no definitive conclusion could be drawn about specific outcomes, such as healthy eating behaviors, resulting from the Internet-based interventions [129]. Other variables may also influence outcomes. The severity of symptoms is important to take into account [200]. For example, those with mild-to-moderate bulimia show improvements using an Internet-based intervention with and without therapist support. However, those with severe anorectic symptoms did not do as well without therapist support.

ANXIETY AND STRESS

Anxiety disorders are one of the most common mental disorders in the United States. It is estimated that 18% of the adult population suffers from an anxiety disorder [11]. Some have argued that given these large numbers, the use of Internetbased interventions would appear to be a viable alternative to solely providing traditional face-toface clinical interventions. In one study, 15 young adults between 16 and 25 years of age with anxiety and depression were recruited to participate in an Internet-based cognitive behavioral intervention consisting of eight online modules facilitated by an online therapist. Symptoms of anxiety and depression were reduced and quality of life was reported to have improved following the intervention [201]. A systematic review on the effectiveness of Internetbased cognitive-behavioral therapy for depression and anxiety replicated these findings among those with chronic illness [231].

Social phobia is a form of anxiety disorder whereby the individual experiences anxiety in social situations to the extent that it produces significant negative consequences and impairment. Because individuals with social anxiety may be embarrassed to seek traditional counseling, Internet-based interventions could be a viable treatment option for this group. One experimental study compared the effects of a nine-week, Internet-based intervention that utilized a self-help manual based on a cognitive behavioral modality [3]. This Internet-based intervention (the experimental group) consisted of nine modules that provided information on social phobia and exposure exercises. Each module ended with three to eight essay questions. Participants were asked to describe the most important topic covered in each module, to provide records of their thoughts and feelings, and to describe their experience with and outcome of their exposure exercises [3]. Therapists responded to the participants via e-mail.

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The findings were promising. Participants in the Internet-based intervention experienced significant improvement on measures of social anxiety, fear, avoidance, depression, and general anxiety compared with their counterparts in the control group, who received no treatment. Furthermore, their overall quality of life increased [3]. The post-treatment and one-year follow-up outcome scores were stable. The authors recommended Internet-based treatment as a complement to traditional cognitive-behavioral interventions. Furthermore, because clients with social phobias differ in terms of history and severity, a careful evaluation should be done to determine the specific intervention employed (use of a self-help manual, psychoeducational group, Internet-based group, etc.).

In another study that examined the effectiveness of online group counseling for social phobia, 105 adults were randomized to the treatment group, which consisted of e-mail contact with a therapist, lessons to be completed online, homework assignments, and discussions in an online forum; the control group simply consisted of those on a waiting list [160]. Both groups experienced decreased levels of social phobia symptoms, but the participants in the treatment group had greater improvements.

Practitioners are increasingly using virtual environment technologies for the treatment of various anxiety and stress disorders. Malbos, Mestre, Note, and Gellato described an intervention using virtual reality for six patients with claustrophobia; the intervention consisted of education, relaxation, and cognitive and behavioral strategies [131]. Participants "experienced" enclosed spaces such as houses, corridors, hallways, underground facilities, and elevators, and the amount of space in each of these scenarios was manipulated. Overall findings showed a decrease in fear of enclosed spaces, and these improvements were sustained at the 6-month follow-up. After completion of the intervention, participants reported they were able to use the elevator alone, stay in a cellar, and use public toilets [131].

A virtual reality smartphone application was developed for individuals with social anxiety disorder; no therapist facilitation was provided [202]. Twenty-two subjects diagnosed with social anxiety disorder and 30 subjects with no diagnoses engaged in the twoweek, eight-session program. In both groups, social anxiety scores decreased and there were improvements in speech length as well as self-reported amount of nervousness.

The question of whether exposure of a threat in a virtual reality can truly imitate real-life exposure in a way that produces similar psychophysiologic responses is also a source of debate [161]. In a meta-analysis of 38 studies, researchers found that virtual reality does trigger psychophysiologic arousal, particularly electrodermal activity [161]. In another meta-analysis of 23 studies of anxiety and virtual reality, individuals given a stimulus in virtual reality therapy experienced anxiety symptoms, and over time, the virtual reality exposure therapy produced similar outcomes in terms of reducing anxiety symptoms compared with face-to-face interventions with in-vivo exposures [162]. These positive improvements exhibited following virtual reality exposure treatment persisted into the long term and the dropout rates were similar. Overall, it is important to remember that virtual reality therapies for anxiety disorders are not a new form of therapy, but are an application of technology in an evidence-based treatment [163]. A 2019 systematic review found that Internet Acceptance and Commitment Therapy appeared to be effective in reducing anxiety symptoms [232]. However, more randomized controlled trials are needed.

CHRONIC ILLNESS

The Internet has been a powerful vehicle for patients to access health information, which ultimately has positive effects on their quality of life and sense of empowerment. In addition, online health communities can help increase patients' sense of self-efficacy through sharing experiences, asking for help, and talking about symptoms [203]. Today, there are an estimated 165,000 apps focused on health, but there have been minimal empirical studies, especially randomized control trials, examining their effectiveness [216]. It is suggested that these health apps are particularly helpful for treatment/medication compliance and for appointment reminders [216].

Chronic illnesses such as HIV and acquired immune deficiency syndrome (AIDS) have profound effects on patients' abilities to cope and adjust. These patients must make daily decisions regarding their medical regimens and navigate a complex medical system involving various medical tests and interventions. In an experimental design study, two intervention groups that focused on health information were evaluated [38]. Participants were randomly assigned to the experimental or control groups. The experimental group involved an Internet skills-building intervention in which participants focused on learning how to use the computer and the Internet to search for HIV-related information and evaluating the quality of health information they retrieved. The control group was a face-to-face health information social support group for men and women living with HIV. Health information was provided for the control group, but there was no cognitive or behavioral component in teaching participants how to evaluate health information. Measures on social coping, health information coping, social support, and depression were administered at baseline, immediately after completion of the interventions, and at 3, 6, and 9 months postintervention. In the Internet group, participants' levels of health information coping were much higher than participants in the control group immediately after completion of the intervention and at all three postintervention follow-ups. Essentially, participants in the Internet group indicated they would seek information from friends, family, and doctors to find out more about a problem compared with those in the control group. Findings also indicated that those in the Internet group reported a significantly greater level of social support at all three follow-up assessments compared with those in the control group. Depressive symptoms were lower in the Internet group than in the control group, with significant differences between the experimental and control group occurring at the six-month follow-up [38]. As with the previous study on stress management, the attrition rate was much higher and overall attendance was poorer in the Internet group. The researchers cautioned that although the outcome variables were positive for the Internet group, Internet skills building for health information seeking is not appropriate for everyone. Consequently, patient education, patient health education counseling, and face-to-face interaction and relationship building cannot be replaced by the Internet [38].

A 2012 study recruited participants for an online support groups for individuals with HIV/AIDS with the goal of examining the effect on levels of perceived efficacy in self-care, adaptive coping, and quality of life [164]. The authors found that online participation assisted with adaptive coping, as the participants felt more empowered by receiving health information and finding positive meaning through the group. This ultimately increased the patients' sense of self-efficacy [164].

Another study focused on an online, self-paced intervention teaching adults with type 2 diabetes positive emotional skills using mindfulness techniques, positive reappraisal skills, and learning to be grateful [165]. Participants were randomly assigned to the intervention group or a wait list control group. Participants in the intervention group experienced improved depression symptoms and there were no differences in levels of self-efficacy between the two groups.

The use of Internet and cell phone-based interventions was studied for patients with diabetes, high blood pressure, and weight maintenance [132]. The experimental group received a cell phone, blood glucose monitoring device, and blood pressure measuring devise, and patients received an alarm reminder to measure blood glucose and blood pressure levels twice every day. After patients sent in the results, they received tips and reminders on their cell phones

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tailored to the results. Patients in the control group continued to visit a clinic to see their physicians based on a schedule. After the study period, patients in both groups had reduced their body weight, body mass index, and waist circumference. However, participants in the experimental group also experienced a decrease in systolic and diastolic blood pressure levels. In addition, the total cholesterol, low-density lipoprotein cholesterol, and triglyceride levels significantly decreased after three months among participants in the experimental group [132]. In a 2019 study, adolescents were randomly assigned to the waitlist group (no intervention) or a 14-week course of cognitive-behavioral therapy delivered via the Internet by a professional therapist [233]. At both 3 months and 12 months, participants in the treatment group had greater improvements. At 12 months, 40% were symptom-free, compared with only 16% from the waitlist group [233].

One study adapted a face-to-face lifestyle program entailing lessons about diet, exercise, and healthy living and wellness for the Internet [204]. Participants received e-mail prompts for monitoring and progress reports and also received coaching by text messaging. After one year, participants in the Internet program had lost more weight and had greater reductions in systolic blood pressure than the traditional intervention participants. The Internet program was also more economical than the traditional program.

These studies indicate positive results with Internetbased interventions, and many are cautiously maintaining that online counseling can be as effective as traditional counseling [178]. However, researchers have consistently warned counselors to conduct rigorous assessments to determine whether Internetbased interventions are suitable for an individual client based on need; Internet-based interventions should supplement traditional, face-to-face interventions.

SUITABILITY OF ONLINE COUNSELING

ASSESSING CLIENTS

As stressed throughout this course, it is vital to recognize that online counseling and mental health services are not for everyone. Key questions have been formulated to help determine if utilizing the Internet and other forms of communication technologies are amenable to a particular patient/client [75; 134]. Counselors can use the following questions to structure assessments with individuals who are exploring the option of using online counseling [156; 205; 227]:

- What type of communication method does the client prefer? Does he or she prefer using e-mails, chatrooms, or video conferencing?
- How proficient and comfortable is the client using the identified form of communication technology? Does the client demonstrate sufficient knowledge in using computers and the Internet?
- What type of access does the client have? Is his or her computer system compatible with that of the counselor? What type of Internet connection does the client have? Where is the client accessing the computer and Internet? Are privacy issues involved?
- Is the client proficient in trouble-shooting computer and other technology issues that might arise?
- How comfortable and knowledgeable is the client regarding online communication and relationships? Does the client enjoy communicating online? Does the client have any experience with online groups? What other activities does the client pursue online? What are his/her attitudes about the Internet?

- How proficient and comfortable is the client with reading and writing? Can he or she type well? Is there any cognitive impediment that might hinder the client's ability to communicate online? Does the client prefer face-to-face or phone communications? In the counselor's opinion, would there be therapeutic advantages to using e-mails, instant messaging, chatrooms, or other forms of online communications even though the client might state he/she does not prefer a particular method? If using e-mail or text messaging, to what extent can the client express feelings and emotions in written form?
- Does the client have any experience receiving counseling or any other type of mental health services? (Previous experiences may influence expectations, perceptions, and goals.)
- Are there any factors associated with the online format that could potentially exacerbate client symptomology?
- Does the client's personality style, presenting problem, and/or diagnosis affect the suitability of utilizing online communications? (It is usually recommended that those with poor reality testing or who present with s evere psychiatric problems [e.g., personality disorders, dissociative disorders, paranoia], suicidal ideations, or homicidal tendencies may not be appropriate.)
- Is the client comfortable with delayed responses from the counselor if e-mails or text messaging is used?
- To what extent might cultural issues affect the decision to employ online counseling? Obviously, shared language proficiency between the counselor and client is vital. How might the client's cultural beliefs about mental health and counseling affect counseling?

It is not completely clear how personality type influences the proclivity to using online counseling. In a survey study of 176 college students, researchers found that those who were extroverted were more likely to have positive attitudes about obtaining help through online counseling compared with introverts [133]. In particular, extroverts were more likely to indicate a preference for online counseling involving the use of voiceover or video-conferencing formats; the authors speculated that perhaps this mode of online counseling most resembles traditional face-toface counseling. More research is needed to examine the relationship between personality types and use of online counseling; however, this study does indicate that personality may be a factor, and a clear assessment for each individual client is necessary.

CONSIDERATIONS FOR CLINICIANS

Counselors who are considering setting up a practice that is delivered through the Internet must explore a range of issues before embarking on this adventure. Because online counseling is still a relatively new phenomenon, there are a host of clinical, ethical, and legal questions that professionals should consider before they begin. Many of these issues have been discussed in this course. Just as counselors help clients determine if online counseling is appropriate, counselors should assess the feasibility of online counseling for themselves [58]. This feasibility study should relate to the specific type of online clinical service the counselor wishes to provide, taking into consideration the population and area of specialization. For example, a counselor who is interested in facilitating an Internet-based support group for individuals with weight concerns will have different clinical, legal, and ethical issues to consider compared with a counselor who is interested in provid-

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ing counseling services using e-mails for individuals who recently experienced rape. The feasibility study asks counselors to consider the following [58; 227]:

- Self-assessment: Why are you interested in conducting online counseling? What personal qualities do you possess that lend to online counseling? What are your professional goals? What are the professional and personal advantages and disadvantages of conducting online counseling?
- Evaluation of knowledge base: What do you know about the nature of online counseling? What does the literature say about the effectiveness of Internet-based clinical services? What studies have been conducted regarding Internet-based services for specific disorders? What legal and ethical issues should be considered? Counselors should be familiar with the specific code of ethics set forth in their profession about online counseling.
- Evaluate technical and writing skills: Just as counselors help clients assess their proficiency in using computers and technical communication tools, counselors should assess themselves in these areas. How proficient are you in writing clearly, concisely, and professionally?
- Perform risk assessment: Counselors should be very familiar and clear about their state licensing requirements and how the Internet affects these requirements. Licensed counselors may not be aware of the different prohibitions to practice online counseling. What are the telehealth laws in the various states?

CONCLUSION

The Internet has revolutionized the landscape of education, consumer purchasing, and delivery of services, including health and mental health services. It has provided innovative ways to deliver knowledge and support. The Internet has been called a "globalizing," "empowering," and "decentralizing" vehicle [23]. By providing counseling and clinical services via the Internet, access has become global, offering more options for clients. It can be empowering to have the ability to easily access health and mental health knowledge and services at one's convenience. Despite the many advantages of online counseling, both consumers and counselors must be fully aware of the limitations of the medium. If a client is extremely extroverted and relies on both verbal and nonverbal cues to process information, then he/she should convey this to the counselor, who can recommend that Internet-based counseling may not be the best forum for this individual. While online counseling holds much promise, each client's needs, presenting problems, patterns of communication, and personality styles are unique. Counseling and clinical services, whether delivered face-to-face or through the Internet, continuously revolve around the individual.

RESOURCES

Center for Telepsychology http://telepsychology.net

International Society for Mental Health Online http://ismho.org

Online Therapy Institute https://www.onlinetherapyinstitute.com

PsychCentralBest Practices in e-Therapy https://psychcentral.com/lib/e-therapy

National Board for Certified Counselors Policy Regarding the Provision of Distance Professional Services https://www.nbcc.org/Assets/Ethics/ NBCCPolicyRegardingPracticeofDistance CounselingBoard.pdf American Psychological Association Guidelines for the Practice of Telepsychology https://www.apa.org/practice/guidelines/ telepsychology

National Association of Social Workers Telemental Health

https://www.socialworkers.org/LinkClick.aspx?fil eticket=evgx77RtVLI%3D&portalid=0

American Counseling Association Telebehavioral Health Information and Counselors in Health Care

https://www.counseling.org/knowledge-center/ mental-health-resources/trauma-disaster/ telehealth-information-and-counselors-in-healthcare

Implicit Bias in Health Care

The role of implicit biases on healthcare outcomes has become a concern, as there is some evidence that implicit biases contribute to health disparities, professionals' attitudes toward and interactions with patients, quality of care, diagnoses, and treatment decisions. This may produce differences in help-seeking, diagnoses, and ultimately treatments and interventions. Implicit biases may also unwittingly produce professional behaviors, attitudes, and interactions that reduce patients' trust and comfort with their provider, leading to earlier termination of visits and/or reduced adherence and follow-up. Disadvantaged groups are marginalized in the healthcare system and vulnerable on multiple levels; health professionals' implicit biases.

Interventions or strategies designed to reduce implicit bias may be categorized as change-based or controlbased. Change-based interventions focus on reducing or changing cognitive associations underlying implicit biases. These interventions might include challenging stereotypes. Conversely, control-based interventions involve reducing the effects of the implicit bias on the individual's behaviors. These strategies include increasing awareness of biased thoughts and responses. The two types of interventions are not mutually exclusive and may be used synergistically.

Works Cited

- 1. Ainsworth M. E-therapy: History and Survey. Available at http://www.metanoia.org/imhs/history.htm. Last accessed October 7, 2020.
- Zimmermann KA, Emspak J. Internet History Timeline: ARPANET to the World Wide Web. Available at https://www.livescience. com/20727-internet-history.html. Last accessed December 7, 2020.
- 3. Andersson G, Carlbring P, Holmström A, et al. Internet-based self-help with therapist feedback and in vivo group exposure for social phobia: a randomized controlled trial. *J Consult Clin Psychol.* 2006;74(4):677-686.
- 4. Beder J. Cybersolace: technology built on emotion. Soc Work. 2005;50(4):355-358.
- 5. Schembri AM. www.why-social-workers-need-to-embrace-Web2.0.com.au. Australian Social Work. 2008;61(2):119-123.
- 6. Boulos MNK, Wheeler S. The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health care education. *Health Info Libr J.* 2007;24:2-23.
- 7. Castelnuovo G, Gaggioli A, Mantovani F, Riva G. From psychotherapy to e-therapy: the integration of traditional techniques and new communication tools in clinical settings. *Cyberpsychol Behav.* 2003;6(4):375-382.
- 8. Celio AA, Winzelberg AJ, Taylor CB, et al. Reducing risk factors for eating disorders: comparisons of an Internet- and a classroomdelivered psychoeducational program. J Consult Clin Psychol. 2000;68(4):650-657.
- 9. Childress C. Ethical issues in providing online psychotherapeutic interventions. J Med Internet Res. 2000;2(1):e5.
- 10. Clark C, Gorski P. Multicultural education and the digital divide: focus on gender. Multicultural Perspectives. 2002;4(1):30-40.
- 11. Comer RJ. Abnormal Psychology: DSM-5 Update. 8th ed. New York, NY: Worth Publishers; 2013.
- 12. Corey G, Corey MS, Callanan P. Issues and Ethics in the Helping Professions. 8th ed. Pacific Grove, CA: Brooks/Cole Publishing Company; 2010.
- 13. Corrigan PW. Mental health stigma as social attribution: implications for research methods and attitude change. *Clin Psychol.* 2000;7(1):48-67.
- 14. Dickerson SS. Gender differences in stories of everyday Internet use. Health Care Women Int. 2003;24(5):434-451.
- 15. Fairburn CG, Beglin SJ. Studies of the epidemiology of bulimia nervosa. Am J Psychiatry. 1990;147(4):401-408.
- 16. Hansen M, Erdley S. YouTube and other Web 2.0 applications for nursing education. OJNI. 2009;13(3):1-20.
- 17. Finn J. MSW student perceptions of the efficacy and ethics of Internet-based therapy. J Soc Work Educ. 2002;38(3):403-419.
- O'Reilly T. What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software. Available at http://oreilly. com/web2/archive/what-is-web-20.html. Last accessed October 8, 2020.
- 19. Rockinson-Szapkiw AJ, Walker VL. Web 2.0 technologies: facilitating interaction in an online human services counseling skills course. J Technol Hum Serv. 2009;27(3):175-193.
- 20. Computer History Museum. Internet History 1962 to 1992. Available at http://www.computerhistory.org/internet_history. Last accessed October 8, 2020.
- 21. Greer BG. Psychological and support functions of an e-mail mailing list for persons with cerebral palsy. *Cyberpsychol Behav.* 2000;3(2):221-235.
- 22. Griffiths M, Cooper G. Online therapy: implications for problem gamblers and clinicians. Br J Guid Counc. 2003;31(1):113-135.
- 23. Guillén MF, Suárez SL. Explaining the global digital divide: economic, political, and sociological drivers of cross-national Internet use. Soc Forces. 2005;84(2):681-708.
- 24. Gundling E. How to communicate globally. Train Dev J. June 30, 1999.
- 25. Guterman JT, Kirk MA. Mental health counselors and the Internet. Journal of Mental Health Counseling. 1999;21(4):309-325.
- 26. Hall ET. The Dance of Life: The Other Dimension of Time. New York: Anchor; 1983.
- 27. Hamburger YA, Ben-Artzi E. The relationship between extraversion and neuroticism and the different uses of the Internet. *Comput Human Behav.* 2000;16:441-449.
- 28. Harvey-Berino J, Pintauro S, Buzzell P, et al. Does using the Internet facilitate the maintenance of weight loss? *Int J Obes*. 2002;26(9):1254-1260.
- 29. Conners J. History of the World Wide Web. Available at https://www.whoishostingthis.com/resources/history-of-web. Last accessed December 7, 2020.
- Herring SC. Gender and Democracy in Computer-Mediated Communication. Available at http://www.cios.org/ EJCPUBLIC/003/2/00328.html. Last accessed October 8, 2020.
- 31. Hilty DM, Marks SL, Urness D, et al. Clinical and educational telepsychiatry applications: a review. Can J Psychiatry. 2004;49(1):12-23.
- 32. Hilty DM, Luo JS, Morache C, Marcelo DA, Nesbitt TS. Telepsychiatry: an overview for psychiatrists. CNS Drugs. 2002;16(8): 527-548.
- Statistica. Most Popular Online Activities of Adult Internet Users in the United States as of November 2019. Available at https://www.statista.com/statistics/183910/internet-activities-of-us-users. Last accessed October 8, 2020.
- 34. Internet Society. A Brief History of the Internet. Available at https://www.internetsociety.org/internet/history-internet/brief-history-internet. Last accessed October 8, 2020.

- 35. Irwin L. Gender inequities in technology in developing nations: females and computers in traditional cultures. *Intercultural Education*. 2000;11(2):195-199.
- 36. Johari A, Bentley JPH, Tinney MV, Chia BH. Intercultural Internet-based learning: know your audience and what it values. *Educational Technology Research and Development*. 2005;53(2):117-127.
- 37. Joo JE. Cultural issues of the Internet in the classrooms. Br J Educ Technol. 1999;30(3):245-250.
- Kalichman SC, Cherry C, Cain D, et al. Internet-based health information consumer skills intervention for people living with HIV/ AIDS. J Consult Clin Psychol. 2006;74(3):545-554.
- 39. Lasker JN, Sogolow ED, Sharim RR. The role of an online community for people with a rare disease: content analysis of messages posted on a primary biliary cirrhosis mailing list. *J Med Internet Res.* 2005;7(1).
- 40. Leidner DE, Kayworth T. A review of culture in information systems research: toward a theory of information technology culture conflict. MIS *Quarterly*. 2006;30(2):357-399.
- 41. Leonard S. The development and evaluation of a telepsychiatry service for prisoners. *J Psychiatr Ment Health Nurs.* 2004;11(4): 461-468.
- 42. Leibert T. Making change visible: the possibilities in assessing mental health counseling outcomes. J Couns Dev. 2006;84(1):108-113.
- 43. Leibert T, Archer J, Munson J, York G. An exploratory study on client perceptions of Internet counseling and the therapeutic alliance. Journal of Mental Health Counseling. 2006;28(1):69-83.
- 44. Lynch EW. Developing cross-cultural competence. In: Lynch EW, Hanson MJ (eds). Developing Cross-Cultural Competence: A Guide for Working With Children and Their Families. 4th ed. Baltimore, MD: Brookes Publishing Company; 2011.
- 45. Lyons JS, Howard KI, O'Mahoney MT, Lish JD. The Measurement and Management of Clinical Outcomes in Mental Health. New York, NY: John Wiley and Sons, Inc.; 1997.
- 46. Health Resources and Services Administration. Telehealth Programs. Available at https://www.hrsa.gov/rural-health/telehealth. Last accessed October 8, 2020.
- 47. Manhal-Baugus M. E-therapy: practical, ethical, and legal issues. Cyberpsychol Behav. 2001;4(5):551-563.
- 48. McClure RF, Livingston RB, Livingston KH, Gage R. A survey of practicing psychotherapists. Journal of Professional Counseling: Practice, Theory and Research. 2005;33(1):35-46.
- 49. Mcloughlin C. Culturally responsive technology use: developing an on-line community of learners. Br J Educ Technol. 1999;30(3):231-244.
- 50. Menard-Warwick J, Dabach DB. "In a little while I could be in front:" social mobility, class, and gender in the computer practices of two Mexican families. *Journal of Adolescent and Adult Literacy*. 2004;47(5):380-389.
- 51. U.S. Census Bureau. Computer and Internet Use in the United States: 2016. Available at https://www.census.gov/content/dam/ Census/library/publications/2018/acs/ACS-39.pdf. Last accessed December 7, 2020.
- 52. Pew Research Center. Internet/Broadband Fact Sheet. Available at http://www.pewinternet.org/fact-sheet/internet-broadband. Last accessed September 9, 2020.
- 53. Bernard HR. Social Research Methods: Qualitative and Quantitative Approaches. 2nd ed. Thousand Oaks, CA: SAGE Publications, Inc.; 2013.
- 54. Pew Research Internet Project. Social Media Fact Sheet. Available at https://www.pewinternet.org/fact-sheet/social-media. Last accessed December 7, 2020.
- 55. Okun BF, Fried J, Okun ML. Understanding Diversity: A Learning-As-Practice Primer. Pacific Grove, CA: Brooks/Cole Publishing Company; 1999.
- 56. Oravec JA. Online counselling and the Internet: perspectives for mental health care supervision and education. *J Ment Health*. 2000;9(2):121-135.
- 57. Parks MR, Roberts LD. "Making MOOsic:" the development of personal relationships online and comparison to their off-line counterparts. *Journal of Social and Personal Relationships*. 1998;15(4):517-537.
- 58. Patrick PK. Internet counseling: trends, applications and ethical issues. In: Patrick PK (ed). Contemporary Issues in Counseling. Boston, MA: Pearson Education, Inc.; 2007: 253-293.
- 59. Postmes T, Spears R, Sakhel I, de Groot. Social influence in computer-mediated communication: the effects of anonymity on group behavior. *Pers Soc Psychol Rev.* 2001;27(10):1243-1254.
- 60. Recupero PR, Rainey SE. Informed consent to e-therapy. Am J Psychother. 2005;59(4):319-331.
- 61. Reese RJ, Conoley CW, Brossart DF. The attractiveness of telephone counseling: an empirical investigation of client perceptions. *J Couns Dev.* 2006;84(1):54-60.
- 62. U.S. Census Bureau. Computer and Internet Use in the United States: 2015. Available at https://www.census.gov/content/dam/ Census/library/publications/2017/acs/acs-37.pdf. Last accessed October 8, 2020.
- 63. Andreassen HK, Bujnowska-Fedak MM, Chronaki CE, et al. European citizens' use of E-health services: a study of seven countries. BMC Public Health. 2007;7:53.
- 64. Robson D, Robson M. Ethical issues in Internet counselling. Couns Psychol Q. 2000;13(3):249-257.

- 65. Rochlen AB, Zack JS, Speyer C. Online therapy: Review of relevant definitions, debates, and current empirical support. J Clin Psychol. 2004;60(3):269-283.
- 66. Rondino M. Breaking out of binaries: reconceptualizing gender and its relationship to language in computer-mediated communication. Journal of Computer-Mediated Communication. 1997;3(3).
- 67. Rovai AP. Building classroom community at a distance: a case study. *Educational Technology Research and Development Journal*. 2001;49(4):33:48.
- 68. Rovai AP, Baker JD. Gender differences in online learning: sense of community, perceived learning, and interpersonal interactions. *Quarterly Review of Distance Education*. 2005;6(1):31:47.
- 69. Royse D, Thyer BA, Padgett DK, Logan TK. Program Evaluation: An Introduction. 5th ed. Belmont, CA: Cengage Learning; 2009.
- Sampson JP, Kolodinsky RW, Greeno B. Counseling on the Information Highway: future possibilities and potential problems J Couns Dev. 1997;75(3):203-212.
- Inciardi JA, Surratt HL, Cicero TJ, et al. Prescription drugs purchased through the Internet: who are the end users? Drug Alcohol Depend. 2010;110(1-2):21-29.
- 72. Shaw HE, Shaw SF. Critical ethical issues in online counseling: assessing current practices with an Ethical Intent Checklist. J Couns Dev. 2006;84(1):41-53.
- 73. Singh NN, Mckay JD, Singh AN. Culture and mental health: nonverbal communication. J Child Fam Stud. 1998;7(4):403-409.
- 74. Stanley LD. Beyond access: psychosocial barriers to computer literacy. Information Society. 2003;19(5):407-416.
- 75. Suler J. Assessing a person's suitability for online therapy: the ISMHO Clinical Case Study Group. *Cyberpsychol Behav.* 2001;4(6):675-679.
- 76. Tate DF, Jackvony EH, Wing RR. Effects of Internet behavioral counseling on weight loss in adults at risk for Type 2 diabetes: a randomized trial. JAMA. 2003;289(14):1833-1836.
- 77. Pew Internet. Mobile Access 2010. Available at https://www.pewinternet.org/2010/07/07/mobile-access-2010. Last accessed October 8, 2020.
- Leung L. Internet embeddedness: links with online health information seeking, expectancy value/quality of health information websites, and Internet usage patterns. *Cyberpsychol Behav.* 2008;11(5):565-569.
- 79. Wahl OF. Mental health consumers' experience of stigma. Schizophr Bull. 1999;25(3):467-478.
- 80. Wasserman IM, Richmond-Abbott M. Gender and the Internet: causes of variation in access, level, and scope of use. Social Science Quarterly. 2005;86(1):252-270.
- 81. Weiser EB. Gender differences in Internet use patterns and Internet application preferences: a two-sample comparison. *Cyberpsychol Behav.* 2000;3(2):167-178.
- 82. Young KS. An empirical examination of client attitudes toward online counseling. Cyberpsychol Behav. 2005;8(2):172-177.
- 83. Harris Interactive. "Cyberchondriacs" on the Rise? Available at https://theharrispoll.com/the-latest-harris-poll-measuring-how-manypeople-use-the-internet-to-look-for-information-about-health-topics-finds-that-the-numbers-continue-to-increase-the-harris-poll-firstused-the-word-cyberch. Last accessed October 8, 2020.
- 84. Fox S. The Engaged E-Patient Population. Available at https://www.pewinternet.org/2008/08/26/the-engaged-e-patient-population. Last accessed October 8, 2020.
- 85. Miller EA, West DM. Where's the revolution? Digital technology and health care in the Internet age. J Health Polit Policy Law. 2009;34(2):261-284.
- 86. Morahan-Martin JM. How internet users find, evaluate, and use online health information: a cross-cultural review. *Cyberpsychol Behav.* 2004;7(5):497-510.
- 87. Ardito SC. The medical blogosphere: how social networking platforms are changing medical searching. Search Medford N J. 2009;17(5):22-51.
- Fox S. Mobile Health 2010. Available at https://www.pewresearch.org/internet/2010/10/19/mobile-health-2010/. Last accessed October 8, 2020.
- 89. Fallows D. Search Engine Users. Available at https://www.pewinternet.org/2005/01/23/search-engine-users. Last accessed October 8, 2020.
- 90. Bernhardt JM, Felter EM. Online pediatric information seeking among mothers of young children: results from a qualitative study using focus groups. J Med Internet Res. 2004;6(1):e7.
- 91. Rainie L, Spooner T. Hispanics and the Internet. Available at https://www.pewresearch.org/internet/2001/07/25/hispanics-and-the-internet. Last accessed October 8, 2020.
- 92. Peña-Purcell N. Hispanics' use of Internet health information: an exploratory study. J Med Libr Assoc. 2008;96(2):101-107.
- 93. Skinner A, Zack JS. Counseling and the Internet. Am Behav Sci. 2004;48(4):434-446.
- 94. Conn J. Upgrading to Health 2.0. Mod Healthc. 2007;37(49):32-33.
- 95. Zahnd WE, Scaife SL, Francis ML. Health literacy skills in rural and urban populations. Am J Health Behav. 2009;33(5):550-557.

- 96. Mancuso JM. Health literacy: a concept/dimensional analysis. Nurs Health Sci. 2008;10(3):248-255.
- 97. Lau JTF, Lau M, Cheung A, Tsui HY. A randomized controlled study to evaluate the efficacy of an Internet-based intervention in reducing HIV risk behaviors among men who have sex with men in Hong Kong. *AIDS Care.* 2008;20(7):820-828.
- Robertson L, Smith M, Castle D, Tannenbau D. Using the Internet to enhance the treatment of depression. Australas Psychiatry. 2006;14(4):413-417.
- 99. Wong DK, Cheung MK. Online health information seeking and ehealth literacy among patients attending a primary care clinic in Hong Kong: a cross-sectional survey. *Journal of Medical Internet Research*. 2019;21(3):e10831.
- Webelhorst C, Jepsen L, Rummel-Kluge C. Utilization of e-mental-health and online self-management interventions of patients with mental disorders: a cross-sectional analysis. PLoS One. 2020;15(4):e023137.
- Fukkink RG, Hermanns J. Children's experiences with chat support and telephone support. J Child Psychol Psychiatry. 2009;50(6):759-766.
- Armstrong N, Powell J. Patient perspectives on health advice posted on Internet discussion boards: a qualitative study. *Health Expect.* 2009;12(3):313-320.
- Owen JE, Bantum EO, Golant M. Benefits and challenges experienced by professional facilitators of online support groups for cancer survivors. Psychooncology. 2009;18(2):144-155.
- 104. Luo JS. Telemedicine: is it time now? Prim Psychiatry. 2007;15(2):27-30.
- 105. Jadhav A, Andrews D, Fiksdal A, et al. Comparative analysis of online health queries originating from personal computers and smart devices on a consumer health information portal. *J Med Internet Res.* 2014;16(7):196-209.
- Gaggioli A, Mantovani F, Castelnuovo G, et al. Avatars in clinical psychology: a framework for the clinical use of virtual humans. Cyberpsychol Behav. 2003;6(2):117-125.
- Girard B, Turcotte V, Bouchard S, Girard B. Crushing virtual cigarettes reduces tobacco addiction and treatment discontinuation. Cyberpsychol Behav. 2009;12(5):477-483.
- Kamel Boulos MN, Toth-Cohen S. The University of Plymouth Sexual Health SIM experience in Second Life: evaluation and reflections after 1 year. *Health Info Libr J.* 2009;26(4):279-288.
- 109. Walker VL. 3D virtual learning in counselor education: using Second Life in counselor skill development. *Journal of Virtual Worlds Research.* 2009;2(1):3-14.
- 110. Preziosa A, Grassi A, Gaggioli A, Riva G. Therapeutic applications of the mobile phone. Br J Guid Counc. 2009;37(3):313-325.
- 111. Heron KE, Smyth JM. Ecological momentary interventions: incorporating mobile technology into psychosocial and health behaviour treatments. *Br J Health Psychol.* 2010;15(1):1-39.
- 112. Matthews M, Doherty G, Sharry J, Fitzpatrick C. Mobile phone mood charting for adolescents. *Br J Guid Counc.* 2008;36(2): 113-129.
- 113. Gustafson DH, Boyle MG, Shaw BR, et al. An e-health solution for people with alcohol problems. *Alcohol Res Health*. 2010;33(4):327-337.
- 114. Goss S, Anthony K. Developments in the use of technology in counseling and psychotherapy. Br J Guid Counc. 2009;37(3): 223-230.
- 115. Maples MF, Han S. Cybercounseling in the United States and South Korea: implications for counseling college students of the millennial generation and the networked generation. J Couns Dev. 2008;86(2):178-183.
- Richards D. Features and benefits of online counseling: Trinity College online mental health community. Br J Guid Counc. 2009;37(3):231-242.
- 117. U.S. Census Bureau. Census Bureau Reports Housing is Top Reason People Moved Between 2009 and 2010. Available at https://www.census.gov/newsroom/releases/archives/mobility_of_the_population/cb11-91.html. Last accessed October 8, 2020.
- 118. Lester D. The use of the Internet for counseling the suicidal individual: possibilities and drawbacks. Omega. 2008;58(3):233-250.
- 119. Haberstroh S. Strategies and resources for conducting online counseling. Journal of Professional Counseling: Practice, Theory & Research. 2009;37(2):1-20.
- 120. Haberstroh S, Duffey T, Evans M, et al. The experience of online counseling. J Ment Health Couns. 2007;29(3):269-282.
- 121. Twu HL. Effective wiki strategies to support high-context culture learners. TechTrends. 2009;53(5):16-22.
- 122. Wang M. Designing online courses that effectively engage learners from diverse cultural backgrounds. *Br J Educ Technol.* 2007;38(2):294-311.
- 123. Rau PP, Gao Q, Sheau-Farn ML. Good computing systems for everyone: how on earth? Cultural aspects. *Behav Inf Technol.* 2008;27(4):287-292.
- 124. Fox S, Duggan M. Mobile Health: 2012. Available at https://www.pewinternet.org/2012/11/08/mobile-health-2012. Last accessed October 8, 2020.
- 125. Baron NS. See you online: gender issues in college student use of instant messaging. J Lang Soc Psychol. 2004;23(4):397-423.
- 126. Santhiveeran J. Compliance of social work e-therapy websites to the NASW Code of Ethics. Soc Work Health Care. 2009;48(1): 1-13.

- 127. International Society for Mental Health Online. Suggested Principles for the Online Provision of Mental Health Services. Available at http://ismho.org/resources/archive/suggested-principles-for-the-online-provision-of-mental-health-services. Last accessed October 8, 2020.
- 128. Micco N, Gold B, Buzzell P, Leonard H, Pintauro S, Harvey-Berino J. Minimal in-person support as an adjunct to Internet obesity treatment. *Ann Behav Med.* 2007;33(1):49-56.
- 129. Newton MS, Ciliska D. Internet-based innovations for the prevention of eating disorders: a systematic review. *Eat Disord*. 2006;14(5):365-384.
- 130. Schoenberger YM, Phillips J, Mohiuddin MO, et al. Acceptability of delivering and accessing health information through text messaging among community health advisors. *J Med Internet Res.* 2013;1(2):e22.
- 131. Malbos E, Mestre DR, Note ID, Gellato C. Virtual reality and claustrophobia: multiple components therapy involving game editor virtual environments exposure. *Cyberpsychol Behav.* 2008;11(6):695-697.
- 132. Yoo HJ, Park MS, Kim TN, et al. A ubiquitous chronic disease care system using cellular phones and the Internet. *Diabet Med.* 2009;26(6):628-635.
- 133. Tsan JY, Day SX. Personality and gender as predictors on online counseling use. J Technol Hum Serv. 2007;25(3):39-55.
- 134. National Association of Social Workers, Association of Social Work Boards, Council on Social Work Education, Clinical Social Work Association. Technology in Social Work Practice. Available at https://www.socialworkers.org/LinkClick.aspx?fileticket=lcTcdsHUcn g%3D&portalid=0. Last accessed October 9, 2020.
- 135. Prabhakar E. E-therapy: ethical considerations of a changing healthcare communication environment. *Pastoral Psychology*. 2013;62(2):211-221.
- 136. Rogers VL, Griffin MQ, Wykle ML, Fizpatrick JJ. Internet versus face-to-face therapy: emotional self-disclosure issues for young adults. Issues Ment Health Nurs. 2009;30:596-602.
- 137. Dowling M, Rickwood D. Online counseling and therapy for mental health problems: a systematic review of individual synchronous interventions using chat. J Technol Hum Serv. 2013;31(1):1-21.
- 138. Richards D, Viganó N. Online counseling: a narrative and critical review of the literature. J Clin Psychol. 2013;69(9):994-1011.
- 139. Jefee-Bahloul H. Use of telepsychiatry in areas of conflict: the Syrian refugee crisis as an example. J Telemed Telecare. 2014;20(3):167-168.
- Dooley JA, Jones SC, Iverson D. Using Web 2.0 for health promotion and social marketing efforts: lessons learned from Web 2.0 experts. *Health Mark Q.* 2014;31(2):178-196.
- 141. Reamer FG. Social work in a digital age: ethical and risk management challenges. Social Work. 2013;58(2):163-172.
- 142. Fukkink R. Peer counseling in an online chat service: a content analysis of social support. Cyberpsychol Behav Soc Netw. 2011;14(4):247-251.
- 143. King VL, Brooner RK, Peirce JM, et al. A randomized trial of web-based videoconferencing for substance abuse counseling. J Subst Abuse Treat. 2014;46(1):36-42.
- 144. Kozlowski KA, Holmes CM. Experiences in online process groups: a qualitative study. *Journal for Specialists in Group Work*. 2014;39(4):276-300.
- 145. Warren JM. Mobile mind mapping: using mobile technology to enhance rational emotive behavior therapy. J Ment Health Couns. 2012;34(1):72-81.
- 146. Bathje GJ, Kim E, Rau E, et al. Attitudes toward face-to-face and online counseling: roles of self-concealment, openness to experience, loss of face, stigma, and disclosure expectations among Korean college students. *Int J Adv Couns.* 2014;36:408-422.
- 147. Rodda S, Lubman DI, Dowling NA, et al. Web-based counseling for problem gambling: exploring motivations and recommendations. J Med Internet Res. 2014;15(5):e99.
- 148. Holmes C, Foster V. A preliminary comparison study of online and face-to-face counseling: client perceptions of three factors. *J Technol Hum Serv.* 2012;30(1):14-31.
- 149. Sucala M, Schnur JB, Brackman EH, et al. Clinicians' attitudes toward therapeutic alliance in e-therapy. J Gen Psychol. 2013;140(4):282-293.
- 150. Holtbrügge D, Weldon A, Rogers H. Cultural determinants of email communication styles. International Journal of Cross Cultural Management. 2013;13(1):89-110.
- 151. Kavanagh B. A cross-cultural analysis of Japanese and English non-verbal online communication: the use of emoticons in weblogs. Intercultural Communication Studies. 2010;19(3):65-80.
- 152. Kimbrough AM, Guadagno RE, Muscanell NL, Dill J. Gender differences in mediated communication: women connect more than do men. *Comput Human Behav.* 2013;29(3):896-900.
- 153. Hu T, Zhang X, Dai H, Zhang P. An examination of gender differences among college students in their usage perceptions of the internet. *Education and Information Technologies*. 2012;17:315-330.
- 154. Atai MR, Chahkandi F. Democracy in computer-mediated communication: gender, communicative style, and amount of participation in professional listservs. *Comput Human Behav.* 2012;28(3):881-888.

- 155. Zhang Y, Dang Y, Chen H. Research note: examining gender emotional differences in Web forum communication. *Decis Support Syst.* 2013;55(3):851-860.
- 156. Poh Li L, Jaladin RAM, Abdullah HS. Understanding the two sides of online counseling and their ethical and legal ramifications. Procedia Soc Behav Sci. 2013;103(26):1243-1251.
- 157. Haberstroh S, Barney L, Foster N, Duffey T. The ethical and legal practice of online counseling and psychotherapy: a review of mental health professions. *J Technol Hum Serv.* 2014;32(3):149-157.
- 158. Hwang KO, Ning J, Trickey AW, Sciamanna CN. Website usage and weight loss in a free commercial online weight loss program: retrospective cohort study. J Med Internet Res. 2013;15(1):e11.
- 159. Serdar K, Kelly NR, Palmberg AA, et al. Comparing online and face-to-face dissonance-based eating disorder prevention. *Eat Disord*. 2014;22(3):244-260.
- 160. Titov N, Andrews G, Schwencke G. Treating social phobia online: replication and extension. Aust N Z J Psychiatry. 2008;42(7):595-605.
- 161. Diemer J, Mühlberger A, Pauli P, Zwanzger P. Virtual reality exposure in anxiety disorders: impact on psychophysiological reactivity. World J Biol Psychiatry. 2014;15(6):427-442.
- 162. Opriș D, Pintea S, García-Palacios A, et al. Virtual reality exposure therapy in anxiety disorders: a quantitative meta-analysis. *Depress* Anxiety. 2012;29(2):85-93.
- 163. David D, Matu S, David OA. New directions in virtual reality-based therapy for anxiety disorders. Int J Cogn Ther. 2013;6(2):114-137.
- Mo PKH, Coulson NS. Developing a model for online support group use, empowering processes and psychosocial outcomes for individuals living with HIV/AIDS. *Psychol Health.* 2012;27(4):445-459.
- Cohn MA, Pietrucha ME, Saslow LR, et al. An online positive affect skills intervention reduces depression in adults with type 2 diabetes. J Posit Psychol. 2014;9(6):523-534.
- 166. New Media Institute. History of the Internet. Available at https://www.newmedia.org/history-of-the-internet. Last accessed October 9, 2020.
- Pew Research Center. Social Media Update 2016. Available at https://www.pewinternet.org/2016/11/11/social-media-update-2016. Last accessed October 9, 2020.
- Zainudin ZN, Yusop YM. Cyber-Counseling: Is It Really New? Available at https://www.masree.info/wp-content/uploads/2019/11/ IRJES-2018-VOL-2-ISSUE-2-ARTICLE-4.pdf. Last accessed December 7, 2020.
- 169. Nguyen A, Mosadeghi S, Almario CV. Persistent digital divide in access to and use of the Internet as a resource for health information: results from a California population-based study. *Int J Med Inform.* 2017;103:49-54.
- 170. Amante DJ, Hogan TP, Pagoto SL, English TM, Lapane KL. Access to care and use of the internet to search for health information: results from the U.S. National Health Interview Survey. *JMIR*. 2015;17(4):e106.
- 171. Li J, Theng Y, Foo S. Predictors of online health information seeking behavior: changes between 2002 and 2012. *Health Informatics Journal*. 2016;22(4):804-814.
- 172. Todd C, Mueller J, Jay C, Harper S, Davies A, Vega J. Web use for symptom appraisal of physical health conditions: a systematic review. JMIR. 2017;19(6):e202.
- 173. Best P, Manktelow R, Taylor BJ. Social work and social media: online help-seeking and the mental well-being of adolescent males. Br J Soc Work. 2016;46(1):257-276.
- 174. Rauch J. The History of Online Therapy. Available at https://www.talkspace.com/blog/2017/07/history-online-therapy. Last accessed October 9, 2020.
- 175. World Health Organization. Telemedicine: Opportunities and Developments in Member States. Available at http://www.who.int/goe/ publications/goe_telemedicine_2010.pdf. Last accessed October 9, 2020.
- 176. Conell J, Bauer R, Glenn T, et al. Online information seeking by patients with bipolar disorder: results from an international multisite survey. *Int J Bipolar Disord*. 2016;4(1):1-14.
- 177. Salleh A, Hamzah R, Nordin N, Ghavifekr S, Joorabchi TN. Online counseling using email: a qualitative study. *Asia Pacific Education Review.* 2015;16(4):549-563.
- 178. Johnson SM. E-counselling: a review of practices and ethical considerations. Antistasis. 2017;7(1):38-47.
- 179. Stoll J, Müller JA, Trachsel M. Ethical issues in online psychotherapy: a narrative review. Front Psychiatry. 2020;10:993.
- 180. Stommel W, Van Der Houwen F. Counseling and new media technologies: a comparison of problem presentations in e-mail and in chat. *Commun Med.* 2015;12(2/3):243-256.
- 181. Griffiths KM, Carron-Arthur B, Reynolds J, Bennett K, Bennett A. User characteristics and usage of an open access moderated internet support group for depression and other mental disorders: a prospective study. *Internet Interv.* 2017;7:9-15.
- 182. Goldschmidt K. Tele-mental health for children: using videoconferencing for cognitive behavioral therapy (CBT). J Pediatr Nurs. 2016;31(6):742-744.
- 183. Kingsley A, Henning JA. Online and phone therapy: challenges and opportunities. J Individ Psychol. 2015;71(2):185-194.
- 184. Crum KI, Comer JS. Using synchronous videoconferencing to deliver family-based mental healthcare. J Child Adolesc Psychopharmacol. 2016;26(3):229-234.

- 185. Freeman D, Reeve S, Robinson A, et al. Virtual reality in the assessment, understanding, and treatment of mental health disorders. Psychol Med. 2017;47:2393-2400.
- Pietrabissa G, Manzoni GM, Algeri D, et al. Facebook use as access facilitator for consulting psychology. Aust Psychol. 2015;50(4):299-303.
- Parmar A, Sharma P. Smartphone apps based psychotherapy in India: potential benefits and pitfalls. Asian J Psychiatr. 2016;21: 46-47.
- Donker T, Blankers M, Hedman E, Ljótsson B, Petrie K, Christensen H. Economic evaluations of Internet interventions for mental health: a systematic review. Psychol Med. 2015;45(16):3357-3376.
- Ross W. Web-based counseling: evaluating efficacy in light of ethical challenges and therapeutic advantages. Online Journal of Counseling & Education. 2016;5(2):35-49.
- 190. Shepler DK, Ho MA, Zoma PN, Bober CC, Dluzynski JL. Perceptions of the therapist in a virtual world: an exploratory analog study. *The Humanistic Psychologist.* 2016;44(2):164-176.
- 191. Morrison A. Online therapy: friend or foe for social work? New Social Worker. 2017;24(2):18-19.
- 192. Berger T. The therapeutic alliance in Internet interventions: a narrative review and suggestions for future research. *Psychother Res.* 2017;27(5):511-524.
- 193. Pflug J. Contextuality and computer-mediated communication: a cross cultural comparison. Comput Human Behav. 2016;56:375.
- 194. D, Kroumova M. Cross-cultural communication patterns in computer mediated communication. Journal of International Education Research. 2015;11(1):1-6.
- 195. Pew Research Center. Internet/Broadband Fact Sheet. Available at https://www.pewinternet.org/fact-sheet/internet-broadband. Last accessed October 9, 2020.
- 196. Krasnova H, Veltri NF, Eling N, Buxmann P. Why men and women continue to use social networking sites: the role of gender differences. *Journal of Strategic Information Systems*. 2017;26(4):261-284.
- 197. Swenson JE, Smothermon J, Rosenblad SR, Chalmers B. The future is here: ethical practices of telemental health. *Journal of Psychology* and Christianity. 2016;35(4):310-319.
- 198. Murphy JM, Pomerantz AM. Informed consent: an adaptable question format for telepsychology. *Prof Psychol Res Pr.* 2016;47(5):330-339.
- 199. Ross KM, Wing RR. Implementation of an internet weight loss program in a worksite setting. J Obes. 2016;2016:1-7.
- 200. Aardoom JJ, Dingemans AE, Fokkema M, Spinhoven P, Van Furth EF. Moderators of change in an Internet-based intervention for eating disorders with different levels of therapist support: what works for whom? *Behav Res Ther.* 2017;89:66-74.
- 201. Silfvernagel K, Wassermann C, Andersson G. Individually tailored internet-based cognitive behavioural therapy for young adults with anxiety disorders: a pilot effectiveness study. *Internet Interv.* 2017;8(C): 48-52.
- Kim HE, Hong YJ, Kim MK, Jung YH, Kyeong S, Kim JJ. Effectiveness of self-training using the mobile-based virtual reality program in patients with social anxiety disorder. Comput Human Behav. 2017;73:614-619.
- Willis E. Patients' self-efficacy within online health communities: facilitating chronic disease self-management behaviors through peer education. *Health Commun.* 2016;31(3):299-307.
- Smith KJ, Kuo S, Zgibor JC, et al. Cost effectiveness of an Internet-delivered lifestyle intervention in primary care patients with high cardiovascular risk. Prev Med. 2016;87:103-109.
- 205. Mulhauser G. Suitability of Counselling by Email: Is it For You? Available at https://counsellingresource.com/therapy/service/ suitability. Last accessed October 9, 2020.
- 206. Mallen MJ, Vogel DL. Introduction to the major contribution. The Counseling Psychologist. 2016;33(6):761-775.
- 207. World Health Organization. Telemedicine: Opportunities and Developments in Member States: Report on the Second Global Survey on eHealth. Available at https://www.who.int/goe/publications/goe_telemedicine_2010.pdf. Last accessed December 7, 2020.
- 208. Williams A, Farhall J, Fossey E, Thomas N. Internet-based interventions to support recovery and self-management: a scoping review of their use by mental health service users and providers together. BMC Psychiatry. 2019;19(1):1-16.
- Hu Y. Helping is healing: examining relationships between social support, intended audiences, and perceived benefits of mental health blogging. *Journal of Communication in Healthcare*. 2019;12(2):112-120.
- Fang L, Tarshis S, McInroy L, Mishna F. Undergraduate student experiences with text-based online counselling. British Journal of Social Work. 2018;48(6):1774-1790.
- Harrison L, Wright J. The experiences of person-centred counsellors working with suicidal clients online through the medium of text. British Journal of Guidance and Counselling. 2020;48(4):576-591.
- 212. Burke K. 107 Texting Statistics That Answer All Your Questions. Available at https://www.textrequest.com/blog/texting-statisticsanswer-questions. Last accessed December 7, 2020.
- 213. Dobrilova T. 35 Must-Know SMS Marketing Statistics in 2019. Available at https://techjury.net/stats-about/sms-marketing-statistics. Last accessed December 7, 2020.

- 214. Bechmann T, Sindahl TN, Wistoft J. Children's experiences texting with a child helpline. British Journal of Guidance and Counselling. 2020;48(2):51-262.
- 215. Nesmith A. Reaching young people through texting-based crisis counseling. Advances in Social Work. 2019;18(4):1147-1164.
- Karcher NR, Presser NR. Ethical and legal issues addressing the use of mobile health (mHealth) as an adjunct to psychotherapy. Ethics & Behavior. 2018;28(1):1-22.
- 217. Prescott J, Hanley T, Ujhelyi Gomez K. Why do young people use online forums for mental health and emotional support? Benefits and challenges. *British Journal of Guidance & Counselling.* 2019;47(3):317-327.
- 218. Smolenski DJ, Pruitt LD, Vuletic S, Luxton DD, Gahm G. Unobserved heterogeneity in response to treatment for depression through videoconference. *Psychiatric Rehabilitation Journal.* 2017;40(3):303-308.
- 219. Pompeo-Fargnoli A, Lapa A, Pellegrino C. Telemental health and student veterans: a practice perspective through voices from the field. Journal of Technology in Human Services. 2020;38(3):271-287.
- 220. van Rijn B, Cooper M, Chryssafidou E. Avatar-based counselling for young people within school counselling: qualitative analysis of client experience. *Counselling & Psychotherapy Research.* 2018;18(1):59-70.
- 221. Stephens JD, Yager AM, Allen J. Smartphone technology and text messaging for weight loss in young adults. *Journal of Cardiovascular* Nursing. 2017;32(1):39-46.
- 222. Racine N, Hartwick C, Collin-Vézina D, Madigan S. Telemental health for child trauma treatment during and post-COVID-19: limitations and considerations. *Child Abuse & Neglect.* 2020; [Epub ahead of print].
- 223. Beebe S. Practice note. Journal of Technology in Human Services. 2018;36(2/3):163-171.
- 224. Tirel M, Rozgonjuk D, Purre M, Elhai JD. When do people seek Internet counseling? Exploring the temporal patterns of initial submissions to online counseling services. *Journal of Technology in Human Services*. 2020;38(2):184-202.
- 225. Takahashi K, Oishi T, Shimada M. Is 😳 smiling? Cross-cultural study on recognition of emotion's emotion. Journal of Cross-Cultural Psychology. 2017;48(10):1578-1586.
- 226. Butterworth SE, Giuliano TA, White J, Cantu L, Fraser KC. Sender gender influences emoji interpretation in text messages. *Frontiers in Psychology*. 2019;10:784.
- 227. Mattison M. Informed consent agreements: standards of care for digital social work practices. *Journal of Social Work Education*. 2018;54(2):227-238.
- 228. Reamer FG. Ethical standards for social workers' use of technology: emerging consensus. *Journal of Social Work Values and Ethics*. 2018;15(2):71-80.
- 229. National Association of Social Workers. Code of Ethics. Available at https://www.socialworkers.org/About/Ethics/Code-of-Ethics/ Code-of-Ethics-English. Last accessed December 7, 2020.
- 230. Matsushita Y, Mai TT, Thuy PTP, Takahashi T, Yokoyama T. P161 effectiveness of a lifestyle-related diseases prevention program based on the internet-based cognitive behavior therapy. *Journal of Nutrition Education and Behavior*. 2019;51(7):S105.
- 231. Mehta S, Peynenburg VA, Hadjistavropoulos HD. Internet-delivered cognitive behaviour therapy for chronic health conditions: a systematic review and meta-analysis. *Journal of Behavioral Medicine*. 2019;42(2):169-187.
- 232. Kelson J, Rollin A, Ridout B, Campbell A. Internet-delivered acceptance and commitment therapy for anxiety treatment: systematic review. *Journal of Medical Internet Research*. 2019;21(1):e12530.
- 233. Stjerneklar S, Hougaard E, McLellan LF, Thastum M. A randomized controlled trial examining the efficacy of an internet-based cognitive behavioral therapy program for adolescents with anxiety disorders. *PloS One.* 2019;14(9):e0222485.
- 234. Webster P. World report: virtual health care in the era of COVID-19. Lancet. 2020;395(10231):1180-1181.