Digital Technology and Domestic Violence

HOW TO RECEIVE CREDIT

- Read the enclosed course.
- Complete the questions at the end of the course.
- Return your completed Evaluation to NetCE by mail or fax, or complete online at www.NetCE.com. (If you are a physician, behavioral health professional, or Florida nurse, please return the included Answer Sheet/Evaluation.) Your postmark or facsimile date will be used as your completion date.
- Receive your Certificate(s) of Completion by mail, fax, or email.

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 post-doctoral 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. (A complete biography appears at the end of this course.)

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

Division Planners
John M. Leonard, MD
Mary Franks, MSN, APRN, FNP-C
Margaret Donohue, PhD

Senior Director of Development and Academic Affairs
Sarah Campbell

Division Planners/Director Disclosure
The division planners and director have disclosed no relevant financial relationship with any product manufacturer or service provider mentioned.

Audience
This course is designed for physicians, nurses, social workers, and mental health counselors and therapists in contact with victims of domestic violence.

Accreditations & Approvals
JOINTLY ACCREDITED PROVIDER™ INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, NetCE is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

As a Jointly Accredited Organization, NetCE is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. Regulatory boards are the final authority on courses accepted for continuing education credit.

NetCE has been approved by NBCC as an Approved Continuing Education Provider, ACEP No. 6361. Programs that do not qualify for NBCC credit are clearly identified. NetCE is solely responsible for all aspects of the programs.

This course, Digital Technology and Domestic Violence, Approval #07012022-37, provided by NetCE, is approved for continuing education by the New Jersey Social Work Continuing Education Approval Collaborative, which is administered by NASW-NJ. CE Approval Collaborative Approval Period: September 1, 2022 through August 31, 2024. New Jersey social workers will receive 3 Clinical CE credits for participating in this course.

NetCE is recognized by the New York State Education Department's State Board for Social Work as an approved provider of continuing education for licensed social workers #SW-0033.

This course is considered self-study, as defined by the New York State Board for Social Work. Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of licensed master social work and licensed clinical social work in New York. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice for an LMSW and LCSW. A licensee who practices beyond the authorized scope of practice could be charged with unprofessional conduct under the Education Law and Regents Rules.

NetCE is recognized by the New York State Education Department's State Board for Mental Health Practitioners as an approved provider of continuing education for licensed mental health counselors. #MHC-0021.

A complete Works Cited list begins on page 24.

Mention of commercial products does not indicate endorsement.

This course is considered self-study by the New York State Board of Mental Health Counseling.

NetCE is recognized by the New York State Education Department's State Board for Mental Health Practitioners as an approved provider of continuing education for licensed marriage and family therapists. #MFT-0015.

This course is considered self-study by the New York State Board of Marriage and Family Therapy.

Designations of Credit

NetCE designates this enduring material for a maximum of 3 *AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 3 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit. Completion of this course constitutes permission to share the completion data with ACCME.

Successful completion of this CME activity, which includes participation in the evaluation component, enables the learner to earn credit toward the CME and Self-Assessment requirements of the American Board of Surgery's Continuous Certification program. It is the CME activity provider's responsibility to submit learner completion information to ACCME for the purpose of granting ABS credit.

Successful completion of this CME activity, which includes participation in the activity with individual assessments of the participant and feedback to the participant, enables the participant to earn 3 MOC points in the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABP MOC credit.

Through an agreement between the Accreditation Council for Continuing Medical Education and the Royal College of Physicians and Surgeons of Canada, medical practitioners participating in the Royal College MOC Program may record completion of accredited activities registered under the ACCME's "CME in Support of MOC" program in Section 3 of the Royal College's MOC Program.

NetCE designates this continuing education activity for 3 ANCC contact hours.

IPCE CREDIT™

This activity was planned by and for the healthcare team, and learners will receive 3 Interprofessional Continuing Education (IPCE) credits for learning and change.

NetCE designates this continuing education activity for 3.6 hours for Alabama nurses.

AACN Synergy CERP Category B.

Social workers completing this intermediate-to-advanced course receive 3 Clinical continuing education credits.

NetCE designates this continuing education activity for 2 NBCC clock hours.

Individual State Nursing Approvals

In addition to states that accept ANCC, NetCE is approved as a provider of continuing education in nursing by: Alabama, Provider #ABNP0353 (valid through 07/29/2025); Arkansas, Provider #50-2405; California, BRN Provider #CEP9784; California, LVN Provider #V10662; California, PT Provider #V10842; District of Columbia, Provider #50-2405; Florida, Provider #50-2405; Georgia, Provider #50-2405; Kentucky, Provider #7-0054 (valid through 12/31/2025); South Carolina, Provider #50-2405; West Virginia, RN and APRN Provider #50-2405.

Individual State Behavioral Health Approvals

In addition to states that accept ASWB, NetCE is approved as a provider of continuing education by the following state boards: Alabama State Board of Social Work Examiners, Provider #0515; Florida Board of Clinical Social Work, Marriage and Family Therapy and Mental Health, Provider #50-2405; Illinois Division of Professional Regulation for Social Workers, License #159.001094; Illinois Division of Professional Regulation for Licensed Professional and Clinical Counselors, License #197.000185; Illinois Division of Professional Regulation for Marriage and Family Therapists, License #168.000190.

Special Approval

This activity is designed to comply with the requirements of California Assembly Bill 1195, Cultural and Linguistic Competency, and California Assembly Bill 241, Implicit Bias.

About the Sponsor

The purpose of NetCE is to provide challenging curricula to assist healthcare professionals to raise their levels of expertise while fulfilling their continuing education requirements, thereby improving the quality of healthcare.

Our contributing faculty members have taken care to ensure that the information and recommendations are accurate and compatible with the standards generally accepted at the time of publication. The publisher disclaims any liability, loss or damage incurred as a consequence, directly or indirectly, of the use and application of any of the contents. Participants are cautioned about the potential risk of using limited knowledge when integrating new techniques into practice.

Disclosure Statement

It is the policy of NetCE not to accept commercial support. Furthermore, commercial interests are prohibited from distributing or providing access to this activity to learners.

Course Objective

Because power, intimidation, and control are key dimensions to abuse, both online and offline technologies have become new vehicles for abusers. Consequently, the purpose of this course is to increase health and mental healthcare providers' awareness of how Internet and digital technologies can place victims at risk so that they can better educate their patients.

Learning Objectives

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

1. Define domestic violence, intimate partner violence, dating violence, and the dynamics of abuse.
2. Describe the scope of Internet and digital technologies and electronic communications.
3. Analyze how Internet and digital technologies have been used to perpetrate intimate partner violence.
4. Discuss the role of digital technology in providing services to victims and survivors of intimate partner violence.
5. Identify interventions and educational measures targeted to victims of intimate partner violence affected by online abuse.
6. Discuss the role of interprofessional collaboration and practice in addressing intimate partner violence.

INTRODUCTION

In most jurisdictions in the United States, the term of "domestic violence" is used to describe intimate partner violence as well as family violence, such as child abuse [8]. The term "domestic violence" is broader and includes violence in a household against another member in that household [20]. Intimate partner violence (IPV) is characterized by a cluster of behaviors that an individual in an intimate relationship uses to control and maintain power over his or her partner [1]. These behaviors include physical, psychological, verbal, sexual, and economic/financial actions to threaten, assault, and ultimately control the victim. Power, intimidation, and control are key dimensions to abuse, and advances in online and offline technology offer a new arsenal of tools for abusers. Cell phones, video cameras, and global positioning systems (GPS) are examples of offline technologies domestic violence perpetrators may use to harass, intimidate, and locate victims. Perpetrators may call victims' cell phones or text message incessantly asking where they are, what they are doing, and who they are with. Abusers also utilize Internet tools like e-mail and social networking sites to threaten and intimidate. Technology-based IPV is often accompanied by offline violence, but there are instances where abusers simply use technology-based violence. In a study of adolescents 14 to 19 years of age, 17% used only some form of technology to engage in intimate partner violence [10]. Ultimately, in this new age of technology, abusers use these tools to create a sense of their omnipotence in order to control and demean their victims [9]. With the growing sophistication of technology, some scholars have observed that abuse can now emanate from a spaceless terrain [52]. The purpose of this course is to increase healthcare professionals' awareness of how Internet and digital technologies can place victims at risk, allowing for better patient education. Practitioners are encouraged to familiarize themselves with these new technologic tools, reformulate ways of thinking about safety planning, and consider about how to best educate the general public on how technology has changed the face of intimate partner violence.

DEFINITIONS OF DOMESTIC VIOLENCE AND INTIMATE PARTNER VIOLENCE

The World Health Organization (WHO) defines violence broadly to encompass a wide range of behaviors. The formal WHO definition is [2]:

> ...the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.

The WHO defines intimate partner violence as [63]:

> ...behaviour within an intimate relationship that causes physical, sexual, or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse, and controlling behaviours. This definition covers violence by both current and former spouses and partners.

TYPES OF INTIMATE PARTNER VIOLENCE			
Physical Abuse	**Psychologic Aggression**	**Sexual Abuse**	**Financial/Economic Abuse**
Kicking, punching, biting, slapping, strangling, choking, restraining, abandoning in unsafe places, burning with cigarettes, throwing acid, beating with fists, throwing objects, refusing to help when sick, stabbing, shooting	Intimidation, verbal abuse, humiliation, put-downs, ridiculing, control of victim's movement, stalking, threats, threatening to hurt victim's family and children, social isolation, ignoring needs or complaints, online stalking, accessing intimate partner's social media accounts or email without permission	Rape, forms of sexual assault such as forced masturbation, oral sex, sexual humiliation, groping, refusal to use contraceptives, coerced abortions, posting sexually explicit pictures of an intimate partner online, secretly recording sexual encounters, texting private sexual media	Withholding of money, refusing to allow victim to open bank account, placing all property in perpetrator's name, not allowing victim to work
Source: Compiled by Author			*Table 1*

In their definition of violence, the WHO utilizes the term "power" to communicate that abuse can go beyond physical acts of violence and includes behaviors that emanate from a power relationship, such as threats and intimidation, as well as acts of omission and neglect [2]. Furthermore, the concept of intentionality is used to convey that abuse does not necessarily mean that there is an intent to cause injury; a perpetrator may employ force with no intention of physically hurting or injuring the victim. However, the consequences of psychological, emotional, or financial abuse can have tremendous short- and long-term implications without being physically injuring [2].

Some have argued that the WHO definition is not always culturally specific. In India, IPV can involve other family members and not just an intimate partner [16]. Types of abuse or violence may also encompass behaviors that reflect the cultural norms. The abuse of infertile women or women who have not delivered any sons, for example, is common in India [16].

The U.S. Department of Justice defines domestic violence "as felony or misdemeanor crimes of violence committed by a current or former spouse or intimate partner of the victim, by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse or intimate partner" [11]. This definition has continued to use the term domestic violence, further evidence that the term is still used interchangeably with IPV. The Centers for Disease Control and Prevention (CDC) defines intimate partner violence as a continuum ranging from a single episode to ongoing episodes of abuse that may include physical violence, sexual violence, stalking, and psychological aggression used by one individual on another party within the context of an intimate relationship [3]. The perpetrator or victim can be male or female, and the abuse can be perpetrated within a current or former dating relationship or marital dyad or within a heterosexual or homosexual context. ***Table 1*** summarizes the types of abuse or violence that can occur.

In this course, the terms "abuser," "batterer," and "perpetrator." It is acknowledged that there are distinct differences and political ramifications in how terms used to describe IPV are utilized; however, it is beyond the scope of this curriculum to address this issue.

DYNAMICS OF INTIMATE PARTNER VIOLENCE: POWER AND CONTROL

Studies show that there appear to be two major patterns of IPV [2]. The first is a more severe type of abuse that encompasses multiple and various forms of abusive behaviors. In this classification, the abuse and violence escalates and the perpetrator increasingly attempts to control, monitor, and intimidate the victim. The second is a more moderate form of abuse whereby physical violence is occasionally perpetrated [2]. Some IPV victims do not experience any physical or sexual abuse for many years; rather, they regularly experience non-physical forms of abuse, such as emotional, psychological, social, and economic abuse [4]. The terms emotional and psychological abuse are often used interchangeably; however, they are distinct entities [4]. Emotional abuse consists of behaviors that are meant to gradually deteriorate the victim's dignity, self-respect, and self-worth. These behaviors might involve insults, put-downs, name-calling, and public humiliation. On the other hand, psychological abuse is meant to gradually diminish a victim's rational perceptions, to make one feel "crazy." The underlying intention in all types of abuse is power and control [4]. Although there is no consensus operational definition for the term "coercive control," most agree that it can exist without the use of physical or sexual violence. Continual monitoring and surveillance, mind games, and low-level threats can serve as an effective means for the perpetrator to control the victim [17; 38]. Rather, previous incidences of partner violence can result in the victim feeling threatened and intimidated [17; 51]. Jealousy, controlling behaviors, and threatening and sexually coercive behaviors result in a continual sense of fear and isolation in victims [38]. Understanding these dynamics provides a context in how technology can be used by perpetrators to reinforce power and control.

PREVALENCE OF INTIMATE PARTNER VIOLENCE

IPV knows no geographic boundaries. In a comprehensive systematic review and meta-analysis of studies conducted in low-, middle-, and high-income countries, researchers found an overall prevalence rate of 24.2% for any type of IPV experienced in the past year [77]. The lifetime prevalence of any type of IPV was 37.3%. Most victims of inter-relationship sexual violence are women who were assaulted by their male partners; 99% of perpetrators of rape against women are men [5]. As of 2011 in the United States, 9% of women have been raped by an intimate partner in their lifetime and an additional 16% have been subjected to other forms of sexual violence by a partner [5]. Approximately 0.5% of men have been raped by an intimate partner (predominantly by a male partner) in their lifetime and 9.5% experienced other forms of sexual violence [5]. In a 2024 systematic review focusing on IPV and immigrants in the United States, the authors noted that past-year IPV victimization rates ranged from 3.8% to 46.9% and lifetime rates ranged from 13.9% to 93% [79].

The prevalence of physical violence in relationships is high, and rates are similar among women and men. In a 2018 national survey study conducted by the CDC, 25% of women and 14% men reported having experienced severe physical violence by an intimate partner during their lifetime [45]. The lifetime prevalence of physical violence by an intimate partner is 31.5% among women, with about two-thirds of instances involving severe physical violence [5]. Physical violence by an intimate partner has been experienced by 27.5% of men in their lifetime, with about half of instances being acts of severe violence. However, the physical toll on women is typically more severe and with much greater consequences. Sexual, physical, emotional, and psychological abuse of women overlaps in many instances, and abuse (often ongoing) can escalate to accidental or intentional murder. Violence perpetrated by current or former boyfriends or husbands accounts for 40% to 70% of all female homicides each year [2].

Intimate partner violence affects all areas of life, including the workplace. In a quantitative survey study involving 32 different companies, more than half of the female respondents and one-quarter of the male respondents disclosed having experienced some form of intimate partner violence during their lifetime. Of these respondents, violence affected their work in terms of missed days, tardiness, and abuser visits to the workplace [53].

A 2024 study found a prevalence rate of 27% of psychological abuse/violence for the past year and a lifetime prevalence rate of 32.8% experienced by women [77]. In the United States, more than 43 million women and 38 million men report having experienced psychological aggression by an intimate partner in their lifetime [3]. One or more acts of psychological aggression by an intimate partner have been experienced by 47% of women and 46.5% of men in their lifetime [5]. This is not limited to the United States. In a study with 661 Portuguese college students, 75% of men and 72% women reported having experienced psychological abuse by a partner during their lifetime [54]. In addition, 9.25% of women and 2.5% of men have been stalked by an intimate partner or former intimate partner.

In societies/cultures rigidly bound by traditional gender roles, abuse of wives is often considered a husband's right. When women in these groups do not conform to social and cultural expectations, their husbands are expected to use violence to regain obedience and respect from their wives [2]. Not surprisingly, the rates of coercive control are higher among countries with low levels of gender equality [17]. Women in such societies/cultures often fear that if they seek help from the violence, they will be ostracized from their family and the community. Because their identities are bound to marriage, these women feel they have no choice but to tolerate the abuse [55]. Studies highlighted by the WHO show that intimate partner violence is highly prevalent in Nicaragua, Papua New Guinea, Turkey, Egypt, and Ethiopia. Acceptance of IPV may play a role. In Vietnam, for example, although the overall prevalence of acceptance of IPV had declined between 2006 and 2011 (from 65.1% to 36.1%), age and educational attainment influenced overall acceptance. For example, women who were younger and had lower educational attainment were more likely to condone IPV [56].

Many first, second, or later generations of individuals from these cultures living in the United States experience and/or perpetrate the violence typical of their society of origin. Throughout the world, when physical abuse occurs in a marriage, psychological aggression almost always occurs and sexual assault occurs in one-quarter to one-half of instances [2]. However, in many countries (including the United States) studies are not conducted and/or intimate partner violence is hidden or not reported out of fear. In the United States, the prevalence of intimate partner violence varies among various ethnic/racial groups (***Table 2***) [5].

DATING VIOLENCE

Dating violence is a distinct type of intimate partner violence, characterized by abusive behaviors that occur in a dating relationship. In a 2017 meta-analysis, the rate of physical dating violence among teens was 20%; the rate of sexual dating violence was 9% [57]. In a Midwestern study on adolescent health and welfare, researchers found that 35% of girls and 36% of boys disclosed being victims of physical violence in a dating relationship [6]. The study also found that 73% of girls and 66% of boys experienced psychological aggression in a dating relationship in high school. Additionally, 64% of girls and 45% of boys had engaged in verbal emotional abuse toward a dating partner. Up to 25% of girls and 14% of boys expressed that they had been sexually coerced in a teen dating relationship [6]. Research indicates that when dating violence starts during adolescence, t is likely to continue into young adulthood [60].

The term "digital dating abuse" has been used to describe the use of technology by abusers to victimize dating partners [58]. Other terms include cyber dating abuse, electronic aggression/violence/victimization/dating violence, and computer-mediated or communication-based teen dating violence/harassment/abuse/victimization [58]. Because adolescents are more likely to use technology, they are also more

PREVALENCE OF INTIMATE PARTNER VIOLENCE AMONG VARIOUS ETHNIC/RACIAL GROUPS—UNITED STATES, 2014						
Types of Violence	**Prevalence By Race**					
	Asian/Pacific Islander	**American Indian/Alaskan Native**	**Hispanic**	**Non-Hispanic Black**	**Non-Hispanic White**	**Multiracial**
Women raped by an intimate partner during their lifetime	NA	NA	6.2%	8.8%	9.6%	11.4%
Women experienced sexual violence other than rape by an intimate partner during their lifetime	NA	NA	9.9%	17.4%	17.1%	26.8%
Women experienced physical violence by an intimate partner during their lifetime	15.3%	51.7%	29.7%	41.2%	30.5%	51.3%
Men experienced physical violence by an intimate partner during their lifetime	11.5%	43%	27.1%	36.3%	26.6%	39.3%
NA: Data not available.						
Source: [5]						*Table 2*

likely to experience digital dating abuse compared with adults. In fact, teens are three times more likely to be a victim of digital partner abuse than adults [59]. A survey of sixth graders who have ever had a boyfriend/girlfriend found that approximately 15% reported perpetrating some form of cyber dating abuse [74]. A New England study on teen violence and abuse found that 26% of adolescents had been the victims of some form of cyber abuse in a dating relationship in the 12-month period before the study [7]. In a 2021 nationwide online survey study with 696 young adults, 76.1% of participants reported experiencing or perpetrating a form of digital dating abuse during their lifetime [100]. The average age of the start of digital dating abuse was 16 years of age, and the most common use of the digital technology was to control and monitor a partner. Girls were twice as likely as boys to experience sexual cyber abuse in a dating relationship. This was confirmed in a 2020 study that found being female, being older, endorsing traditional gender stereotypes, and having observed fathers' controlling behaviors predicted adolescent perpetration of digital monitoring behaviors [75].

Teen cyber abuse victims are also likely (84%) to experience in-person psychological dating abuse, and a large proportion experience violence and sexual abuse in the dating relationship [7]. Cyber abuse perpetrators are often perpetrators of physical, sexual, and psychological aggression; 52% also perpetrate psychological dating abuse, 55% perpetrate physical dating violence, and 11% perpetrate sexual coercion [7]. This study found that all forms of teen dating abuse are common, but not as common as in the previous study. It is unclear if there is a regional pattern to dating violence, or if study design accounts for the variations; the Midwestern study's sample size was significantly smaller. Generally, digital- or technology-facilitated dating violence increases during early adolescence and peaks at around 16 or 17 years of age, after which it levels off [101].

USE OF INTERNET AND ELECTRONIC TECHNOLOGIES

In order to understand the pervasive social, psychological, and cultural impact of the Internet on the lives of individuals, it is important to obtain a brief glimpse of Internet and digital technology usage and consumption. In 2018, 85.3% of American households had an Internet subscription, and in 2021, 77% of households in the U.S. had broadband Internet [76; 102]. Pew Internet Research Center reports that 89% of men and 88% of women 18 years of age and older use the Internet [76]. 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 (75%) [76].

There is no doubt that Internet technology has become a ubiquitous part of the American landscape. Although data published in the last several years is among the most current, the Internet landscape changes so rapidly that obtaining accurate data is nearly impossible.

CELL PHONE USE

Mobile devices are also an integral part of the fabric of individuals' lives. In 2019, individuals in the United States spent more time on their mobile devices than they did watching television. An adult will spend on average 2 hours and 55 minutes on their smartphone each day [78]. In 2020, 97% of Americans owned a cellphone of some kind, and 85% owned a smartphone [103]. Among adults 65 years of age and older, 61% own a smartphone [103]. An estimated 12% of adult Americans use smartphones rather than Internet-connected computers at home [61]. Overall, use of the smartphone for Internet access is correlated with being younger, non-White, and from lower income brackets [61]. The phone has become more than just a means to connect with other people. According to the Pew Internet and American Life Survey, 39% of adults in the United States, 70% of adolescents, and 72% of young adults (18 to 29 years of age) indicated that the phone is a way to deal with boredom [12]. In a focus group study of Australian adolescents and their use of cell phones, interesting themes emerged [13]. While it is not surprising they were attached to their cell phones, these adolescents expressed that the number of calls or texts they received on their cell phone was associated with how valued or loved they felt. When they could not use their cell phones, they felt disconnected. This speaks to how cell phones have become entrenched in individuals' social and personal lives.

Texting remains the most commonly used feature on the smartphone. The majority of people who own a smartphone (97%) have texted at least once [62]. On average, more than two-thirds of Americans check their texts 160 of more times per day [104]. Roughly the same proportion report sleeping with a cell phone by their bedside [104]. In general, adolescents are the largest consumers of text messaging on cell phones, and a Pew Internet survey showed that 38% of teens texted friends on a daily basis in 2008; this increased to 54% by 2009 [14]. As of 2015, 90% of teens with phones text every day [15]. Adolescents (14 to 17 years of age) who text frequently send and receive 30 to more than 100 texts daily [14;

15]. These texts are not only sent via telephones' text feature, but are shared through messaging apps such as Facebook Messenger, Snapchat, WhatsApp, or Telegram. In 2014, 88% of adolescents 13 to 17 years of age had their own cell phones or access to cell phones [15]. About 95% of teens with mobile web access go online at least once per day and about 25% say they are "constantly online."

SOCIAL NETWORKING

A huge number of individuals are using online social networking sites like Facebook, Instagram, Pinterest, Twitter, and Snapchat. In a 2019 survey, 74% of the research participants say they use Facebook on a daily basis [76]. As of 2021, an estimated 69% of Americans 18 years and older used Facebook, 81% used YouTube, 40% had an Instagram profile, 31% used Pinterest, 28% reported using LinkedIn, 25% used Snapchat, and 23% used Twitter (now X) [76]. Among adolescents 13 to 17 years of age, 71% report using more than one social networking site, with Facebook being the most popular, followed by Instagram [64].

People, and teens in particular, are sharing much more personal information online now than in the past, despite valid privacy and safety concerns. More than 90% of teens post their real name and photo online, and 82% post their birthdate [50]. Other personal information, such as the school they attend (71%), the city or town in which they live (71%), e-mail address (53%), and phone number (20%), are freely posted online by teens. Posting personal information online has been a growing trend; in 2006, only 2% of teens posted their phone number online compared with 20% in 2012 [50]. However, 60% of teen Facebook users keep their profiles private.

Parental supervision of Internet use is not as strict as one might think. According to one source, 20% of parents do not supervise their children's Internet use at all, 52% moderately supervise their use, and 71% stop supervision after age 14 [18]. This is in spite of the fact that 60% of 10 to 17 year olds have received an e-mail or instant message from a stranger (50% respond) and 20% have been sexually solicited online.

PATTERNS OF ELECTRONIC INTIMATE PARTNER VIOLENCE

A range of terminologies have been used to discuss intimate partner violence perpetrated through the use of electronic communications or digital technologies. The prefixes digital, Internet, cyber, online, technology-facilitated, electronic (or e-) have been used to refer to various devices [80]. A systematic review found 30 different terms employed across 33 different studies [81]. Further, there are conflicting and diverse definitions of intimate partner violence and which behaviors constitute abuse. The authors of the review settled on the term "cyber intimate partner victimization," defining it as "the intentional use of technology to abuse an intimate partner or an ex-intimate partner by implementing control and monitoring tactics, or by disseminating information, of a sexual nature or not, without consent. Moreover, these abusive behaviors, when they are known by the victim (e.g., when the geolocation is discovered), make her feel distressed, afraid, or preoccupied for her security" [81]. Nonetheless, it remains unclear if digital abuse and cyber intimate partner violence are extensions of offline, traditional IPV or if it represents a new form of intimate partner violence. The differing terminologies and definitions have made it difficult for researchers to employ standardization to allow comparison across studies. The lack of uniform definition and measurement has also yielded prevalence rates ranging from as low as 1% to as high as 78% [81].

The prefixes used to describe various technologies (e.g., cyber, digital, technology, electronic) are numerous, reflecting the ever-changing landscape of technology [105]. The terms after the prefixes (e.g., abuse, violence) further complicate the picture. Some researchers focus on specific forms of interpersonal violence, such as sexual, physical, or psychological, while others measure it more globally. It appears that technology tends to be used as an extension of existing in-person abuse and/or to facilitate abuse. The lack of consensus definitions and measurements creates a challenging environment

in which to compare this phenomenon across studies and to understand the prevalence and context, impact, and significance.

INTIMATE PARTNER VIOLENCE

It is difficult to assess the prevalence of IPV that has been perpetrated using some type of technology. Most available information regarding these behaviors is from small studies or extrapolated data. In a survey study with Australian adults, 51% reported having experienced technology-facilitated abuse during their lifetime [106]. In a survey study with 540 college students examining cyber aggression by an intimate partner, the authors cyber aggression as the use of texting and social networking and other forms of interactive technologies [69]. In this study, almost 75% reported experiencing at least one form of cyber aggression by an intimate partner in the past year. Another study of 339 college students found that 10% to 15% of participants had received repeated e-mails or text messages from a spouse, boy/girlfriend, or partner that were insulting, threatening, or harassing [19]. In a survey study involving 479 victims who had received services, 25% of the women reported having their Internet browser history monitored, 23.6% stated that they had received threatening e-mails repeatedly, and 18% indicated that someone had monitored their e-mails [21]. Intimate partner abuse perpetrated using technology may be just as dangerous as face-to-face abuse [65]. The online environment may promote less inhibition, and abusers may do things that they may not normally do in person. Furthermore, deleterious information disseminated via e-mail, websites, blogs, and social media is relatively permanent and widely available.

Sexual abuse by an intimate partner can also be facilitated by technology.

Technology can be the means to meet up with or lure a victim (e.g., an online dating site, chatroom, or social media platform) [80]. In a 2023 study, more women (28.8%) reported technology-facilitated sexual abuse compared with men (19%) [106]. Women were more likely to report someone taking a nude or sexual image of them without their consent or having received an unwelcome nude or sexual image compared with male participants. In cases of rape by proxy, the perpetrator posts messages online to arrange a third party to carry out the sexual assault. Sextortion refers to using technology to extort, blackmail, and coerce a victim to engage in sex acts. For example, the perpetrator might threaten posting a sexual photo of the victim online if the victim does not have sex with the perpetrator [80].

Perpetrators have employed cellphones, cameras, social networking sites, and video sharing to post humiliating public messages about victims; in addition, software may be used to hack passwords and/or to monitor, control, isolate, threaten, and humiliate current and former intimate partners [81; 82]. At times, abusers may take their victim's device. If a phone is purchased by the perpetrator and is in his/her name, the victim may be left without any recourse [82]. Other abusers create fake Facebook accounts and profiles to harass the victim [82].

DATING VIOLENCE

Dating violence has also been transformed in the cyberage. In a 2018 review of studies involving digital dating abuse, prevalence rates ranged from 6% to 73% [58]. In a 2023 systematic study with adolescents, the lifetime rate of experiences with technology-facilitated IPV were 2.3% to 6.7%; the rates were 32.2% to 58.3% for experiences within the last 12 months [107]. Much of the variation in these rates is a function of how digital dating abuse is defined and measured. In some studies, a positive response to one item in a questionnaire constitutes digital dating abuse, while other instruments are multidimensional and encompass a range of aggressive behaviors. In a longitudinal study with 795 adolescents, half of the participants in the study reported having ever experienced technology-facilitated dating violence. About 31% indicated that they had perpetrated technology-facilitated dating violence. Both victimization and perpetration experiences only decreased slightly from 7th to 8th grade [108]. A separate study of high school students in the Midwest found that 53.8% disclosed being psychologically victimized in the form of digital monitoring and controlling [66]. For example, victims

reported to being pressured to respond quickly to their partners' calls and texts, having their contacts monitored, and being pressured to send sexually explicit messages or pictures ("sext"). In a large-scale survey study, with a random sample of approximately 4,400 children and adolescents between 11 and 18 years of age, the researchers found that 10% of the adolescents had a romantic partner who would not allow them to use their cell phone or computer [22]. Approximately 10.4% of the boys and 9.8% of the girls disclosed that they received a threatening message on their cell phone from their boy/girlfriend. Less than 10% stated their romantic partner posted embarrassing or humiliating information or photos in an online forum or via a cell phone. In a quantitative study with 703 high school students, teenage boys were more likely than girls to have perpetrated digital sexual abuse (including sexting, pressuring a partner to sext, and sending a photo or video of partner in a sexually compromising position) [83]. Girls were more likely to engage in cyber monitoring (e.g., stealing a password or hacking a partner's account, online impersonation, monitoring). For both genders, motivations behind the behaviors were reported as a joke, a fight, and/or being upset or angry.

Monitoring partners' text messages and social media accounts is relatively common, and jealousy is often exhibited in this manner [84]. In focus groups, adolescents report personally or vicariously (e.g., through a friend) accessing their partner's social media accounts and profiles. Some of these behaviors were made simpler through unsafe Internet practices such as sharing of passwords or not logging off properly. Sharing usernames and passwords was viewed as a sign of commitment, trust, and love [84]. A smaller study of adolescent dating violence victims uncovered patterns in technology use, particularly the use of cell phones to monitor victims' activities and who they were with [23]. Furthermore, threatening, insulting, or disparaging messages that were meant to humiliate or intimidate were regularly left on voicemail accounts. Some participants reported that their partners used social networking sites to post hurtful messages. One young woman reported that her boyfriend at the time posted messages that he never loved her but only used her for sex. Another woman's boyfriend had developed a website titled "I Hate [Participant's Name]" and invited others to post hurtful messages about her. Some abusers even controlled who the victim could interact with on social networking sites. Demanding that victims "unfriend" certain individuals on social networking site(s) was relatively common [24]. An emerging behavior involves tagging pictures posted on sites like Facebook and Instagram with insulting, shaming, or hurtful tags.

Sexual forms of digital dating abuse may include pressuring the victim to pose sexually and send the photos via e-mail or social network sites, forcing the victim to engage in sexual acts via the Internet, or sending sexually explicit photos to the victim regardless of how often the victim says he/she does not want to be the recipient of such messages [67]. Cyber dating violence behaviors include [85]:

- Posting hurtful, humiliating, private, or sensitive messages, videos and/or photos
- Continual monitoring of whereabouts
- Pressuring for sex or sexual content
- Sending unwanted sexual images
- Demanding passwords, deleted messages, friends, and contacts from social networking sites
- Preventing the use of electronic devices.

Other experts have categorized electronic dating violence into three different domains [109]:

- Electronic harassment: Using technology, such as texting and phoning, in order to intimidate and promote fear
- Electronic coercion: Employing technology to pressure a partner to share sexual videos, images, or messages
- Electronic monitoring: Reading text messages, listening to voicemail when asked not to, and demanding passwords in order to control and monitor a partner's movements and behaviors

Adolescents have reported the ease of perpetuating such behaviors. Furthermore, the ability to hide behind a screen afforded confidence to engage in cyber dating violence behaviors that they might not normally do offline [85].

CYBERSTALKING

In many IPV cases, stalking is an integral component of the abuser's arsenal of behaviors to intimidate the victim. Stalking is defined as repeated harassing, threatening, and/or intimidating behaviors used by an individual on another party [25]. Stalkers are often perceived as being unknown to the victim; however, this is often not the case. One study found that 60% of female stalking victims are stalked by an intimate partner, and 80% of women stalked by a current or former intimate partner are also physically assaulted by that partner [5]. A 2010 report to Congress published by the U.S. Department of Justice showed that 97% of stalking victims knew their stalker in some manner [48]. Specifically, 55% of the stalkers were a current or former intimate partner, 17% were an acquaintance, and 15% were a current or former dating partner [48]. In a study that examined the different types of stalking methods using technology, 78% of victims indicated that the abuser called or texted them to ridicule and harass and 56% reported their abuser used mobile technology to track their whereabouts [9].

Cyberstalking is a term coined to describe using computers or electronic communications to harass and intimidate. There is also an element of humiliation, particularly when tactics are intended to facilitate the victim's loss of control in the relationship. This is often a risk marker for danger or even lethality [110].

Harassers might use the following electronic communication methods to harass their victims [26; 68; 86]:

- Flooding the victim's e-mail box with e-mails so as to disrupt the ability to receive incoming e-mails
- Sending intimidating e-mail, texts, or instant messages
- Monitoring the victim's computer communications through the use of software programs such as spyware or keystroke logging programs
- Taking on the victim's identity to send false messages or to purchase goods on the Internet
- Using the Internet to obtain personal information about the victim
- Impersonating the victim through e-mail and social networking sites
- Sending unwanted sexual photos and/or videos to the victim
- Distributing sexual photos and/or videos of the victim without her/his consent

Generally, men and boys are more likely to cyberstalk by logging into their partners' e-mail and social media accounts [68]. A an online survey with 405 participants found that general controlling behaviors, being a woman, and having secondary psychopathology predicted intimate partner cyberstalking [87]. Unfortunately, the definitions for cyberstalking have not kept up with the changing technologies [110]. The laws for cyberstalking vary from state to state, and the laws often have a difficult time keeping up with technology.

HOW DIGITAL TECHNOLOGY IS USED BY PERPETRATORS

In general, Internet and electronic technology may be used by perpetrators to determine victims' plans and movements. If a victim is not technologically sophisticated, she or he can inadvertently provide more information than intended to the abuser. When IPV or dating violence is perpetrated using technology, victims may be pressured by their partners to share passwords, usernames, or pin codes as a symbol of love [67]. The spaceless nature of technology may make victims feel like they are hostages, even after they have left a partner. The sense

that a perpetrator is omnipresent and not able to be avoided creates continual fear and hypervigilance [111]. The following sections will explore specific ways technologic tools have been used by perpetrators of intimate partner violence to stalk, control, and abuse their victims.

SOCIAL NETWORKING SITES

Social networking is a form of online communication that is comprised of "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system" [27]. As noted, examples of social networking sites include Facebook, Instagram, LinkedIn, Google+, and Pinterest.

Although social networking sites have reduced geographic dispersion, connected family and friends with each other, and made the world "smaller," these sites can also be used by IPV perpetrators to track and locate victims and to inflict psychological abuse. Perpetrators can easily glean information from profiles, uploaded photos, and comments from others to make inferences about where the victim is located [111]. Some perpetrators learn about an ex-partner's new relationship and continue to send threatening messages [111]. Using such information, perpetrators can not only track a victim but can also send terrifying and abusive messages to continue the emotional and psychological abuse and reinforce the established dynamic of fear, power, and control; this is referred to as online obsessive relational intrusion [26; 69; 111]. Even if the victim does not have an account with a social networking site, perpetrators can trace family members, friends, work colleagues, and other individuals who may know the victim [9; 26]. This makes the victim feel that he or she is being monitored constantly [9]. Some abusers will contact employers and colleagues in an attempt to ruin the victim's reputation and credibility [70]. Many people, for example, are very detailed about where they work in their profiles, in part because they use these sites for networking purposes. Consequently, it is not inconceivable to envision a perpetrator showing up at the victim's workplace in order to obtain some personal information. Furthermore, abusers may create fake accounts and/or profiles in order to befriend a victim or the victim's family members and friends or block friends and family from the victim [26; 88; 111].

SPYWARE PROGRAMS

Abusers can monitor victims' activities online (e.g., websites visited, sent and received e-mails) by simply looking at browser histories and reading deleted e-mails [28]. Browser history refers to an archive of websites that are visited; the pages are usually organized chronologically. This history can be stored in the computer's memory, making it difficult to completely erase. Perpetrators can also access victims' e-mails by opening the "deleted" e-mail folder or by reviewing the "sent" folder.

With increasingly sophisticated and easily accessible software, hardware, and spyware programs, which are typically marketed for parents to monitor their children's Internet activity, abusers have additional tools to monitor and control victims' online activities. For example, abusers can install spyware (also referred to as malware or stalkware) on victims' computers and gain the ability to take screenshots of the computer, record passwords and personal identification codes, track websites visited, and record incoming and outgoing e-mails, text messages, and chats [30; 58; 70; 88]. Whenever the computer is used, e-mails reporting the computer activity are then sent to the abuser [26; 28]. Other abusers have used keystroke loggers, a hardware device that is plugged into the keyboard and the computer and records everything typed, including e-mails, passwords, and URLs [28]. Some perpetrators use tracking apps, GPS trackers, and location-based apps to monitor victims' whereabouts and movements [111]. Abusers give gifts to victims or children with secretly installed trackers [112].

E-MAILS AND TEXT MESSAGES

E-mail and text messaging are forms of electronic communication that involve sending messages over the Internet or cell phones. They are some of the most commonly used applications, allowing messages to be sent to another person or to a group of individuals rapidly, conveniently, and without incurring any long-distance charges [31]. One study with college students explored how Internet technology influenced intimate partner violence and what this abuse or violence might look like in the new age of cybertechnology [32]. Study participants were asked to provide an example of a form of intimate terrorism, defined as the use of a range of tactics, such as threats, intimidation, physical violence, and financial barriers, to control another person [33; 34]. Participants recounted partners who would go into online banking accounts and change banking records or go to the post office's website and redirect the victim's mail so the mail came to them. These actions can be accomplished with knowledge of the victim's username and password, information that allows access to almost every arena of the victim's life.

Those who send phishing emails are motivated to trick an individual to share private information. The emails look and sound authentic, and once a recipient clicks on a weblink, it will take them to a site that requires them to enter private information. Other phishing emails only require an individual to open a link and the perpetrator can take over the device [113]. In some cases, children are brought into the conflict. In a qualitative study, female IPV survivors recounted how the abuser would use their children to pressure the survivor to disclose passwords to the child who could then pass the information to the abuser [112]. These cyberabuse behaviors often exist among an array of other abusive behaviors [89].

Another form of intimate violence is minor violence or situational couple violence [33; 34]. Minor forms of violence that occur within a specific context and rarely escalate to severe violence fall under this category. Texting is one of the most common ways to intrude on the victim to mock, jeer, and/or humiliate them at any moment [111]. Other abusers monitored text messages on cell phones or reading incoming or outgoing text archives. Some victims reported that their abuser made them give up their devices in addition to giving them their passwords and usernames. Others were forced to have to "check in" with the abuser using their device(s) [88; 89]. Jealousy and the desire to control are the underlying motives of these behaviors. Even if a victim maintains a physical distance from an abusive situation, it can be difficult to maintain a psychological distance [9].

GPS AND WIRELESS VIDEO CAMERAS

GPS and wireless video cameras are now being used by perpetrators to control and monitor victims' movements [32; 111]. GPS may be used to track victims' exact positions, where abusers would then continually show up. Web cameras, extremely small devices that can be strategically installed by the abuser, have also been used to perpetrate abuse. The images are transmitted to a web page, where the perpetrator can watch every movement [30; 89]. Eventually, victims are paralyzed by fear and anxiety from being constantly watched [9].

PHONES AND FAX MACHINES

It is not uncommon for a victim of IPV to receive an inordinate number of harassing phone calls from the abuser. In some cases, the perpetrator will purchase prepaid cell phones or calling cards in order to eliminate any evidence linking the calls back to him or her [35]. Other abusers will monitor whom the victim has called by looking through bills, phone records, or the cell phone's internal record of incoming and outgoing calls [35]. Cell phones can also be utilized

as a form of eavesdropping [30]. It is not atypical for a jealous perpetrator to take their partner's cell phone without permission in order to read texts or listen to voice messages and delete them [111]. Settings may be manipulated in such a way that the phone does not ring but automatically answers, allowing the perpetrator to listen while the victim is unaware [30; 88; 89]. Depending on the phone's settings, it could also silently pick up sounds within certain proximity. Participants in a 2020 qualitative study reported their abuser's omnipresence invaded every dimension of their lives through the use of cell phones [90].

Faxes often include sender information (e.g., telephone number), and if faxes are used, this can aid the abuser in locating the victim [35]. Many of these "trace evidences" are taken for granted, but it may put victims' lives at-risk and/or minimize their chances of successfully leaving IPV situations.

DEEPFAKE TECHNOLOGIES

Deepfake technology employs artificial intelligence and facial mapping to produce real-life looking images or videos called deepfakes. With this technology, people can create video clips of individuals saying and doing fictional things [114]. Sexually explicit, nonconsensual deepfakes can be created and shared with others. Because this technology is readily available and easily learned, IPV perpetrators can create images of the victim that can have long-lasting deleterious effects. Victims often live in fear and anxiety of when the perpetrator will create another deepfake video and post it [114].

CHATROOMS AND BLOGS

A chatroom is a virtual community in which a group of individuals "dialogue" and share information with each other. Blogs, on the other hand, are analogous to website journals, with entries ranging from commentary and information about events to graphics or videos posted by an individual and viewed in chronologic order. Perpetrators might post lies about the victim in a chatroom, blog, or bulletin in order to humiliate the victim or encourage others to send humiliating e-mails or post degrading messages [36; 82]. Because it is difficult for information to be deleted, attempting to do so may result in retraumatization [70].

WEBSITES

With the many free software programs and online hosting platforms, it is easy for people to create their own websites. IPV perpetrators may create websites and post false information about victims or encourage others to harass the victim [35]. Similarly, there have been reports of perpetrators using websites as "tributes" to victims, with graphic details of fantasies and obsessions [36]. Abusers may post contact information and/or explicit images of the victim on pornography websites and encourage others to harass the victim or ask for sexual favors, also referred to as revenge porn [70].

Overall, the underlying themes of power, intimidation, and control are common denominators of intimate partner violence perpetrated both face-to-face and via online technology. However, the ease, relative speed, and public nature of aggression performed using Internet technologies present new problems in caring for victims of IPV. In this new Internet environment, individuals can respond immediately regardless of time or geographic distance. Similarly, individuals can easily make a private matter public and involve other parties who are not integral to the relationship [32].

The same technology that can make abuse constant and multifaceted can make help and services more easily accessible and diverse. However, victims have concerns that their abuser will know they have accessed online assistance due to the constant online surveillance [90].

INTERNET AND ELECTRONIC COMMUNICATION TOOLS: BENEFITS FOR VICTIMS

Although this course focuses on increasing practitioners' awareness of how technology can be used by abusers to harm victims of IPV, it is important to briefly review how the Internet and other forms of electronic technology have positively changed the landscape of the counseling, social service, mental health, and health arenas, particularly for victims of violence. In a study exploring how Internet technology was used by IPV organizations, seven types of direct online services were identified [37]:

- Online assessments of violent relationships
- Education targeted to survivors
- Information and referrals for IPV victims and survivors
- Direct e-mail services
- Online monitored chatrooms
- Online support groups
- Art and stories shared by survivors

Empowerment is a recurrent theme in the use of technology by IPV victims. First, victims are able to easily access information. Being able to easily retrieve information and communicate with practitioners using multiple communication vehicles can promote patient/client autonomy, increasing victims' sense of confidence, self-efficacy, and empowerment in terms of making decisions that promote their well-being and safety. For example, all 50 states have an IPV coalition, with a website for the public to access information about IPV, resources, shelters, and safety planning. Victims of intimate partner violence can also research information about restraining orders, shelters, and employment opportunities [35]. In a study by the Technology Safety Project of the Washington State Coalition Against Domestic Violence, a project designed to promote awareness of how technology can increase the risk of IPV, participants indicated that the Internet was an important tool when researching strategies to promote safety, allowing victims to play an active role in their own care [21; 39; 91]. Internet technology has also been used to provide education regarding general life skills for IPV victims, such as job training, money management, and practical survival skills. Victims have reported using the Internet to help search for housing, obtain assistance in creating a résumé, and enhance their skills in order to get a job [21]. Some of these services are offered in both real-time and non-real-time [115]. Internet technology may also be used to help raise awareness about IPV and to educate the public about intimate partner violence, how to obtain services, and how to protect oneself [71; 91; 115].

IPV victims often feel psychologically isolated, with overwhelming feelings of shame and worthlessness. They may also be physically isolated, given that abusers monitor victims' movements and/or restrict interaction with friends and family members. However, the Internet has opened opportunities for individuals to obtain social support. Online support groups, such as online self-help groups and discussion forums, can create communities for individuals to connect with each other based on common experiences. Victims and survivors of IPV share their stories in these online communities and through various Internet tools, including online social networking sites, video conferencing, and e-mail, to derive support from others with similar experiences [26; 116]. Victims may feel more empowered and able to open up regarding IPV experiences online due to the relative anonymity and lack of stigma [71; 72; 116].

Because IPV situations are intense and manifest as crises to victims, Internet and electronic technologies can quickly connect victims to helping professionals. For example, victims can e-mail their counselors to obtain support during crisis situations. Providers can also more readily provide victims with information about potential options and resources, instead of having to wait for office visits [36; 115].

For those who do not own or cannot safely use a cell phone, some organizations will provide disposable phones as part of the safety plan. Knowing that they have a cell phone available to call for help gave victims some semblance of control and safety [116]. In one research project, funds were provided for healthcare providers to use personal digital assistants (PDAs) to screen for abuse [40]. When the practitioner determined that an individual was at-risk, information was transmitted as quickly as possible to social workers to follow-up, mobilize resources, and electronically file mandatory reports of IPV [40]. Ultimately, this could improve the practitioner/patient relationship through the provision of more seamless services, which can increase patient satisfaction and reduce attrition.

Just as perpetrators of IPV can use electronic tools to harass their victims, victims can use technology to increase their sense of security. Victims may install cameras in their homes for additional security and in order to obtain evidence if the abuser is violating a restraining order. Data accumulated by mobile apps can detect IPV, and video cameras and audio recordings can quickly capture sounds and images for legal purposes [115]. Others use text messages as a way to let friends and family members know they may be in danger and to reach out for help [92]. On smartphones, victims can access recorders and video cameras to document abuse [92]. There are apps targeted to helping IPV victims such as myPlan and I-Decide to help individuals formulate safety plans [115; 116]. There are also apps to promote safety for IPV victims (Resources).

MyPlan has been examined empirically to assess its effectiveness in helping IPV survivors and even bystanders (e.g., friends, family members). One experimental study involved college/university student participants who were randomly assigned to the myPlan app or to a control group of a website with basic emergency safety planning strategies to support a friend [117]. The participants were recruited based on a knowledge of a female friend who may be in an unsafe relationship and whom the participants were concerned about. The myPlan group had lower scores of decisional conflict and higher ratings of their own values and decisional preparedness compared with those in the control group. MyPlan has also been adapted to different cultures and low-income communities and countries. An experimental study randomly assigned 352 women in Kenya who were experiencing IPV to either an intervention group, which consisted of myPlan, or a control group, which consisted of referral to services [118]. The participants in the myPlan group reported greater safety preparedness immediately post-intervention compared with their control group counterparts. At three months, they reported an increased use of helpful safety strategies and felt they had the information to make better safety decisions. They also scored higher in resilience and helpfulness in safety strategies used compared with the control group [118].

Regardless of the tools used, it is always important for victims to remain vigilant regarding possible monitoring by their abusers. Victims who know or suspect that their online activities are being monitored should avoid visiting IPV sites or contacting triggering individuals unless an escape plan is in place.

REFORMULATING SAFETY PLANNING IN THE INTERNET AGE

Traditionally, safety planning has involved identifying practical approaches for lessening the risk of harm, including a plan of action if the victim decides to leave the abusive relationship such as having a bag packed with all the necessary documents; this is still advisable [73]. However, safety planning should also be supplemented with extra precautions that ensure victims understand how electronic communication tools can place them at risk and further steps to protect their safety. Practitioners serve a vital role in educating their patients or clients.

Many IPV organizations disseminate a message of fear in their communications about Internet safety [41]. Providers often suggest and may even pressure victims to disconnect themselves from their devices, change passwords/settings, and/or remove themselves from social networking sites [119]. However, this places the burden back on the victim and can result in further isolation and less access to existing support networks. It may also be associated with further escalation of the abuse [111]. Although fear can initially invoke safety behaviors, fear tactics tend to actually prevent the behavior that one is trying to promote over time. In other words, while a low amount of fear may not trigger any safety behaviors because individuals do not perceive the threat as real, employing a tremendous amount of fear in education and communications can also prove ineffective if individuals perceive there are no viable options to mitigate the fear. In these cases, victims may merely suppress the fear and not engage in any safety behavior [41]. As a result, practitioners must strike a balance in providing both education and support. The following precautions can promote technologic safety for victims and survivors of intimate partner violence [42; 43; 44; 70; 93; 113; 114]:

- Practitioners should encourage victims to Google themselves to see what personal information is available online.
- If a perpetrator is harassing the victim by cell phone, the practitioner should discuss with the victim potential reactions and responses the abuser may have to changing the phone number. Would this enrage the perpetrator and place the victim in further danger? If the same number is retained, should the phone company be contacted to track calls? If the victim eventually decides to take legal action, having an archive of text and voice messages could be beneficial.
- Practitioners should recommend that victims check account and privacy settings on social networking sites and ensure that the information on their profiles is private. Security settings may need to be adjusted. Explain to patients/clients how personal information posted about activities and schedules can be used by the abuser.
- Practitioners can review information about how to block contacts in social media.
- It is easy to believe computers and online accounts are secure when they are not. Victims should be reminded that their computers and phones are not secure. Using a public computer (e.g., at a library) is a safer option than accessing information from a personal computer or cell phone.
- Practitioners should recommend that victims clear browser histories, temporary Internet files from downloads, and saved passwords on online accounts every time they use a computer.
- Victims should be encouraged to keep their accounts password-protected.
- Victims should change their passwords and identification numbers frequently and avoid selecting passwords or numbers that perpetrators could easily guess (e.g., important dates, nicknames, relatives' names).
- Victims should avoid keeping all their passwords to their various accounts and devices in a single (especially written) location in the event record is stolen.
- Victims should be advised to always log out of e-mail, social network accounts, and other personal accounts when not in use.
- E-mail addresses should be similarly anonymous. If an e-mail address contains names or other common terms to the victim, the perpetrator will be more likely to figure it out.

- Victims may also be encouraged to set up multiple e-mail accounts. Incoming and outgoing e-mails that the victim does not necessarily want the abuser to see can be sent from one specific account accessed only from a public computer. Free e-mail accounts can be established through a variety of online hosts.
- When working with victims to make an escape plan, consider obtaining a donated cell phone for the victim to use instead of a personal one. An abuser can easily access personal phone records to view incoming and outgoing calls, potentially determining when and where the victim is planning to leave.
- Victims should be encouraged to enable two-step authentication for devices, bank accounts, and other accounts.
- Victims should employ camera covers on laptops and phones to block the camera when not in use.
- Victims should be encouraged to look into their health records, as many are electronically based. There are no guarantees about privacy and security.
- Education should be provided to victims detailing how software programs can be used to monitor computer activities. If a victim suspects such a program being used, he or she should not attempt to research the software or attempt to remove it, as this could be dangerous.
- To protect themselves from deepfakes, individuals should exercise caution providing or sharing photos or videos. They might further ask friends and family members avoid posting photos with images of the victim. Social media profiles may be made private.

Ultimately, it is important for practitioners to emphasize and implement a survivor-centered approach to safety planning. It is important to partner with survivors to discuss how they want to implement their specific safety plan [116]. Some may want to remove and disconnect themselves from online platforms while others will feel that online social support networks are important. Their input on how they want their data stored and used should be solicited. Providers should also avoid assuming that in-person services are optimal; some prefer services to provided online and non-real time because they feel it is safer and more convenient [116].

INTERVENTIONS AND EDUCATION

Many adults may be categorized as what is termed "digital immigrants," meaning they did not grow up in the digital world and are trying to learn and adapt to this new environment [46]. Digital immigrants may employ technology and acknowledge its importance for some tasks, but tend to be less familiar with its potential [47]. On the other hand, adolescents and young adults are generally considered "digital natives," as they were raised using digital technology and have no difficulty speaking about and utilizing new technologic mediums with ease and familiarity [46]. Digital natives tend to use technology for numerous tasks and adapt as the tools change [47]. It is likely that the majority of health and mental health practitioners fall into the category of "digital immigrants," and many patients/clients, particularly adolescents and young adults, are "digital natives." Consequently, practitioners must quickly build their knowledge of new technology and how it is being used by their potentially younger patients or clients [47]. Unfortunately, this includes the need to understand how Internet technologies are being used to perpetuate abuse.

In order for practitioners to effectively educate patients/clients about the role of technology in intimate partner violence, they must understand the capacity of available programs and applications. Fortunately, there is a tremendous amount of information available online (***Resources***). These resources can be used to obtain a foundational knowledge in order to more effectively educate patients and clients.

Organizations and facilities share some responsibility in training professionals to become more computer and Internet savvy in general, especially in educating practitioners in how intimate partners can use the Internet and other forms of electronic communications to threaten, abuse, and intimidate their victims. It is important to identify cyberstalking and cyberabuse as crimes and respond accordingly, providing immediate services to protect victims [48]. When victims indicate that they feel they are being watched or that an abuser appears to know every movement made by the victim, practitioners should acknowledge and validate the experience [48].

To address the emotional turmoil and fear that victims of intimate partner violence experience, a variety of interventions can be offered [48]:

- Crisis intervention and emotional support
- Review and formulation of safety plans (both traditional IPV safety plans and plans that include Internet and electronic communications safety)
- Assessment of victims' level of risk as well as their children's safety
- Advising victims to keep logs and copies of threatening e-mails, phone calls, chatroom postings, etc.

Community partnerships are vital, as it is often impossible for one organization or agency to provide multilevel services to meet all the needs of victims [48]. If Internet/technologic safety is an issue, collaborations with technology experts, legal professionals familiar with laws pertaining to stalking (particularly cyberstalking), and/or businesses that are willing to donate cell phones to victims can all be valuable.

Practitioners should also familiarize themselves with the Violence Against Women Act (VAWA). VAWA, enacted in 1994 and reauthorized in 2000, 2005, 2013, and 2021, was the first federal legislation that addressed IPV and other forms of violence against women. Since the first enactment, the legislation has been updated to touch on relevant issues such as privacy, the role of the Internet, and cyberstalking. Before anyone or any court can obtain private information, agencies funded by VAWA must make every reasonable effort to obtain permission and releases from victims [49]. Furthermore, VAWA restricts the online publication of filings for orders of protection as this could place victims at risk for discovery by perpetrators [49]. The 2005 reauthorization of VAWA updated stalking laws to reflect the use of Internet and electronic communications for the purposes of monitoring and harassing [49]. The 2013 reauthorization helped to ensure that services are available to persons of all sexual/gender identities, all races/ethnicities, college students, young adults, and immigrants [29]. The 2022 reauthorization provides additional funding for culturally specific services, housing services such as federally assisted housing for victims, and access to unemployment insurance [94]. Finally, the Stopping Harmful Image Exploitation and Limiting Distribution (SHIELD) Act was introduced as a bipartisan bill in 2019. The goal was to provide protections for victims of nonconsensual sexual imagery and set criminal penalties for offenders. It was not enacted, but it was added as an amendment to the VAWA [114; 120].

An ideal ecosystem for assisting and supporting victims of digital IPV should include professionals who have the knowledge and skills about how perpetrators use technology to control and monitor victims [121]. They should be able to explore with victims/survivors on how to handle the technologies to promote safety. Having the clinical skills to intervene in crisis and provide emotional support to enhance survivors' coping is equally vital to technology skills. Being familiar with the legal issues and having effective partnerships with local law enforcement and other resources is central to this ecosystem.

CULTURALLY SENSITIVE ASSESSMENT

During the assessment process, a practitioner must be open and sensitive to the client's/patient's worldview, cultural belief systems, and how he/she views the injury or situation. Professionals should be willing to acknowledge that they do not possess enough or adequate knowledge in health beliefs and practices among the different ethnic and cultural groups they come in contact with. Reading and becoming familiar with medical anthropology is a good first step. Culturally sensitive assessment involves a dynamic framework whereby the practitioner engages in a continual process of questioning. By incorporating cultural sensitivity into the assessment of individuals with a history of being victims or perpetrators of IPV, it may be possible to intervene and offer treatment more effectively.

INTERPROFESSIONAL COLLABORATION AND PRACTICE

IPV is a social problem that has been studied from multidisciplinary lenses, and practitioners often have to work with an interdisciplinary team to be effective. Interprofessional collaboration (IPC) is characterized as a process whereby multiple providers from different professional fields work together to provide comprehensive services to patients. However, this requires professionals to alter the way they practice—moving from working in a silo to working in a collaborative and trusting manner, sharing information, resources, and multiple perspectives to address complex problems. Efficiency, cost containment, and measurable outcomes are key to IPC. More coordinated responses and maximizing interprofessional collaboration would yield improved outcomes, including delivering more effective services that avoid retraumatization, improving system responses, protecting the victim, and effectively sanctioning the abuser [95].

The core features of IPC include sharing, interdependency, communication, and mutual trust and understanding. Professionals from different disciplines share their philosophies, values, perspectives, data, and the planning of interventions [96]. IPC also involves the sharing of roles, responsibilities, decision making, and power [97]. Everyone on the team employs their expertise, knowledge and skills, working collectively on a shared, patient-centered goal or outcome [97; 98]. Instead of working in autonomously, each team member's knowledge, expertise, and strengths are capitalized [96]. In order to share responsibilities, the differing roles and expertise are respected.

Although knowledge and skills sharing are often touted as imperative and valuable in IPC, it is challenging to implement. Division of responsibilities can result in blurred roles, because professionals have often been socialized in their training to operate autonomously [99]. Furthermore, definitions of IPV, screening and assessment practices, reporting requirements, and interventions vary in the different disciplines [99]. However, IPC is even more crucial when addressing technology-facilitated IPV. Including information technology experts and designers can add an important knowledge-sharing component.

CONCLUSION

Technology is a tool, and as with any tool, it can be used for positive means or abused to manipulate and exploit others. The solution is not to restrict access to technology but to educate consumers regarding its safe use. In addition to educating consumers, social service agencies, mental health organizations, and other helping organizations play a vital role in raising awareness among key stakeholders about how technology can be used by abusers to place IPV victims at risk. Furthermore, IPV advocates and practitioners can advocate for the formulation of new laws to protect victims of technology-based abuse. As more organizations use various forms

of Internet technologies as part of their models of service delivery, it has become vital to incorporate security systems to protect the privacy of patients and clients, particularly victims of abuse.

RESOURCES

Electronic Privacy Information Center
https://epic.org
Founded in 1994, this public interest research center focuses on emerging civil liberties and privacy issues. They address the impact of the Internet on privacy issues in the area of IPV, medical records, and civil liberties.

eSafetywomen
https://www.esafety.gov.au/women
An Australia-based site that provides excellent information on online safety.

Love is Respect
https://www.loveisrespect.org/personal-safety/safety-online
The mission of this organization is to educate and provide services to young people and parents about abusive relationships.

Microsoft Safety and Security Center
https://www.microsoft.com/en-us/security

National Center for Victims of Crime
https://victimsofcrime.org

National Network to End Domestic Violence
https://nnedv.org/resource-library
https://nnedv.org/content/technology-safety

National Online Resource Center on Violence Against Women
Safety and Privacy in a Digital World
https://vawnet.org/sc/safety-privacy-digital-world
This special collection includes a categorized and annotated listing of selected articles, fact sheets, papers, reports, and other materials regarding the use of technology as it impacts and intersects with violence against women and children.

Privacy Rights Clearinghouse
https://privacyrights.org
Founded in 1992, this nonprofit consumer organization provides the general public with information about privacy and advocates for consumers.

Safety Net Project
https://www.techsafety.org

VAWnet
Tech Safety and Privacy for Survivors
https://vawnet.org/sc/considerations-advocates-and-organizations-serving-survivors-abuse
https://vawnet.org/sc/technology-assisted-abuse
Operated by the National Resource Center on Domestic violence, this is an online network targeted to violence against women that provides information and resources for professionals

Working to Halt Online Abuse (WHOA)
https://genderit.org/index.php/working-halt-online-abuse
Founded in 1997, this volunteer organization provides targeted education to the general public, victims, and professionals about online harassment.

SAFETY APPS
A variety of apps are available to promote the safety of users and prevent domestic or sexual violence.

National Network to End Domestic Violence Technology Safety App
https://techsafetyapp.org
This app contains information that can help someone identify technology-facilitated harassment, stalking, or abuse and includes tips on what can be done.

UrSafe
https://ursafe.com
This app has features that allow designated contacts or emergency services to be alerted. Users can also request contacts to follow or check in with them.

myPlan
https://www.myplanapp.org
A personalized safety planning app developed by John Hopkins University. The app provides educational information about healthy relationships and referrals for services, resources, and support. There are also interactive assessments for danger, red flags for unhealthy relationships, and a personalized safety plan generated based on an algorithm.

Noonlight
https://www.noonlight.com/noonlight-app
This app allows an individual to call for help without having to take out the phone. When the large red button is touched, local emergency services are notified. It is also location enabled so help can be dispatched without the victim needing to provide their location.

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 can further exacerbate these existing disadvantages.

Interventions or strategies designed to reduce implicit bias may be categorized as change-based or control-based. 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.

FACULTY BIOGRAPHY

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 post-doctoral 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.

Works Cited

1. Ganley AL, Schecter S. *Domestic Violence: A National Curriculum for Children's Protective Services*. San Francisco, CA: Family Violence Prevention Fund; 1996.
2. World Health Organization. World Report on Violence and Health. Available at http://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf. Last accessed March 2, 2024.
3. Centers for Disease Control and Prevention. Preventing Intimate Partner Violence. Available at https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html. Last accessed March 2, 2024.
4. Outlaw M. No one type of intimate partner abuse: exploring physical and non-physical abuse among intimate partners. *J Fam Violence*. 2009;24(4):263-272.
5. Breiding MJ, Smith SG, Basile KC, Walters ML, Chen J, Merrick MT. Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—national intimate partner and sexual violence survey, United States, 2011. *MMWR*. 2014;63(8):1-18.
6. Espelage DL, Low SK, Anderson C, De La Ru L. Bullying, Sexual, and Dating Violence Trajectories From Early to Late Adolescence. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/246830.pdf. Last accessed March 14, 2024.
7. Zweig JM, Dank M, Lachman P, Yahner J. Technology, Teen Dating Violence and Abuse, and Bullying. Available at https://www.ncjrs.gov/pdffiles1/nij/grants/243296.pdf. Last accessed March 14, 2024.
8. Barocas B, Emery D, Mills L. Changing the domestic violence narrative: aligning definitions and standards. *J Fam Violence*. 2016;31(8):941-947.
9. Woodlock D. The abuse of technology in domestic violence and stalking. *Violence Against Women*. 2017;23(5):584-602.
10. Korchmaros JD, Ybarra ML, Langhinrichsen-Rohling J, Boyd D, Lenhart A. Perpetration of teen dating violence in a networked society. *Cyberpsychology, Behavior and Social Networking*. 2013;16(8):561-567.
11. U.S. Department of Justice. Domestic Violence. Available at https://www.justice.gov/ovw/domestic-violence. Last accessed March 2, 2024.
12. Lenhart A. Adult Attitudes Towards the Cell Phone. Available at https://www.pewresearch.org/internet/2010/09/02/part-three-adult-attitudes-towards-the-cell-phone. Last accessed March 14, 2024.
13. Walsh SP, White KM, Young RM. Over-connected? A qualitative phenomenon of the relationship between Australian youths and their mobile phones. *J Adolesc*. 2008;31(1):77-92.
14. Lenhart A, Ling R, Campbell S, Purcell K. Teens and Mobile Phones. Available at https://www.pewresearch.org/internet/2010/04/20/teens-and-mobile-phones. Last accessed March 14, 2024.
15. World Health Organization. Understanding and Addressing Violence Against Women. Available at https://www.who.int/publications/i/item/WHO-RHR-12.35. Last accessed May 11, 2024.
16. Kalokhe AS, Potdar RR, Stephenson R, et al. How well does the World Health Organization definition of domestic violence work for India? *PLoS One*. 2015;10(3):1-16.
17. Nevala S. Coercive control and its impact on intimate partner violence through the lens of an EU-wide survey on violence against women. *J Interpers Violence*. 2017;32(12):1792-1820.
18. San Diego County District Attorney. Protecting Children Online. Available at https://www.sdcda.org/preventing/protecting-children-online. Last accessed March 14, 2024.
19. Finn J. A survey of online harassment at a university campus. *J Interpers Violence*. 2004;19(4):468-483.
20. Moorer O. Intimate Partner Violence vs. Domestic Violence. Available at https://ywcaspokane.org/what-is-intimate-partner-domestic-violence. Last accessed May 17, 2024.
21. Finn J, Atkinson T. Promoting the safe and strategic use of technology for victims of intimate partner violence: evaluation of the technology safety project. *J Fam Violence*. 2009;24(1):53-59.
22. Hinduja S, Patchin JW. Cyberbullying Research Summary: Bullying, Cyberbullying, and Sexual Orientation. Available at https://cyberbullying.org/cyberbullying_sexual_orientation_fact_sheet.pdf. Last accessed March 14, 2024.
23. Draucker CB, Martsolf DS. The role of electronic communication technology in adolescent dating violence. *J Child Adolesc Psychiatr Nurs*. 2010;23(3):133-142.
24. Gatti J. 2009 AP-MTV Digital Abuse Study Executive Summary. Available at http://www.athinline.org/MTV-AP_Digital_Abuse_Study_Executive_Summary.pdf. Last accessed March 14, 2024.
25. Privacy Rights Clearinghouse. Online Harassment and Cyberstalking. Available at https://www.privacyrights.org/consumer-guides/online-harassment-cyberstalking. Last accessed March 14, 2024.
26. Baughman LL. Friend request or foe? Confirming the misuse of Internet and social networking sites by domestic violence perpetrators. *Widener Law Journal*. 2010;19(3):933-966.
27. Boyd DM, Ellison NB. Social networking sites: definition, history and scholarship. *J Comput Mediat Commun*. 2007;13(1):210-230.
28. Southworth C, Finn J, Dawson S, Fraser C, Tucker S. Intimate partner violence, technology, and stalking. *Violence Against Women*. 2007;13(8):842-856.

29. U.S. Congress. The Violence Against Women Reauthorization Act of 2013. Available at https://www.govinfo.gov/content/pkg/PLAW-113publ4/pdf/PLAW-113publ4.pdf. Last accessed March 14, 2024.
30. Kranz AL, Nakamura K. Helpful or Harmful? How Innovative Communication Technology Affects Survivors of Intimate Violence. Available at https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=f2df923b800f71b1690d97bc381fa9b721d516ba. Last accessed March 14, 2024.
31. Guterman JT, Kirk MA. Mental health counselors and the Internet. *J Ment Health Couns*. 1999;21(4):309-325.
32. Melander LA. College students' perceptions of intimate partner cyber harassment. *CyberPsychol Behav Soc Netw*. 2010;13(3): 263-268.
33. Johnson MP. Patriarchal terrorism and common couple violence: two forms of violence against women. *J Marriage Fam*. 1995;57(2):283-294.
34. Johnson MP. Conflict and control: gender symmetry and asymmetry in domestic violence. *Violence Against Women*. 2006;12(11): 1003-1018.
35. Southworth C, Dawson S, Fraser C, Tucker S. A High-Tech Twist on Abuse: Technology, Intimate Partner Stalking, and Advocacy. Available at https://vawnet.org/material/high-tech-twist-abuse-technology-intimate-partner-stalking-and-advocacy. Last accessed March 14, 2024.
36. Spence-Diehl E. Stalking and technology: the double-edged sword. *J Technol Hum Serv*. 2003;22(1):5-18.
37. Finn J. A survey of domestic violence organizations on the World Wide Web. *J Technol Hum Serv*. 2000;17(1):83-102.
38. Myhill A, Hohl K. The "golden thread:" coercive control and risk assessment for domestic violence. *Journal of Interpersonal Violence*. 2019;34(21-22):4477-4497.
39. Lo B, Parham L. The impact of Web 2.0 on the doctor-patient relationship. *J Law Med Ethics*. 2010;38(1):17-26.
40. Hawkins JW, Pearce CW, Skeith J, Dimitruk B, Roche R. Using technology to expedite screening and intervention for domestic abuse and neglect. *Pub Health Nurs*. 2009;26(1):58-69.
41. LaRose R, Rifon NJ, Enbody R. Promoting personal responsibility for Internet safety. *Commun ACM*. 2008;51(3):71-76.
42. Technology Safety. Online Privacy and Safety Tips. Available at https://www.techsafety.org/onlineprivacyandsafetytips. Last accessed March 14, 2024.
43. Technology Safety. Technology Safety Plan. Available at https://www.techsafety.org/resources-survivors/technology-safety-plan. Last accessed March 14, 2024.
44. Technology Safety. Who's Spying on Your Computer? Spyware, Surveillance, and Safety for Survivors. Available at https://vawnet.org/material/whos-spying-your-computer-spyware-surveillance-and-safety-survivors. Last accessed March 14, 2024.
45. Centers for Disease Control and Prevention. National Intimate Partner and Sexual Violence Survey: 2015 Data Brief—Updated Release. Available at https://www.cdc.gov/violenceprevention/pdf/2015data-brief508.pdf. Last accessed March 14, 2024.
46. Prensky M. Digital natives, digital immigrants. *On the Horizon*. 2001;9(5):1-6.
47. Herther NK. Digital natives and immigrants: what brain research tells us. *Online*. 2009;33(6):15-22.
48. U.S. Department of Justice. The Office on Violence Against Women's Grant Funds Used to Address Stalking: 2010 Report to Congress. Available at https://www.justice.gov/sites/default/files/ovw/legacy/2012/09/18/2010-stalking-rpt.pdf. Last accessed March 14, 2024.
49. Electronic Privacy Information Center. VAWA and Privacy. Available at https://epic.org/privacy/dv/vawa.html. Last accessed March 14, 2024.
50. Madden M, Lenhart A, Cortesi S, et al. Teens, Social Media, and Privacy. Available at https://www.pewresearch.org/internet/2013/05/21/teens-social-media-and-privacy. Last accessed March 14, 2024.
51. Candela K. Protecting the invisible victim: incorporating coercive control in domestic violence statutes. *Fam Court Rev*. 2016;54(1):112-125.
52. Marganski AJ, Melander LA, DeKeseredy WS. Single, repeat, and poly intimate partner violence victimization among women at a college campus: extending research through the inclusion of technology-facilitated violence and examining key social determinants for intimate partner violence prevention. *Violence Against Women*. 2022;28(12/13):3013-3036.
53. Blodgett C, Lanigan JD. The prevalence and consequences of intimate partner violence intrusion in the workplace. *J Aggress Maltreat Trauma*. 2018;27(1):15-34.
54. Começanha R, Basto-Pereira M, Maia Â. Clinically speaking, psychological abuse matters. *Compr Psychiatry*. 2017;73:120-126.
55. Tonsing JC. Domestic violence: intersection of culture, gender and context. *J Immigr Health*. 2016;18(2):442-446.
56. Trinh OT, Oh J, Choi S, To KG, Van Do D. Changes and socioeconomic factors associated with attitudes towards domestic violence among Vietnamese women aged 15 to 49: findings from the Multiple Indicator Cluster Surveys, 2006–2011. *Glob Health Action*. 2016;9.
57. Wincentak K, Connolly J, Card N. Teen dating violence: a meta-analytic review of prevalence rates. *Psychol Violence*. 2017;7(2):224-241.
58. Brown C, Hegarty K. Digital dating abuse measures: a critical review. *Aggress Violent Behav*. 2018;40:44-59.
59. Ybarra M, Price-Feeney M, Lenhart A, Zickuhr K. *Intimate Partner Digital Abuse*. New York, NY: Data and Society Research Institute, Center for Innovative Public Health Research; 2017.

60. Saint-Eloi Cadely H, Pittman JF, Pettit GS, et al. Classes of intimate partner violence from late adolescence to young adulthood. *Journal of Interpersonal Violence*. 2020;35(21/22):4419-4443.
61. Pew Research Center. Mobile Fact Sheet. Available at https://www.pewresearch.org/internet/fact-sheet/mobile. Last accessed March 14, 2024.
62. Pew Research Center. U.S. Smartphone Use in 2015. Available at https://www.pewresearch.org/internet/2015/04/01/us-smartphone-use-in-2015. Last accessed March 14, 2024.
63. World Health Organization. Intimate Partner Violence. Available at https://apps.who.int/violence-info/intimate-partner-violence. Last accessed May 17, 2024.
64. Pew Research Center. Teens, Social Media and Technology Overview 2015. Available at https://www.pewresearch.org/internet/2015/04/09/teens-social-media-technology-2015. Last accessed March 14, 2024.
65. Watkins LE, Maldonado RC, DiLillo D. The Cyber Aggression in Relationships Scale: a new multidimensional measure of technology-based intimate partner aggression. *Assessment*. 2016;25(5):608-626.
66. Reed LA, Tolman RM, Ward LM. Gender matters: experiences and consequences of digital dating abuse victimization in adolescent dating relationships. *J Adolesc*. 2017;59:79-89.
67. Van Ouytsel J, Walrave M, Ponnet K, Temple JR. Digital forms of dating violence: what school nurses need to know. *NASN Sch Nurse*. 2016;31(6):348-353.
68. Marcum C, Higgins G, Nicholson J. I'm watching you: cyberstalking behaviors of university students in romantic relationships. *Am J Crim Justice*. 2017;42(2):373-388.
69. Marganski A, Melander L. Intimate partner violence victimization in the cyber and real world: examining the extent of cyber aggression experiences and its association with in-person dating violence. *J Interpers Violence*. 2018;33(7):1071-1095.
70. Lee K, Anderson J. The Internet and intimate partner violence. *Crim Justice*. 2016;31(2):28-33.
71. Tarzia L, Iyer D, Thrower E, Hegarty K. "Technology doesn't judge you:" young Australian women's views on using the Internet and smartphones to address intimate partner violence. *J Technol Hum Serv*. 2017;35(3):199-218.
72. Bacchus LJ, Buller AM, Bullock L, et al. Infusing technology into perinatal home visitation in the United States for women experiencing intimate partner violence: exploring the interpretive flexibility of an mHealth intervention. *J Med Internet Res*. 2016;18(11):37-53.
73. Kahraman MS, Bell K. Safety planning: a vital preliminary step for professionals working with intimate partner violence victims. *BilişselDavranışçıPsikoterapi Araştırmalar Dergisi*. 2017;6(3):141-150.
74. Peskin MF, Markham CM, Shegog R, et al. Prevalence and correlates of the perpetration of cyber dating abuse among early adolescents. *Journal of Youth & Adolescence*. 2017;46(2):358-375.
75. Van Ouytsel J, Ponnet K, Walrave M. Cyber dating abuse: investigating digital monitoring behaviors among adolescents from a social learning perspective. *Journal of Interpersonal Violence*. 2020;35(23/24):5157-5178.
76. Pew Research Center. Internet/Broadband Fact Sheet. Available at https://www.pewresearch.org/internet/fact-sheet/internet-broadband. Last accessed March 3, 2024.
77. White SJ, Sin J, Sweeney A, et al. Global prevalence and mental health outcomes of intimate partner violence among women: a systematic review and meta-analysis. *Trauma, Violence, & Abuse*. 2024;25(1):494-511.
78. Wurmser Y. U.S. Time Spent with Mobile 2019: Smartphones Gain Minutes, But New Challengers Emerge. Available at https://www.emarketer.com/content/us-time-spent-with-mobile-2019. Last accessed March 14, 2024.
79. Morrison AM, Campbell JK, Sharpless L, Martin SL. Intimate partner violence and immigration in the United States: a systematic review. *Trauma, Violence, & Abuse*. 2024;25(1):846-861.
80. Henry N, Flynn A, Powell A. Technology-facilitated domestic and sexual violence: a review. *Violence Against Women*. 2020;26(15/16):1828-1854.
81. Fernet M, Lapierre A, Hébert M, Cousineau M-M. A systematic review of literature on cyber intimate partner victimization in adolescent girls and women. *Computers in Human Behavior*. 2019;100:11-25.
82. Freed D, Palmer J, Minchala D, Levy K, Ristenpart T, Dell N. "A stalker's paradise:" how intimate partner abusers exploit technology. *Human Factors in Computing Systems*. 2018;667:1-13.
83. Reed LA, Lawler SM, Cosgrove JM, Tolman RM, Ward LM. "It was a joke:" patterns in girls' and boys' self-reported motivations for digital dating abuse behaviors. *Children and Youth Services Review*. 2021;122:105883.
84. Van Ouytsel J, Walrave M, Ponnet K, Willems A, Van Dam M. Adolescents' perceptions of digital media's potential to elicit jealousy, conflict and monitoring behaviors within romantic relationships. *Cyberpsychology*. 2019;13(3):106-126.
85. Stonard KE. "Technology was designed for this:" adolescents' perceptions of the role and impact of the use of technology in cyber dating violence. *Computers in Human Behavior*. 2020;105:106211.
86. Duerksen KN, Woodin EM. Technological intimate partner violence: exploring technology-related perpetration factors and overlap with in-person intimate partner violence. *Computers in Human Behavior*. 2019;98:223-231.

87. March E, Litten V, Sullivan DH, Ward L. Somebody that I (used to) know: gender and dimensions of dark personality traits as predictors of intimate partner cyberstalking. *Personality and Individual Differences*. 2020;163:110084.

88. Hertlein KM, Eddy BP, Lancaster Strickland M. A framework for assessing technology-mediated IPV. *Journal of Couple & Relationship Therapy*. 2020;19(4):296-321.

89. Messinger AM, Birmingham RS, DeKeseredy WS. Perceptions of same-gender and different-gender intimate partner cyber-monitoring. *Journal of Interpersonal Violence*. 2021;36(7/8):NP4315-NP4335.

90. Woodlock D, McKenzie M, Western D, Harris B. Technology as a weapon in domestic violence: responding to digital coercive control. *Australian Social Work*. 2020;73(3):368-380.

91. Gray M, Kress V. Using apps to promote client safety: technology can play an important role in supporting survivors' safety, autonomy and empowerment as part of a trauma-informed counseling approach. *Counseling Today*. 2020;63(2):48-50.

92. Cardoso LF, Sorenson SB, Webb O, Landers S. Recent and emerging technologies: implications for women's safety. *Technology in Society*. 2019;58(3):101108.

93. Douglas H, Harris BA, Dragiewicz M. Technology-facilitated domestic and family violence: women's experiences. *British Journal of Criminology*. 2019;59(3):551-570.

94. National Network to End Domestic Violence. Violence Against Women Act. Available at https://nnedv.org/content/violence-against-women-act. Last accessed March 12, 2024.

95. Richards TN, Gover AR. Domestic violence offender treatment and multidisciplinary treatment teams: the role of "treatment" victim advocates. *International Journal of Offender Therapy and Comparative Criminology*. 2018;62(4):851-867.

96. D'Amour D, Oandasan I. Interprofessionality as the field of interprofessional practice and interprofessional education: an emerging concept. *Journal of Interprofessional Care*. 2015;5(Suppl 1):8-20.

97. Petri L. Concept analysis of interdisciplinary collaboration. *Nursing Forum*. 2010;45(2):73-82.

98. Lam AHY, Wong JTL, Ho ECM, Choi RYY, Fung MST. A concept analysis of interdisciplinary collaboration in mental healthcare. *COJ Nurse Healthcare*. 2017;1(2).

99. Jakobsen HF, Filstad C. Crossing knowledge boundaries in interprofessional collaborations. *Nordic Journal of Studies in Policing*. 2020;7:121-136.

100. Ellyson AM, Adhia A, Lyons VH, Rivara FP. Prevalence, age of initiation, and patterns of co-occurrence of digital dating abuse behaviors nationwide. *Children and Youth Services Review*. 2021;122:105921.

101. Thulin EJ, Zimmerman MA, Kusunoki Y, Kernsmith P, Smith-Darden J, Heinze JE. Electronic teen dating violence curves by age. *Journal of Youth & Adolescence*. 2022;51(1):45-61.

102. Martin M. Computer and Internet use in the United States, 2018. Available at https://www.census.gov/library/publications/2021/acs/acs-49.html. Last accessed May 17, 2024.

103. Pew Research Center. Mobile Fact Sheet. Available at https://www.pewresearch.org/internet/fact-sheet/mobile. Last accessed May 17, 2024.

104. Adavelli M, Ivanov I, Sheikh A. 35 Must-Know SMS Marketing Statistics in 2024. Available at https://techjury.net/blog/sms-marketing-statistics. Last accessed May 17, 2024.

105. Henry N, Flynn A, Powell A. Technology-facilitated domestic and sexual violence: a review. *Violence against Women*. 2020;26(15/16):1828-1854.

106. Powell A, Flynn A. Technology-facilitated abuse victimization: a gendered analysis in a representative survey of adults. *Feminist Criminology*. 2023;18(5):435-458.

107. Kim C, Ferraresso R. Examining technology-facilitated intimate partner violence: a systematic review of journal articles. *Trauma, Violence, & Abuse*. 2023;24(3):1325-1343.

108. Cutbush S, Williams J, Miller S, Gibbs D, Clinton-Sherrod M. Longitudinal patterns of electronic teen dating violence among middle school students. *Journal of Interpersonal Violence*. 2021;36(5/6):2506-2526.

109. Thulin EJ, Heinze JE, Kernsmith P, Smith-Darden J, Fleming PJ. Adolescent risk of dating violence and electronic dating abuse: a latent class analysis. *Journal of Youth and Adolescence*. 2021;50(12):2472-2486.

110. Messing J, Bagwell-Gray M, Brown ML, Kappas A, Durfee A. Intersections of stalking and technology-based abuse: emerging definitions, conceptualization, and measurement. *Journal of Family Violence*. 2020;35(2):1-12.

111. Afrouz R. The nature, patterns and consequences of technology-facilitated domestic abuse: a scoping review. *Trauma, Violence & Abuse*. 2023;24(2):913-927.

112. Dragiewicz M. "What's mum's password?" Australian mothers' perceptions of children's involvement in technology-facilitated coercive control. *Journal of Family Violence*. 2022;37(1):137-149.

113. New York State Office for the Prevention of Domestic Violence. Technology Safety for Survivors of Domestic and Sexual Violence. Available at https://opdv.ny.gov/system/files/documents/2021/10/technology-safety.pdf. Last accessed May 17, 2024.

114. Lucas KT. Deepfakes and domestic violence: perpetrating intimate partner abuse using video technology. *Victims & Offenders*. 2022;17(5):647-659.

115. Kouzani AZ. Technological innovations for tackling domestic violence. *IEEE Access*. 2023;11:91293-91311.

116. Storer HL, Scott CF, Rodriguez M, Nyerges EX. Technology is a "blessing and a curse:" the perceived risks and benefits of digital technology adoption at domestic violence organizations that serve teens. *Journal of Technology in Human Services*. 2023;41(1):96-124.

117. Bloom TL, Perrin N, Brown ML, et al. Concerned friends of intimate partner violence survivors: results from the myPlan randomized controlled trial on college campuses. *BMC Public Health*. 2023;23(1):1-11.

118. Decker MR, Wood SN, Hameeduddin H, et al. Safety decision-making and planning mobile app for intimate partner violence prevention and response: randomised controlled trial in Kenya. *BMJ Global Health*. 2020;5(7):e002091.

119. Williams SR, Afrouz R, Vassos S. Exploring rural and regional social workers' perceptions and practices of technology-facilitated domestic abuse. *Australian Social Work*. 2023;76(2):231-244.

120. Women's Media Center. SHIELD Act Would Be First Federal Law on Intimate Image Abuse. Available at https://womensmediacenter.com/news-features/shield-act-would-be-first-federal-law-on-intimate-image-abuse. Last accessed May 17, 2024.

121. Harkin D, Merkel R. Technology-based responses to technology-facilitated domestic and family violence: an overview of the limits and possibilities of tech-based "solution." *Violence Against Women*. 2023;29(3):648-670.