Virtual Support and Intimate Partner Violence Services: A Scoping Review

Stephanie L. Baird¹, Sarah Tarshis², Catherine Messenger¹, and Michaeline Falla¹

Abstract
Purpose: This article reports on a scoping review that maps the empirical research on virtual intimate partner violence (IPV) interventions.
Method: Following the Joanna Briggs Institute’s nine-step scoping review methodology, 25 studies were selected.
Results: The majority of the studies (72%) were published in the United States, and included quantitative (56%), mixed methods (24%), and qualitative study designs (20%). The most frequent focus of the virtual interventions to support survivors of IPV included safety (52%), with other interventions focusing mainly on treatment (36%), and education and prevention (12%). Forms of interventions included interactive, internet-based (72%), smartphone apps (16%), live videoconferencing (8%), and an asynchronous chatroom (4%). Barriers and strengths of virtual IPV interventions are identified.
Discussion: From this analysis, emerging models in virtual IPV intervention are identified, as well as next steps necessary in virtual IPV practice and research. The article concludes with implications for social work practice and research.

Keywords
virtual interventions, online support services, scoping review, intimate partner violence

Intimate partner violence (IPV) is a pervasive public health concern with devastating worldwide impacts (World Health Organization: WHO, 2017). IPV is defined as coercive control and emotional, psychological, physical, economic, and/or sexual violence by an intimate or dating partner (Centers for Disease Control: CDC, 2019; Smith et al., 2017; Stark, 2007). IPV remains a serious global health issue, disproportionately affecting women-identified people, with one in three women experiencing some form of violence by a partner in their lifetime (WHO, 2021). Incidents of IPV are known to increase during pandemics, epidemics, and economic recessions (Agüero, 2021; Moreira & Pinto da Costa, 2020; Roesch, Amin, Gupta, & García-Moreno, 2020). Due to the increased rates of IPV during the COVID-19 pandemic, IPV has been referred to as a pandemic, within a pandemic (Evans, Lindauer, & Farrell, 2020).

At various points during the COVID-19 pandemic and across regions and countries, incidents of IPV have doubled (Gosangi et al., 2021) and tripled (Allen-Ebrahimian, 2020) due to stay-at-home orders and confinement measures (WHO, 2020). During the first year of the pandemic, stay-at-home measures were enforced by over 140 countries worldwide, which forced many individuals experiencing IPV into lockdown with abusive partners (Hall & Tucker, 2020). While public health interventions including lockdowns, social isolation, and social distancing are intended to keep individuals and communities safe, they can have negative impacts on survivors of IPV (Buttell & Ferreira, 2020). Stay-at-home orders increase time at home with abusive partners and reduce contact with friends, family, and social supports, raising risks of relational conflict and violence (WHO, 2020). School closures further isolate survivors of IPV and their children by creating additional caregiving responsibilities and stress (e.g., supervising at-home learning) and increase the potential risk of children being exposed to violence at home (Kaukinen, 2020; Usher et al., 2021). The COVID-19 pandemic has also disrupted employment and ability to work, which can create financial strain and stress and exacerbate incidents of violence (Evans et al., 2020; WHO, 2020). Abusive partners may also use COVID-19 restrictions to further exert control over survivors of IPV to limit their contact with family, friends, and social supports (Moreira & Pinto da Costa, 2020).

The COVID-19 pandemic has also interfered with how survivors of IPV access support services. Previously, survivors of IPV were able to contact support organizations and...
receive in-person IPV services confidentially. Unfortunately, particularly at the beginning of the pandemic, many IPV organizations were forced to stop in-person services, leaving survivors of IPV to navigate their experiences with limited agency support (Goodman & Epstein, 2020). IPV service providers quickly harnessed technological and electronic resources and moved towards an online or telephone format to provide support (Evans et al., 2020; Slakoff, Aujla, & PenzeyMoog, 2020). Interestingly, as IPV agencies prepared for an increase in calls to their support hotlines during the early stages of the pandemic, many found a decrease of 50% in calls from survivors of IPV (Fielding, 2020). Under lockdown, contacting IPV service providers while home with abusive partners poses additional issues, as abusive partners may restrict and monitor phone calls, making it difficult to safely contact supports (Slakoff et al., 2020). For many service providers, these additional risks to survivors of IPV and the service challenges presented by the pandemic created a call to mobilize and innovate current technology-based strategies and internet-based services to enhance service provision (Emezue, 2020).

In the last decade, the use of virtual interventions (online, internet-based or web-based, smartphone applications [apps], email, teleconferencing) has increased as service providers have explored the utility of virtual services in their practice (Cotter, Bacallao, Smokowski, & Robertson, 2013; Spencer, Stith, & King, 2021). Given the growth of information and communication technologies (ICTs) transforming professional practice, virtual responses to IPV are necessary and timely (El Morr & Layal, 2020). Virtual communication between service providers and service users is becoming an added component of social work practice with increased use of email, text, and social media (Fang et al., 2013; Mishna, Sanders, Sewell, & Milne, 2021). Informal use of ICTs in practice is a reality among social workers and is also a support tool used among IPV survivors (Etherington, Baker, Ham, & Glasbeek, 2021). Krisvianti and Triastuti (2020) discuss the benefits of Facebook groups for women experiencing IPV in Indonesia. As a means to navigate the often-presenting barrier of social stigma and daily constraints on time, cost, and geography, survivors of IPV created their own supports through anonymous virtual Facebook communities (Krisvianti & Triastuti, 2020). These communities were found to provide knowledge, emotional support, and connection to those with a history of IPV experiences, thus decreasing isolation, fear, and shame associated with the IPV experience (Krisvianti & Triastuti, 2020). Similarly, Chu and colleagues (2021) found that a Chinese online community for IPV survivors provided a source of informal emotional support for participants.

More formal use of ICTs has also emerged with structured virtual interventions providing an added component to face-to-face services. Some service providers discuss the need to conceptualize virtual interventions that help address various stages of IPV (e.g., breaking free, moving on) (Rempel, Donelle, Hall, & Rodger, 2019). There are varying degrees of use of virtual interventions among different fields (e.g., social work, medicine, psychology), with the medical fields increasingly integrating digital resources and screening tools into IPV care (Anderson et al., 2019). However, there are gaps in understanding how various virtual interventions are utilized to support survivors of IPV after an experience of abuse, as well a need to establish best practices in this area (Slakoff et al., 2020).

The COVID-19 pandemic has undoubtedly brought on specific challenges in IPV service provision, which are essential to understand. Service providers require current research on virtual interventions to adequately support survivors of IPV in the many settings in which they seek support (e.g., shelter, counseling, health-focused, non-profit community settings). Since social workers are frequent providers of IPV services in a range of settings (Messing & Thaller, 2015), it is necessary to ensure they have access to the most up-to-date knowledge on empirically researched virtual IPV support interventions.

Database searches of Medline, Cochrane Database of Systematic Reviews, and Joanna Briggs Institute (JBI) Evidence Synthesis were conducted to show no current systematic or scoping reviews on virtual IPV support interventions. Earlier reviews in the area of virtual IPV responses were focused on screening and identification of IPV, particularly related to medical settings (Anderson et al., 2019; El Morr & Layal, 2020), or included grey literature rather than focusing only on empirical research (Rempel et al., 2019). In contrast, this scoping review aimed to identify empirical research on virtual IPV interventions providing support to survivors of IPV, rather than focusing on screening for IPV.

In response to the critical need to support survivors of IPV and to ensure that service providers are best equipped to provide virtual services, a scoping review provides an opportunity to summarize current empirical knowledge in this area. The objectives of this scoping review were to assess the extent of the research literature on virtual support interventions for survivors of IPV to provide an overview of research in this area, and to identify potential gaps to inform next steps in future practice and research in virtual IPV service provision. This scoping review sought to answer the following research questions: (1) What is the scope and nature of the research evidence in virtual IPV support interventions?; (2) What are the characteristics of research studies on virtual IPV support interventions?; and (3) What interventions and solutions can inform next steps in virtual IPV service provision?

**Method**

A scoping review methodology provides an opportunity to map the evidence in a certain area of study, offering a systematic overview of an area of knowledge (Colquhoun et al., 2014). As such, and in response to our research questions, our scoping review maps the scope, type, and gaps in evidence in the area of virtual IPV support interventions. This scoping
review followed the nine-step Joanna Briggs Institute (JBI) methodology (Peters et al., 2020), which is an extension of Arksey and O’Malley’s (2005) five-step scoping review process. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist was also followed (Tricco et al., 2018). In accordance with this process, a scoping review protocol was developed and published at figshare.com (https://doi.org/10.6084/m9.figshare.14772897.v1).

Identifying Relevant Studies

The search strategy was developed following an initial search of Medline and PsycINFO databases to identify related articles on this topic, which then informed the full search strategy, along with consultations with social science librarians and researchers. Databases searched included Medline, PsycINFO, Scopus, Social Services Abstracts, and Social Work Abstracts. The following key words were used for the search strategy: “virtual” OR “digital” OR “online” AND “intimate partner violence” OR “domestic violence” AND “intervention” OR “support.” The reference lists of all included sources of evidence were screened for additional studies, as were related journals (i.e., Journal of Interpersonal Violence; Violence Against Women). The research team consisted of two primary investigators (PIs) and two research assistants (RAs), who reviewed and extracted the studies and conducted analyses.

Study Selection

The inclusion and exclusion criteria were developed by the research team a priori. The inclusion criteria were: (1) mixed methods, qualitative, or quantitative study design; (2) written in English; (3) published from 2010 or later, due to how current this topic is; (4) focused on adults (age 18+) who have had an experience of IPV; and (5) published in a peer-reviewed journal. The exclusion criteria were studies that focused on: (1) couple relationships or families; (2) those who have perpetrated IPV; (3) service providers; and (4) IPV interventions that were not specifically related to supporting survivors of IPV following an experience of abuse (e.g., IPV training, IPV screening, IPV legal services).

Following the database searches, all identified citations were collated for review. Following a pilot test, titles and abstracts were screened by two independent reviewers for assessment against the inclusion criteria, with a third reviewer resolving any disagreements. Duplicates were removed and potentially relevant sources were retrieved in full and uploaded into Covidence systematic review software (Veritas Health Innovation, 2021) for review. The full text of selected citations was assessed in detail against the inclusion and exclusion criteria by two independent reviewers, with a third reviewer resolving any disagreements.

Data Extraction

A data extraction form was created and then piloted by two of the reviewers (Peters et al., 2020; Tricco et al., 2018). Data from the included scoping review papers were then extracted into this form by two separate reviewers. The data extraction form identified the lead author, journal, year of publication, field of study, country, study setting, study aim, methods, population, intervention type/focus, and study findings/results. A third research team member reviewed all data for consensus and resolved any disagreements between the two reviewers by consulting the fourth reviewer before making the final decision.

Results

A total of 2,479 articles were identified through database searches with 1,680 articles remaining after duplicate removal. After title and abstract review, 52 articles remained for full text review. There were 19 articles that met the full inclusion criteria with a further six articles identified from hand searching related journals and reviewing the reference lists of included studies, with the scoping review including a total of 25 peer-reviewed articles. Figure 1 presents a Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) flowchart of the search and screening process. In response to our research questions, we have examined the extent and state of the empirical research in this area, as described below.

Characteristics of Studies

The characteristics of the selected scoping review studies are summarized in Table 1 and a synthesis of the studies can be found in Table 2. Given our inclusion criteria, all articles were published in the last 11 years, beginning in 2010. However, there is a growing frequency of publications in recent years, with more than 75% of the articles published from 2015 to present (n = 19, 76%), including two articles in the first half of 2021 alone (January–June) (n = 2, 8%) (Bagwell-Gray et al., 2021; Creech et al., 2021). The age of participants was reported in all but two studies (n = 23, 92%), either by average age or reporting an age range, with a reported age range from all studies of 18–64.

Relevant studies were found throughout a variety of journals related to helping professions (n = 22), indicating an awareness of the potential of technology to respond to IPV service barriers among a broad spectrum of disciplines. The journals focused on behavioral sciences, gender-based and interpersonal violence, human services, LGBTQ2S+ identities, mental health, nursing, psychology, public health and health promotion, social work, substance use, and technology and technology-based medical interventions. The journals that most frequently published research relevant to this review include: Journal of Technology in Human Services (n = 3,
12%) and American Journal of Preventive Medicine (n = 2, 8%). The remaining articles were located among twenty different journals (n = 1 for each, 4%). Notably, of these journals, only one journal is identified as a social work journal, the Journal of Ethnic & Cultural Diversity in Social Work (n = 1, 4%) (Bagwell-Gray et al., 2021).

As determined by author affiliations and degrees reported on each article, the lead authors were from several different academic fields, indicating that this topic is of interest to various disciplines. Represented disciplines included fields of medicine (e.g., emergency medicine, psychiatry) (n = 8, 32%) (e.g., Choo et al., 2014; Eden et al., 2015; Hegarty et al., 2019), nursing (n = 8, 32%) (e.g., Bloom et al., 2014; Constantino et al., 2015; Ford-Gilboe et al., 2020), psychology (n = 6, 24%) (e.g., Fiorillo, McLean, Pistorello, Hayes, & Follette, 2017; Gray et al., 2015; Nguyen-Feng et al., 2015), sociology (n = 2, 8%) (Gloor & Meier, 2020; Young-Hauser, Eden, Wilson, & Koziol-McLain, 2014) and social work (n = 1, 4%) (Bagwell-Gray et al., 2021). A majority of the studies were based in the United States (n = 18, 72%) (e.g., Bloom et al., 2014; Choo et al., 2016; Ragavan, Ferre, & Bair-Merritt, 2020), followed by studies located in Australia (n = 3, 12%) (Hegarty et al., 2019; Tarzia, Iyer, Thrower, & Hegarty, 2017; Tarzia et al., 2018), New Zealand (n = 2, 8%) (Koziol-McLain et al., 2018; Young-Hauser et al., 2014), Canada (n = 1, 4%) (Ford-Gilboe et al., 2020), and Switzerland (n = 1, 4%) (Gloor & Meier, 2020).

The overall research design included quantitative studies (n = 14, 56%) (e.g., Eden et al., 2015; Hassija & Gray, 2011; Nguyen-Feng et al., 2015), with fewer mixed methods (n = 6, 24%) (e.g., Constantino et al., 2015; Gloor & Meier, 2020; Ragavan et al., 2020) and qualitative studies (n = 5, 20%) (e.g., Choo et al., 2014; Lindsay et al., 2013; Tarzia et al., 2018). More specifically, research designs included seven studies that were randomized controlled trials (RCTs) (n = 7, 28%) (e.g., Eden et al., 2015; Koziol-McLain et al., 2018; Zlotnick, Tzilos Wernette, Raker, & Raker, 2019), one non-randomized controlled trial (n = 1, 4%) (Creech et al., 2021), and one randomized controlled feasibility study (n = 1, 4%) (Bloom et al., 2014). There were eight articles in total (n = 8, 32%) that identified feasibility, pilot, or preliminary studies (e.g., Fiorillo et al., 2017; Glass, Eden, Bloom, & Perrin, 2010; Gray et al., 2015).

The studies ranged from sample sizes of 13 participants (Bloom et al., 2016) to 720 participants (Glass et al., 2017). All studies reported focusing on IPV survivors who were women or female (n = 23, 92%), with the exception of two studies that were open to all undergraduate college students and did not specify gender (n = 2, 8%) (Nguyen-Feng et al., 2015, 2016). When discussing research participants, studies did not provide definitions of women or female, such as discussing whether cisgender and transgender women were included in the study, or whether those identifying as non-binary, gender fluid, or two-spirit were included.
Study participants in this review included only survivors of IPV with the exception of two studies (n = 2, 8%) that included participants both with and without a history of IPV (Nguyen-Feng et al., 2015, 2016). Many of the studies included participants with an IPV experience that had occurred within the past 6–12 months (n = 11, 44%). Most of the studies focused only on survivors of IPV (n = 19, 76%), with four studies also including service providers or advocates (n = 4, 16%) (e.g., Bagwell-Gray et al., 2021; Ragavan et al., 2020; Young-Hauser et al., 2014), and one study (n = 1, 4%) also including friends of survivors of IPV (Bloom et al., 2016). For the studies including service providers or advocates, these participants represented key stakeholders in IPV service provision and included hospital-based clinicians in pediatric and family medicine, social workers, mental health workers, and IPV advocates. IPV survivors who were participants included those accessing IPV services at settings such as local IPV agencies, a college campus women’s center and LGBTQ2S+ center, crisis centers, and emergency department services. Most study participants spoke English; however, one study was conducted in German (n = 1, 4%) (Gloor & Meier, 2020) and two studies (n = 2, 8%) included both English and Spanish-speaking participants (Glass et al., 2010, 2017). Specific IPV populations included a focus on Native American survivors of IPV (n = 1, 4%) (Bagwell-Gray et al., 2021), perinatal women (n = 1, 4%) (Zlotnick et al., 2019), pregnant women at 12 weeks gestation (n = 1, 4%) (Bloom et al., 2014), LGBTQ2S+-identified women (n = 1, 4%) (Bloom et al., 2016), and women who held veteran status (n = 1, 4%) (Creech et al., 2021). There were four studies that focused on college-aged participants (n = 4, 16%) (e.g., Lindsay et al., 2013; Nguyen-Feng et al., 2015; Nguyen-Feng et al., 2016).

**Virtual Support Interventions**

A summary of the virtual IPV support interventions is provided in Table 3. Sourced papers indicate that a variety of virtual communication methods are being studied in the realm of IPV service provision including interactive internet-based (n = 18, 72%) (e.g., Choo et al., 2016; Creech et al., 2021; Ford-Gilboe et al., 2020), smartphone apps (n = 4, 16%) (e.g., Bagwell-Gray et al., 2021; Bloom et al., 2016; Ragavan et al., 2020), live videoconferencing (n = 2, 8%) (Gray et al., 2015; Hassija & Gray, 2011), and an asynchronous (not live) virtual chatroom-like platform (n = 1, 4%) (Gloor & Meier, 2020). More than half of the studies focused on the assessment of safety decision aids (n = 13, 52%), including I-DECIDE (n = 3, 12%) (Hegarty et al., 2019; Tarzia et al., 2017, 2018), iCAN (n = 1, 4%) (Ford-Gilboe et al., 2020), IRIS, (n = 2, 8%) (Eden et al., 2015; Glass et al., 2017), isafe (n = 1, 4%) (Koziol-McLain et al., 2018), myPlan/ourCircle (n = 1, 4%) (Bagwell-Gray et al., 2021), and several that were not yet named at the time of publication (n = 5, 20%) (e.g., Bloom et al., 2014; Bloom et al., 2016; Glass et al., 2010). The remaining interventions included those providing treatment interventions using motivational interviewing as a key component (n = 3, 12%) including BSAFER (n = 1, 4%) (Choo et al., 2016), Safe and Healthy Experiences (SHE) (n = 1, 4%) (Creech et al., 2021), and Strength for U in Relationship Empowerment (SURE) (n = 1, 4%) (Zlotnick et al., 2019); health and safety online interventions (n = 2, 8%) comprised of Health, Education on Safety, and Legal Support and Resources in IPV Participant Preferred (HELPP) (n = 1, 4%) (Constantino et al., 2015), and a smartphone app to address the well-being of mothers with a history of IPV called Thrive (n = 1, 4%) (Ragavan et al., 2020). Other interventions focused on internet-based stress management techniques designed to increase present control (n = 2, 8%) (Nguyen-Feng et al., 2015, 2016), videoconferencing-based treatment interventions (n = 2, 8%) (Gray et al., 2015; Hassija & Gray, 2011), an online drug use and IPV screening and intervention tool (n = 1, 4%) (Choo et al., 2014), an internet-based brief acceptance

| Characteristic | Studies n (%) |
|---------------|---------------|
| Year of study |               |
| 2010–2015     | 10 (40)       |
| 2016–2020     | 13 (52)       |
| 2021–present  | 2 (8)         |
| Study location|               |
| USA           | 18 (72)       |
| Australia     | 3 (12)        |
| New Zealand   | 2 (8)         |
| Canada        | 1 (4)         |
| Switzerland   | 1 (4)         |
| Lead author field |           |
| Fields of medicine | 8 (32)   |
| Nursing       | 8 (32)        |
| Psychology    | 6 (24)        |
| Sociology     | 2 (8)         |
| Social Work   | 1 (4)         |
| Study design  |               |
| Quantitative  | 14 (56)       |
| Mixed methods | 6 (24)        |
| Qualitative   | 5 (20)        |
| Study sample sizes |         |
| 1–50          | 14 (56)       |
| 51–100        | 3 (12)        |
| 101–200       | 1 (4)         |
| 201–500       | 5 (20)        |
| 501–1000      | 2 (8)         |
| Participant samples included |       |
| Only survivors of IPV | 23 (92) |
| Both survivors of IPV and non-survivors | 2 (8) |
| Primary intervention setting |         |
| College/university | 7 (28) |
| Hospital/medical  | 7 (28)  |
| Community agency | 6 (24)  |
| Own device/computer | 5 (20) |

**Table 1. Characteristics of Selected Studies (N = 25).**
| Authors                  | Date      | Country | Lead Author Discipline | Aim                                                                 | Design                               | Sample |
|-------------------------|-----------|---------|------------------------|----------------------------------------------------------------------|--------------------------------------|--------|
| Bagwell-Gray et al      | 2021 USA  | Social Work | To adapt a web-based safety planning intervention for Native American women exposed to intimate partner violence (IPV) | Mixed Methods (sequential)         | 83      |
| Bloom et al             | 2014 USA  | Nursing  | To establish feasibility of an internet-based safety planning intervention for rural and urban pregnant women experiencing IPV | Quantitative (randomized controlled feasibility) | 46      |
| Bloom et al             | 2016 USA  | Nursing  | To assess the effectiveness of a safety decision aid app for use with college-age women in same-sex IPV relationships and their friends | Qualitative (low-inference, participant-centered analytic method) | 13      |
| Choo et al              | 2014 USA  | Medicine | To explore women’s perspectives on the use of computerized screening and intervention for drug use and IPV | Qualitative                          | 17      |
| Choo et al              | 2016 USA  | Medicine | To assess the feasibility and acceptability of the BSAFER web-based intervention with women accessing emergency medicine and who indicated experiences of drug use and IPV within the past 3 months | Quantitative (acceptability and feasibility) | 40      |
| Constantino et al       | 2015 USA  | Nursing  | To assess the feasibility and effectiveness of Health, Education on Safety, and Legal Support and Resources in IPV Participant Preferred Intervention (HELP) among survivors of IPV, and to compare the results of the online version with the in-person version | Mixed Methods (sequential transformative) | 32      |
| Creech et al            | 2021 USA  | Psychology | To assess feasibility and satisfaction with the Safe and Healthy Experiences (SHE) intervention for women veterans disclosing sexual trauma in addition to additional health risks such as IPV, PTSD, and hazardous drinking | Quantitative (non-randomized trial) | 20      |
| Eden et al              | 2015 USA  | Medicine | To test the effectiveness of a safety decision aid with usual safety planning through a secure website for women experiencing IPV after one use; to evaluate the effectiveness of the aid in reducing decisional conflict after one use | Quantitative (randomized controlled trial) | 708     |
| Fiorillo et al          | 2017 USA  | Psychology | To examine the acceptability, feasibility, and efficacy of a brief web-based acceptance and commitment therapy (ACT) intervention for the treatment of trauma-related psychological difficulties for women with a history of interpersonal violence | Quantitative (open trial pilot study) | 25      |
| Ford-Gilboe et al       | 2020 Canada | Nursing | To test the effectiveness of iCAN, an interactive, tailored, online safety and health intervention on mental health and safety outcomes of Canadian women experiencing IPV | Quantitative (randomized controlled trial) | 462     |
| Glass et al             | 2010 USA  | Nursing  | To develop a web-based safety decision aid for survivors of IPV; and to evaluate the effectiveness of a web-based safety decision aid on women’s decisional conflict related to IPV | Mixed Methods (pilot)               | 90      |
| Glass et al             | 2017 USA  | Nursing  | To compare safety and mental health outcomes of survivors of IPV in an online interactive and tailored web-based safety decision aid with a static IPV resource website | Quantitative (randomized controlled trial) | 720     |
| Gloor & Meier           | 2020 Switzerland | Sociology | To examine the effectiveness/feasibility of an asynchronous counseling intervention for women experiencing IPV | Mixed Methods (pilot)               | 200     |

(continued)
Table 2. (continued)

| Authors            | Date  | Country  | Discipline  | Lead Author | Aim                                                                 | Design                                    | Sample |
|--------------------|-------|----------|-------------|-------------|----------------------------------------------------------------------|-------------------------------------------|--------|
| Gray et al         | 2015  | USA      | Psychology  | Lead Author | To evaluate the effectiveness of virtual counseling (teleconferencing) intervention with women living in a rural area of the United States and experienced IPV or rape as a means to reduce PTSD and depression | Quantitative (preliminary study)          | 28     |
| Hassija & Gray     | 2011  | USA      | Psychology  | Lead Author | To test the effectiveness and feasibility of providing evidence-based, trauma-focused treatment via videoconferencing to rural survivors of domestic violence and sexual assault | Quantitative (uncontrolled trial)         | 15     |
| Hegarty et al      | 2019  | Australia| Medicine    | Lead Author | To test the effectiveness of an interactive online safety decision aid in increasing self-efficacy and decreasing depressive symptoms in women with a history of IPV in comparison to a static IPV information website | Quantitative (two group pragmatic randomized controlled trial) | 422    |
| Koziol-McLain et al| 2018  | New Zealand| Nursing    | Lead Author | To test the effectiveness of the web-based safety decision aid—isafe, with New Zealand women who have had a recent or current experience of IPV | Quantitative (randomized controlled trial) | 412    |
| Lindsay et al      | 2013  | USA      | Nursing     | Lead Author | To explore the use of a prototype smart phone app that is a safety decision aid for female college-aged survivors of dating violence | Qualitative                               | 38     |
| Nguyen-Feng et al  | 2015  | USA      | Psychology  | Lead Author | To test the effectiveness of a web-based present control (stress management) intervention to lower symptoms of stress and mental health among college students with and without a history of IPV; to examine present control and rumination as potential mediators of intervention efficacy | Quantitative (preliminary study)          | 500    |
| Nguyen-Feng et al  | 2016  | USA      | Psychology  | Lead Author | To evaluate the efficacy of two new versions of a web-based intervention that decreases distress among psychology students, 1/3 reporting an IPV history and considered at-risk | Quantitative (randomized controlled trial) | 314    |
| Ragavan et al      | 2020  | USA      | Medicine    | Lead Author | To examine the development and formative evaluation of a trauma-informed, user-friendly smartphone-based mobile application app to address the unmet health needs and improve the well-being of mothers who have experienced IPV | Mixed Methods (formative evaluation)      | 24     |
| Tarzia et al       | 2017  | Australia| Medicine    | Lead Author | To explore the potential role that technology has in supporting IPV survivors and what factors may motivate or discourage women from using an IPV website or app | Qualitative                               | 19     |
| Tarzia et al       | 2018  | Australia| Medicine    | Lead Author | To examine the experiences of women with a history of IPV in receiving support online compared with face-to-face | Qualitative                               | 16     |
| Young-Hauser et al | 2014  | New Zealand| Sociology  | Lead Author | To test a web-based IPV safety decision aid for effectiveness, satisfaction, aesthetics, and cultural appropriateness for use with women of New Zealand | Mixed Methods (feasibility study)          | 20     |
| Zlotnick et al     | 2019  | USA      | Psychiatry  | Lead Author | To examine the feasibility, acceptability, and the preliminary efficacy of a brief, motivational computer-based intervention, SURE (Strength for U in Relationship Empowerment), for perinatal women with IPV experience seeking mental health treatment | Quantitative (randomized controlled trial) | 53     |
| Intervention Type | Intervention Name | Research | Virtual Intervention Details | Implications for Service |
|-------------------|-------------------|----------|-----------------------------|--------------------------|
| Safety Decision Aids (computer-based) | iCAN (iCan Plan 4 Safety) (online safety and health intervention for women experiencing IPV) | Ford-Gilboe et al. (2020) | iCAN is a self-administered, interactive, web-based tool that includes 4 main components: psychoeducation, priority setting, risk assessment (Danger Assessment tool), and a personalized safety and health plan | iCAN is a promising intervention, with differential benefits for mental health and experiences of coercive control among those not living with an abusive partner, living with children, experiencing more severe violence, and living in medium to large urban settings |
|                   |                   |          |                             |                           |
|                   |                   | Hegarty et al. (2019) | I-DECIDE is a self-administered website that consists of 3 modules: a healthy relationship tool, safety (Composite Abuse Scale and Danger Assessment), and a priority setting activity (uses pairwise comparison). Includes assessment and self-report measures for types of abuse being experienced, a personalized safety plan is provided based on the user’s input; content includes motivational interviewing and non-directive problem-solving activities. Abuse awareness and readiness for action is assessed by a modified version of the Contemplation Ladder, with those demonstrating ambivalence redirected to a motivational interviewing module and self-reflection exercise prior to receiving a safety plan. | Continuing to provide abuse, risk, and safety information online was found to be useful to many, with a static website currently being a cheaper, shorter option compared with an interactive website. When creating virtual interventions, finding effective ways to promote trust-building and empathy is a vital next step. Both online and face-to-face interventions for IPV should focus on providing individualized support that raises awareness, lessens isolation, and considers women’s own unique needs and circumstances. |
|                   |                   | Tarzia et al. (2017) |                             |                           |
|                   |                   | Tarzia et al. (2018) |                             |                           |
| IRIS (online safety decision aid) | Eden et al. (2015) | IRIS is an interactive, self-administered, web-based IPV intervention that includes 3 main elements: a safety priority setting activity and Danger Assessment both with a feedback component, and information, resources, and personalized safety planning strategies (geared toward a seventh grade reading level) based on the user’s answers to the first two sections. The intervention is based on decisional conflict theory and is accessible 24/7. | 24/7 access to safety planning interventions for IPV survivors is necessary to promote help-seeking behaviors. One session using an internet-based safety decision aid was effective in reducing decisional conflict, thereby supporting the decision-making process of IPV survivors, with no adverse events. Virtual safety planning interventions provide those who have barriers a means to accessing an important IPV service. Internet-based safety decision aids can help to reduce decisional conflict among survivors of IPV immediately, can increase use of helpful safety strategies, and support IPV survivors to safely end an abusive relationship. |                           |
|                   |                   | Glass et al. (2017) |                             |                           |
|                   |                   |                     |                             |                           |
| Intervention Type                          | Intervention Name                                                                 | Research                                                                 | Virtual Intervention Details                                                                                                                                                                                                 | Implications for Service                                                                                       |
|-------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Safety Decision Aids (smartphone apps)    | MyPlan/ourCircle (myPlan)                                                       | Bagwell-Gray et al. (2021)                                               | MyPlan/ourCircle is a self-administered, secure, open-ended, interactive platform that utilizes the Danger Assessment, an assessment used to assess the risk of domestic homicide, along with questions geared towards determining the user’s priorities. This information is used to provide the user with a personalized safety plan in addition to relevant services and resources such as housing and other social programs as well as IPV hotline numbers | Culturally responsive approaches are necessary in creating effective virtual IPV interventions                  |
| No intervention name associated           | (online safety planning intervention for rural and urban pregnant women experiencing IPV) | Bloom et al. (2014)                                                     | This online safety planning intervention includes 4 self-administered, online sessions (early and late pregnancy and at 3 and 6 months postpartum, calculated through the online tool based on the participant’s due date). The average time of the baseline session was 10.3 days (participants in rural areas taking 2.2 days longer to complete the task) | Survivors of IPV who live in rural communities measured 2 points higher on the Danger Assessment than those living in urban settings; thus, it is important to find ways to promote safety planning interventions to this isolated population |
| No intervention name associated           | (online safety planning intervention for women experiencing IPV)                 | Koziol-McLain et al. (2018)                                             | Isafe is a self-administered, web-based intervention that includes three modules: a safety priority setting activity using pairwise combinations, a risk/danger assessment, and an interactive module that leads to the development of a safety plan individualized to the user and that includes available IPV resources at local, regional, and national levels. The intervention is available 24/7 | A cost-benefit analysis is necessary when considering virtual interventions for IPV. Further dissemination and testing of interactive, individualized web-based interventions is needed to reduce IPV and associated health harms in at risk populations |
| Intervention Type                  | Intervention Name                                                                 | Research                                                                 | Virtual Intervention Details                                                                                                                                                                                                                                                                                                                                 | Implications for Service                                                                                                                                                                                                 |
|-----------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video-conferencing—Support and    | No intervention name associated (the provision of therapies to rural survivors of   | Gray et al. (2015)                                                        | Clients from 3 rural crisis centers received counseling sessions via teleconferencing with doctoral students in clinical psychology. Service users attended sessions at the crisis center connecting through teleconferencing with a therapist at a Telehealth Trauma Clinic. Sessions occurred weekly, 60–90 minutes (mean session number = 12.33). Sessions 1–2 were geared toward rapport building. Treatment included prolonged exposure (PE) or Cognitive Processing Therapy (CPT) and in some cases motivational interviewing (MI) | Videoconferencing interventions can be as effective as face-to-face service provision in improving outcomes and reducing impacts of IPV. Telehealth technologies can effectively be used to provide interventions to rural populations. When implementing videoconferencing interventions, backup plans for service delivery must be considered in the case that technology fails. Videoconferencing can provide an effective means of evidence-based psychological services to rural survivors of IPV and sexual assault. |
| Treatment                         | IPV and sexual assault via telehealth)                                             | Hassija and Gray (2011)                                                   |                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                             |
| Asynchronous Virtual Counseling    | No intervention name associated                                                    | Gloor and Meier (2020)                                                    | This intervention includes open-ended, asynchronous (written), tailored counseling accessed via a service provider’s website. No e-mail address is used, and anonymity is guaranteed. Service users use a pseudonym and password to access the site used for the counseling and interactions between the service user and the counselor (trained in online counseling and victim counseling) are held only on the service provider’s encrypted computer system/Internet to making the information inaccessible to a third party. After the service user makes initial contact, a counselor responds within 1–3 business days. The service user must log in to check the status of the counselor response and view previously written interactions. | Virtual counseling interventions require similar time and financial resources as traditional face-to-face counseling approaches, so the undertaking should not be considered a cost-saving measure.                                                                                                             |
| Intervention Type          | Intervention Name                                                                 | Research          | Virtual Intervention Details                                                                                                                                                                                                 | Implications for Service                                                                 |
|----------------------------|-----------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Web-based Treatment        | BSAFER (web-based intervention for drug use and IPV)                              | Choo et al. (2016) | The BSAFER intervention was conducted at an emergency department and took 4–5 hours to complete. Research assistants were there to support participants as needed and a booster phone call of approximately 20 minutes was made 2 weeks afterward and included discussion related to established goals, current drug use, inconsistencies between goals and motivations related to drug use, barriers to attaining these goals, available resources for drug use and IPV, and finally, encouragement towards goals. Videos of women with similar experiences were included within the intervention. | Motivational interviewing conducted via an online tool is possible and can help elicit change. The length of the program may limit feasibility in some emergency departments or for some patients, particularly with shorter visit times. |
| Safe and Healthy Experience (SHE) (computerized intervention for women veterans with sexual trauma histories including IPV seeking primary care treatment) | SHE includes three brief intervention modules associated with each of the 3 health risks of focus: hazardous drinking, IPV, and PTS. SHE was completed on an iPad with headphones and included relevant intervention modules based on participants’ baseline assessment eligibility, for example, IPV and hazardous drinking, or IPV and posttraumatic stress along with related psychoeducational handouts. Each intervention module included a relevant profile and general information related to the screened risks. Videos of women with similar experiences are presented that discuss resources used to reduce their risk, followed by self-assessment of readiness to change, goal setting, encouragement to use the information presented in the psychoeducational handouts, a motivational video, and a satisfaction survey. | Creech et al. (2021) | The intervention helps to meet the needs of veterans experiencing highly stigmatizing and sensitive health risks related to lifetime sexual trauma exposure. Stigma and life situation barriers can be decreased through the implementation of virtual interventions. |
| Intervention Type         | Intervention Name                                                                 | Research                  | Virtual Intervention Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Implications for Service                                                                                                                                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health and Safety        | Health, Education on Safety, and Legal Support Resources in IPV Participant Preferred (HELPP) | Constantino et al. (2015) | HELPP is a six-week, six-module intervention. One module each week arrives via e-mail and includes learning objectives, educational content, assignments, and prompts for reflection and self-evaluation: 1) personal thoughts, emotions, and behavior; 2) interpersonal relationships and healing in telling; 3) health in HELPP; 4) education on safety in HELPP; 5) legal matters in HELPP; 6) community and the A-B-Cs of empowerment                                                                 | Virtual IPV interventions, especially for those who are not currently living with an abusive partner, provide ease of access to help-seeking survivors of IPV                                                                                                                                                      |
| Web-based Interventions  | Strength for U in Relationship Empowerment (SURE)—a computer-based brief intervention for victimized perinatal women seeking mental health treatment | Zlotnick et al. (2019)    | SURE is self-administered using a tablet device and 30–40 minutes in length. The intervention includes a parrot avatar with a woman’s voice to narrate and guide the user through the intervention. The avatar also reads the content to enhance understanding for low-literacy participants. The avatar individualizes the program by addressing the participant by name. The intervention uses motivational interviewing principles as its foundation and includes education about IPV in its various forms, risk of IPV for woman, fetus, and offspring as well as potential associated health problems. The intervention aids in assessing participant readiness to access resources and provides the opportunity to create a safety plan tailored towards the participant including decision making advice. Empowerment videos with women speakers are accessible and relate to topics such as how to speak with a care provider about IPV resources and building self-esteem (the most chosen and viewed by participants). A 10–15-minute Booster Session was conducted 1-month post baseline intervention, by telephone or in-person that included a review of goals and motivations, identified barriers, problem-solving, resources, and empowerment. | Brief virtual interventions can provide those experiencing IPV increased comfort in disclosing thus increasing connections to IPV resources and information and increasing safety/prevention                                                                 |

(continued)
| Intervention Type                  | Intervention Name                                                                 | Research                  | Virtual Intervention Details                                                                                                                                                                                                 | Implications for Service                                                                                           |
|-----------------------------------|------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| **Health and Safety App**         | THRIVE (health education mobile application for mothers who have experienced intimate partner violence) | Ragavan et al. (2020)    | THRIVE is self-administered and includes text, audio, and video content as well as links to external supporting resources. THRIVE includes 3 components: 1) Myself—self-care, coping skills, and trauma-informed yoga; 2) My Child—reducing childhood stress, promoting mother-child communication, and talking to children about IPV; 3) My Life—resources | Smartphone apps can be a supportive measure used to supplement in-person interventions, not replace them               |
| **Internet-based Stress Management Techniques** | No intervention name associated (web-based intervention to reduce distress among students with a history of interpersonal violence) | Nguyen-Feng et al. (2015) Nguyen-Feng et al. (2016) | This intervention includes three modules and six online stress logs over the course of 5 weeks (3 modules in the first 2 weeks, 2 stress logs each week for the remainder 3 weeks). Each module included a psychoeducational video of a psychology professor, an animated video created using Prezi with examples from other students regarding the lesson content, and a written exercise.  
Module 1: research on stress and its effects on college students  
Modules 2&3: aspects of control (main focus present control) and adjustment  
Stress Logs: current stressors, which aspects are controllable/uncontrollable, what changed about stressors based on actions taken.  
Each intervention was designed to be completed in 3 sessions of 20 minutes each and online activities focused on helping users to focus on what they can control. Narrated videos depicted how other students have focused on present control, social persuasion videos, and stress logs.  
The modified version included an enhanced Present Control to aiming to increase present control and includes users selecting actions steps deemed within their control that they determine they will do, prioritizing and then scheduling a time to do each (developing an action plan). Mindfulness training was also added to target rumination | Web-based interventions are an effective means of supporting those experiencing IPV and can be an effective waitlist stop-gap measure.  
Web-based interventions, offered using a universal prevention approach methodology, may be an effective way to enhance protective factors and reduce distress among students with an IPV history, a group that is particularly at risk. A generalized online intervention focused on reducing distress can be an effective intervention for those who experience trauma and distress related to IPV.  
Web-based interventions based on the temporal model of control are necessary in reducing distress among students and that adding new components (e.g., mindfulness) improved intervention effectiveness |
| Intervention Type | Intervention Name | Research | Virtual Intervention Details | Implications for Service |
|-------------------|-------------------|----------|-------------------------------|-------------------------|
| **Web-based Drug Use and IPV Screening and Intervention Tool** | No intervention name associated (computer intervention for IPV and drug use among women in the emergency department) | Choo et al. (2014) | The intervention was administered on a tablet-style computer, contained questions on a broad range of health-related topics, including nutrition, access to health care, partner abuse and substance use. Assessments included: Women’s Abuse Screening Tool (WAST), an 8-item instrument for physical, emotional, and sexual violence (19). Drug use was defined as a positive answer to a modified version of the NIDA-modified Alcohol and Substances Self Interview Screening Tool (NM-ASSIST). Participants were scheduled for an interview date 1–2 weeks after the initial emergency department visit. | IPV and drug use computer-based screening and intervention is a safe, accessible, and useful tool for survivors of IPV and emergency departments are suitable for such a tool to be implemented. The social and financial limitations of individuals experiencing both IPV and substance use has an impact on their ability to access online interventions. |
| **Web-based Treatment Intervention** | Brief Acceptance and Commitment Therapy (ACT) intervention (web-based acceptance and commitment therapy program for women with a history of interpersonal violence and trauma-related problems) | Fiorillo et al. (2017) | Six, self-administered, web-based, one-hour multimedia sessions over a six-week period. Sessions included video narration, text, activities, worksheets, and fictional case studies that were presented as survivors of different types of interpersonal trauma. The following content areas were covered: introduction and psychoeducation on interpersonal trauma and ACT, willingness and acceptance, mindfulness, diffusion, and self-as-context, clarifying values, and committed action consistent with values. | Web-based ACT treatment interventions are a feasible, effective, and brief alternative for individuals with a history of interpersonal violence, including IPV, and who experience barriers to accessing community supports. |
and commitment therapy (ACT) treatment intervention \((n = 1, 4\%)\) (Fiorillo et al., 2017), and an asynchronous virtual counseling intervention \((n = 1, 4\%)\) (Gloor & Meier, 2020).

The interventions varied in structure and length; many self-administered \((n = 15, 60\%)\). In contrast, two interventions included follow-up responses from an IPV service provider \((n = 2, 8\%)\) (Choo et al., 2016; Zlotnick et al., 2019). Virtual programs ranged from 40 minutes in length, to 5 hours during one visit with a 20-minute follow-up call 2 weeks after the initial intervention, to 24/7 access. One study included a program that included 1 hour sessions that could each be completed over a period of 6 weeks \((n = 1, 4\%)\) (Fiorillo et al., 2017). Other programs had three or four modules be completed during differing lengths of time, such as providing 20 minutes to complete each module, and/or providing a period of up to 5 weeks to complete the modules.

Of the 25 studies that examined IPV virtual support interventions in this review, the main focus of IPV support differed. More than half of the support interventions focused on safety \((n = 13, 52\%)\) emphasizing the importance of creating action plans and accessing supports when leaving a violent situation (e.g., Ford-Gilboe et al., 2020; Hegarty et al., 2019; Tarzia et al., 2018). Other interventions focused on IPV treatment modalities \((n = 9, 36\%)\), including the use of techniques such as motivational interviewing (e.g., Choo et al., 2016; Creech et al., 2021; Zlotnick et al., 2019), psychoeducation (e.g., Nguyen-Feng et al., 2015; Nguyen-Feng et al., 2016), and psychological counseling techniques (e.g., Fiorillo et al., 2017; Gray et al., 2015; Hassija & Gray, 2011). Only three interventions \((n = 3, 12\%)\) had a primary focus on providing prevention and education support (Choo et al., 2014; Constantino et al., 2015; Ragavan et al., 2020).

**Discussion and Applications to Practice**

As a scoping review, this study aimed to provide an overview of the literature in the area of virtual IPV support interventions. This scoping review mapped current research in virtual IPV support interventions and solutions that can inform social workers’ next steps in engaging online with survivors of IPV.

In response to the first two research questions, the nature and characteristics of the scoping review studies illustrate key trends in the literature in this area. First, the publication of 25 articles on this topic since 2010 shows this is a growing area of investigation, with a majority of these studies \((n = 15\) published from 2015 onward, also illustrating that the study results are recent, which is important given the speed at which technology-based services change.

The articles are published throughout 22 different journals, representing a range of academic fields, showing a broad interest in this topic. However, we found that research was conducted mainly from the lens of a lead author in a medical or nursing profession, rather than from a social work lens, with only one study with a lead author from the field of social work (Bagwell-Gray et al., 2021). This is an important area for further research, given that social workers provide essential IPV services in a range of settings and are likely to be using IPV support interventions in practice (Messing & Thaller, 2015), yet have not been well represented as lead authors in this research. While social work practice is informed by a range of disciplines and fields and social workers can benefit from multidisciplinary virtual IPV research, given the unique lens and values of the social work profession, it is imperative to continue to build social work-specific research in this area (National Association of Social Workers, 2018).

Moreover, many geographical areas were not well represented since the majority of the studies were conducted in the United States, and the remaining studies were spread between four high-income countries. Globally, it is necessary to understand how virtual support interventions might be useful in reaching IPV survivors in different contexts and settings, particularly given the global context of IPV as an issue (WHO, 2017, 2021).

The study designs included a majority of quantitative studies, including randomized controlled trials (RCTs) and non-randomized control studies, and fewer mixed methods and qualitative designs, indicating the use of virtual IPV support interventions is being investigated using a range of methods. This finding also illustrates a potential for the increased use of qualitative methods to understand the experiences of service users with virtual interventions in more in-depth and nuanced ways.

The study samples showed a range in sizes and settings and focused on women who experienced IPV. However, no studies in the review focused on virtual support interventions for men who experience IPV, showing a research gap in this area. No studies specified whether research participants identified as cisgender, transgender, non-binary, gender fluid, or two-spirit, although one study reported this information related to the partner of the participant (Ford-Gilboe et al., 2020). Given this research gap, and that only one study specifically focused on survivors of same-sex IPV (Bloom et al., 2016), there is a need for further understanding the fit of virtual support interventions for LGBTIQ2S+-identified survivors of IPV. The results illustrated an ongoing need to ensure IPV research includes trans and gender diverse survivors of IPV (Guadalupe-Diaz & Jasinski, 2017). Since virtual support interventions might be particularly effective for those survivors of IPV experiencing barriers related to their gender in accessing services due to gender-related shelter and service restrictions (Calton et al., 2016), this is an important further area of investigation.

A majority of the interventions in the review focused on the use of safety decision aids, illustrating this to be a well-researched intervention, adapted in different formats for use in several different contexts, which can be incorporated into social work practice with survivors of IPV (e.g., Bagwell-Gray et al., Ford-Gilboe et al., 2020; Tarzia et al., 2018). In particular, research evidence from the review showed that internet-based and smartphone apps using safety-decision aids demonstrate the effectiveness of virtual IPV support...
interventions in supporting survivors of IPV who are experiencing barriers to accessing in-person service provision (e.g., residing in rural areas, shame, and fear) (Bloom et al., 2014; Ford-Gilboe et al., 2020; Glass et al., 2017; Tarzia et al., 2018). Further, much of the research shows that though these internet-based and smartphone app interventions are effective short-term, these virtual interventions cannot replace the effects of an empathetic and trust-building relationship garnered from in-person interactions (Glass et al., 2010; Tarzia et al., 2018).

When responding to the third research question on the interventions and solutions that can inform next steps in IPV service provision, findings signal the importance of including the perspectives and input of survivors of IPV in the development of virtual interventions (e.g., Bagwell-Gray et al., 2021; Bloom et al., 2016; Glass et al., 2010). In particular, this is necessary to ensure that the diverse experiences and identities of all survivors of IPV are represented and valued in creating effective virtual interventions. For instance, research focusing on the use of virtual support interventions for survivors of IPV who identify as newcomers, as racialized, with a disability, or of Indigenous background, are essential next steps, as there were gaps in the research in recognizing the diverse and intersectional needs of survivors of IPV with these identities. This step would include more engagement with survivors of IPV from different communities and geographical locations to ensure the needs of all survivors of IPV are being met. The inclusion of the voices of service users in the development of virtual IPV support interventions to understand the cultural experiences of a population is invaluable in creating effective interventions. This need was effectively demonstrated in the research conducted in the adaptation of the web-based safety planning intervention myPlan to focus on the needs of Native American women and the creation of ourCircle as a safety decision aid (Bagwell-Gray et al., 2021).

The scoping review found limited research on the provision of synchronous IPV treatment interventions and interventions that could support those experiencing barriers to service access in receiving the support they are seeking. Two studies (Gray et al., 2015; Hassija & Gray, 2011) investigated the use of teleconferencing in the treatment of women from rural communities with Gray and colleagues’ (2015) study results indicating decreased anxiety and depressive symptoms in participants over an average of 12 weeks and 12 sessions. Women attended an area crisis center and met synchronously with doctoral students from a clinical psychology program at the University of Wyoming’s Telehealth Trauma Clinic. Given that during the pandemic, much of IPV service provision has been conducted live over virtual videoconferencing programs (e.g., Zoom), this is an area that needs more examination (Sabri et al., 2020). There was also a gap identified in research related to virtual group interventions for women experiencing IPV. Instead, the focus of virtual support interventions was directed towards survivors of IPV accessing services individually (e.g., Constantino et al., 2015; Eden et al., 2015; Zlotnick et al., 2019), which may not adequately address the isolation of the experience of IPV. Next steps in further research include addressing logistics and the safety concerns of IPV survivors related to the implementation of individual and group teleconferencing interventions.

Many of the research studies reviewed required participants, the majority being IPV survivors, to find safe access to their own computer/smartphone and internet (e.g., Eden et al., 2015; Fiorillo et al., 2017; Hegarty et al., 2019). For many, this is not a possibility, which is an ongoing barrier for virtual support interventions for social workers to consider (Slakoff et al., 2020). With this, the outcomes of the current research may be biased towards those with higher socioeconomic status and may exclude input and experiences from a key population of IPV survivors—those with low incomes or those experiencing poverty or homelessness. For example, several studies reported that participants needed to be able to safely access the virtual intervention at their place of employment, at a friend’s home, or in their own home (e.g., Eden et al., 2015; Glass et al., 2017); however, many survivors of IPV experiencing financial barriers may not have access to these study requirements. Computer systems, smartphones, and internet access are costly and due to the limited resources associated with low-socioeconomic status it is plausible that many will not have access within their homes, the homes of friends, or at their workplace, which creates particular challenges during stay-at-home orders. Again, it is logistics and safety for this low-resourced population that need to be addressed in service design and future research, including ensuring universal access to stable internet to allow for these online connections.

Included studies note several additional barriers to using virtual support interventions, including cultural barriers, service preferences, and safety risks. For some survivors of IPV, there are cultural barriers to accessing support services and stigma related to help-seeking, which may make it challenging for service providers when suggesting the use of virtual interventions (Young-Hauser et al., 2014). Some survivors of IPV may not have the knowledge or ability to access the technology needed for virtual platforms (Bloom et al., 2014), or the computer literacy needed to successfully utilize and access these programs (El Morr & Layal, 2020). Some of the web-based interventions provide generalized information, and some survivors of IPV expressed their preference for more tailored and individualized services (Tarzia et al., 2018). Some survivors of IPV continue to prefer face-to-face over virtual support interventions, noting the importance of physical connection and being in a room with another person (Tarzia et al., 2017). Unfortunately, there also continues to be some safety concerns with the use of virtual technology, including risks of online stalking, harassment and other technology-related abuse, and safety and privacy risks should abusive partners gain access to devices (Gloor & Meier, 2020). Finally, technology can be expensive for IPV organizations (e.g., cost of running apps; cost of designing interventions) and require additional resources to pay internet
technology (IT) staff (Ragavan et al., 2020). IPV service providers may also require additional IT training to administer virtual interventions while balancing in-person services (Gloor & Meier, 2020).

There are also legal and ethical implications to consider when using virtual support interventions. It is imperative that the safety and well-being of survivors of IPV are constantly prioritized. Internet privacy must be ensured using techniques such as emphasizing the use of a safe email address and knowing how to clear browser history (Tarzia et al., 2017). Specialized training of IPV service providers is necessary in order to ethically administer virtual modalities. Responses to suicide risk and other safety protocols need to be established in order to signal when a survivor of IPV is in danger, which can differ from procedures used during in-person services (Eden et al., 2015; Tarzia et al., 2017). There may also be concerns around professional boundaries and the availability of IPV service providers during “off hours.” For example, if services are not offered on holidays, weekends, or during after-hours, information on emergency services and resources needs to be clearly accessible (Gloor & Meier, 2020; Tarzia et al., 2017). Unfortunately, despite the benefits and value of virtual support interventions, there are potential safety risks for survivors of IPV that cannot be mitigated if abusive partners gain access to their devices, which must be considered when developing virtual interventions (El Morr & Layal, 2020).

For social workers supporting survivors of IPV, this review underscores the possibilities that virtual services can provide, which is in line with previous research on the use of internet-based interventions in the screening and identification of IPV (Anderson et al., 2019; El Morr & Layal, 2020). This scoping review illustrates that current research supports the effectiveness of several different virtual interventions for IPV, such as virtual safety decision aids and safety planning interventions, which can be integrated into social work practice. These virtual IPV safety interventions are not meant to replace face-to-face support interventions, but to connect individuals impeded by barriers with resources and a means of support (Hegarty et al., 2019). As such, next steps are for service providers to consider how virtual interventions can be utilized in collaboration with existing in-person interventions. For instance, social workers may consider integrating existing empirically researched virtual apps and interventions as discussed in this review with additional practice approaches including virtual individual counseling (e.g., Gray et al., 2015) and virtual support groups (Chu et al., 2021).

As illustrated by this scoping review and as discussed by Etherington and colleagues (2021), some survivors of IPV will experience barriers to virtual forms of intervention and may require in-person support services to ensure their individual needs are met. Considerations include using virtual interventions to act as a supportive after-hours intervention and to provide support and treatment to those experiencing physical or psychological barriers to accessing in-person service (Eden et al., 2015). Additionally, virtual support interventions that incorporate ways of eliminating accessibility and financial barriers are essential next steps (Spencer et al., 2021). As identified by the Council on Social Work Education (CSWE) (2022), as part of ensuring ethical behavior and competency, it is imperative that “social workers understand digital technology and the ethical use of technology in social work practice” (p. 7). As the COVID-19 pandemic has illuminated a digital divide in access to technology and internet, social workers responding to IPV need to consider best practices in providing services that break down barriers to access to virtual IPV services (Etherington et al., 2021).

As a limitation of this scoping review, but consistent with scoping review methodologies (Peters et al., 2020), the quality of the articles selected for the review were not assessed. In addition, despite systematically searching the peer-reviewed literature, it is possible that some articles may have been missed. Our inclusion criteria of only focusing on empirical studies of interventions published in English in peer-reviewed journals, and excluding studies published as dissertations or in grey literature meant that some relevant studies may have been excluded from this analysis.

The objectives of this scoping review were to understand the state of the current empirical research literature on virtual interventions to support survivors of IPV. Specifically, this scoping review aimed to understand the research evidence that exists in virtual IPV service provision and the interventions that can inform next steps in virtual IPV service provision. Based on the review of 25 empirical studies of virtual IPV support interventions, we have identified important implications for social work practice and research. Results illustrated that virtual technologies can be harnessed by social workers to help support survivors of IPV, with several empirically researched interventions that can be incorporated into service provision. However, ensuring these forms of technology are a fit for all survivors of IPV, particularly those marginalized due to race, culture, religion, ability, gender identity, and/or sexual orientation, are key limitations to be addressed. In addition, issues related to access (e.g., to internet, devices) remain a concern to be addressed. Additional research is necessary, particularly in looking at the suitability of virtual support interventions with the many diverse identities and needs of survivors of IPV, from a social work lens, and related to the use of synchronous, live forms to virtual support interventions in social work practice with survivors of IPV.

Declaration of conflicting interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study
was supported by Social Sciences and Humanities Research Council (SSHRC) Knowledge Synthesis Grants; 872-2020-0010.

**ORCID iD**

Stephanie L. Baird  🏷️ https://orcid.org/0000-0002-5979-2300

**References**

References marked with an asterisk indicate studies included in the scoping review

Agüero, J. M. (2021). COVID-19 and the rise of intimate partner violence. *World Development*, 137, 105217. https://doi.org/10.1016/j.worlddev.2020.105217

Allen-Ebrahimian, B. (2020, March 7). *China’s domestic violence epidemic*. Axios. https://www.axios.com/china-domesticviolence-coronavirus-quarantine-7b00c3b3-35bc-4d16-a8d6b76e6ff28882.html

Anderson, E. J., Krause, K. C., Meyer Krause, C., Welter, A., McClelland, D. J., Garcia, D. O., & Koss, M. P. (2019). Web-based and mHealth interventions for intimate partner violence victimization prevention: A systematic review. *Trauma, Violence & Abuse*, 22(4), 870–884. https://doi.org/10.1177/1524838019888889

Arsky, H., & O’Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Method*, 8, 19–32. https://doi.org/10.1080/136455703200019616

*Bagwell-Gray, M. E., Loerzel, E., Dana Sacco, G., Messing, J., Glass, N., Sabri, B., & Campbell, J. (2021). From myPlan to ourCircle: Adapting a web-based safety planning intervention for Native American women exposed to intimate partner violence. *Journal of Ethnic & Cultural Diversity in Social Work*, 30(1), 163–180. https://doi.org/10.18503/1351-3204.2020.1770651

*Bloom, T., Gielen, A., & Glass, N. (2016). Developing an app for college women in abusive same-sex relationships and their friends. *Journal of Homosexuality*, 63(6), 855–874. https://doi.org/10.1080/00918369.2015.1112597

*Bloom, T. L., Glass, N. E., Case, J., Wright, C., Nolte, K., & Parsons, L. (2014). Feasibility of an online safety planning intervention for rural and urban pregnant abused women. *Nursing Research*, 63(4), 243–251. https://doi.org/10.1097/0000000000000036

Buttell, F., & Ferreira, R. J. (2020). The hidden disaster of COVID-19: Intimate partner violence. *Psychological Trauma*, 12(S1), S197. https://doi.org/10.1037/tra0000646

Calton, J. M., Cattaneo, L. B., & Gebhard, K. T. (2016). Barriers to help seeking for lesbian, gay, bisexual, transgender, and queer survivors of intimate partner violence. *Trauma, Violence & Abuse*, 17(5), 585–600. https://doi.org/10.1177/1524838015585318

Centers for Disease Control and Prevention. (2019). *Intimate partner violence: Violence prevention*. https://www.cdc.gov/violenceprevention/intimatepartnerviolence/fastfact.html

*Choo, E., Ranney, M., Wette, T., Morrow, K., Mello, M., Squires, D., & Zlotnick, C. (2014). Attitudes toward computer interventions for partner abuse and drug use among women in the emergency department. *Drug and Alcohol Dependence*, 146, e247–e247. https://doi.org/10.1016/j.drugalcdep.2014.09.137

*Choo, E. K., Zlotnick, C., Strong, D. R., Squires, D. D., Tapè, C., & Mello, M. J. (2016). BSAFER: A web-based intervention for drug use and intimate partner violence demonstrates feasibility and acceptability among women in the emergency department. *Substance Abuse*, 37(3), 441–449. https://doi.org/10.1080/08897077.2015.1134755

Chu, T. H., Su, Y., Kong, H., Shi, J., & Wang, X. (2021). Online social support for intimate partner violence victims in China: Quantitative and automatic content analysis. *Violence against Women*, 27(3–4), 339–358. https://doi.org/10.1177/107780120911452

Colquhoun, H. L., Levac, D., O’Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., & Moher, D. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology*, 67(12), 1291–1294. https://doi.org/10.1016/j.jclinepi.2014.03.013

*Constantino, R. E., Braxter, B., Ren, D., Burroughs, J. D., Doswell, W. M., Wu, L., & Greene, W. B. (2015). Comparing online with face-to-face HELPP intervention in women experiencing intimate partner violence. *Issues in Mental Health Nursing*, 36(6), 430–438. https://doi.org/10.3109/01612840.2014.991049

Cotter, K. L., Bacallao, M., Smokowski, P. R., & Robertson, C. I. (2013). Parenting interventions implementation science: How delivery format impacts the Parenting Wisely program. *Research on Social Work Practice*, 23(6), 639–650. https://doi.org/10.1177/1049731513490811

Council on Social Work Education. (2022). *DRAFT education policy and education standards*. https://www.cswre.org/Accreditation/Information/2022-EPAS/Draft-2-of-2022-EPAS

*Creech, S. K., Pulverman, C. S., Shin, M. E., Roe, K. T., Tzilos Wernette, G., Orchowski, L. M., & Zlotnick, C. (2021). An open trial to test participant satisfaction with and feasibility of a computerized intervention for women veterans with sexual trauma histories seeking primary care treatment. *Violence against Women*, 27(3–4), 597–614. https://doi.org/10.1177/1077801219895102

*Eden, K. B., Perrin, N. A., Hanson, G. C., Messing, J. T., Bloom, T. L., Campbell, J. C., & Glass, N. E. (2015). Use of online safety decision aid by abused women: Effect on decisional conflict in a randomized controlled trial. *American Journal of Preventive Medicine*, 48(4), 372–383. https://doi.org/10.1016/j.amepre.2014.09.027

El Morr, C., & Layal, M. (2020). Effectiveness of ICT-based intimate partner violence interventions: A systematic review. *BMC Public Health*, 20(1), 1372–1372. https://doi.org/10.1186/s12889-020-09408-8

Emezue, C. (2020). Digital or digitally delivered responses to domestic and intimate partner violence during COVID-19. *JMIR Public Health and Surveillance*, 6(3), e19831. https://doi.org/10.2196/19831

Etherington, N., Baker, L., Ham, M., & Glasbeek, D. (2021). Evaluating the effectiveness of online training for a comprehensive violence against women program: A pilot study. *Journal of Interpersonal Violence*, 36(1–2), 160–183. https://doi.org/10.1177/0886260517725734

Evans, M. L., Lindauer, M., & Farrell, M. E. (2020). A pandemic within a pandemic—Intimate partner violence during Covid-19.
Preparing social workers for the digital future

Gosangi, B., Park, H., Thomas, R., Gujrathi, R., Bay, C. P., Raja, A. S., & Khurana, B. (2021). Exacerbation of physical intimate partner violence during COVID-19 pandemic: Implications for intimate partner violence survivors. *Journal of Family Violence*, 36, 1–12. https://doi.org/10.1007/s10896-020-00215-8

Goodman, L. A., & Epstein, D. (2020). Loneliness and the COVID-19 pandemic: Implications for intimate partner violence survivors. *Journal of Family Violence*, https://doi.org/10.1007/s10896-020-00215-8

Gosangi, B., Park, H., Thomas, R., Gujrathi, R., Bay, C. P., Raja, A. S., & Khurana, B. (2021). Exacerbation of physical intimate partner violence during COVID-19 pandemic. *Radiology*, 298(1), E38–E45. https://doi.org/10.1148/radiol.2020202866

Gray, M. J., Hassija, C. M., Jaconis, M., Barrett, C., Zheng, P., Steinmetz, S., & James, T. (2015). Provision of evidence-based therapies to rural survivors of domestic violence and sexual assault via telehealth: Treatment outcomes and clinical training benefits. *Training and Education in Professional Psychology*, 9(3), 235–241. https://doi.org/10.1037tep0000083

Guadalupe-Diaz, X. L., & Jasinski, J. (2017). I wasn’t a priority, I wasn’t a victim: Challenges in help seeking for transgender survivors of intimate partner violence. *Violence against Women*, 23(6), 772–792. https://doi.org/10.1177/1077801216650288

Hall, B. J., & Tucker, J. D. (2020). Surviving in place: The coronavirus domestic violence syndemic. *Asian Journal of Psychiatry*, 53, 102179. https://doi.org/10.1016/j.ajp.2020.102179

Hassija, C., & Gray, M. J. (2011). The effectiveness and feasibility of videoconferencing technology to provide evidence-based treatment to rural domestic violence and sexual assault populations. *Telemedicine Journal and E-Health*, 17(4), 39–315. https://doi.org/10.1089/tmj.2010.0147

Hegarty, K., Tarzia, L., Valpied, J., Murray, E., Humphreys, C., Taft, A., & Glass, N. (2019). An online healthy relationship tool and safety decision aid for women experiencing intimate partner violence (I-DECIDE): A randomised controlled trial. *The Lancet Public Health*, 4(6), e301–e310. https://doi.org/10.1016/S2468-2667(19)30079-9

Kaukinen, C. (2020). When stay-at-home orders leave victims unsafe at home: Exploring the risk and consequences of intimate partner violence during the COVID-19 pandemic. *American Journal of Criminal Justice*, 45, 668–679. https://doi.org/10.1007/s12103-020-09335-3

Koziol-McLain, J., Vandal, A. C., Wilson, D., Nada-Raja, S., Dobbs, T., McLean, C., & Glass, N. E. (2018). Efficacy of a web-based safety decision aid for women experiencing intimate partner violence: Randomized controlled trial. *Journal of Medical Internet Research*, 19(12), e426–e426. https://doi.org/10.2196/jmir.8617

Krisvianti, S., & Triastuti, E. (2020). Facebook group types and posts: Indonesian women free themselves from domestic violence. *SEARCH Journal of Media and Communication Research*, 12(3), 1–17.

Lindsay, M., Messing, J. T., Thaller, J., Baldwin, A., Clough, A., Bloom, T., & Glass, N. (2013). Survivor feedback on a safety decision aid smartphone application for college-age women in abusive relationships. *Journal of Technology in Human Services*, 31(4), 368–388. https://doi.org/10.1080/15228835.2013.861784

Messing, J. T., & Thaller, J. (2015). Intimate partner violence risk assessment: A primer for social workers. *The British Journal of Social Work*, 45(6), 1804–1820. https://doi.org/10.1093/bjsw/bcu012

Mishna, F., Sanders, J. E., Sewell, K. M., & Milne, E. (2021). Teaching note—Preparing social workers for the digital future of social work practice. *Journal of Social Work Education*, 57(sup1), 19–26. https://doi.org/10.1080/10437797.2021.1912676

Moreira, D. N., & Pinto da Costa, M. P. (2020). The impact of the Covid-19 pandemic in the precipitation of intimate partner violence. *International Journal of Law and Psychiatry*, 71, 101606. https://doi.org/10.1016/j.ijlp.2020.101606

National Association of Social Workers. (2018). *Social work’s role in responding to intimate partner violence*. Washington, D.C. https://www.socialworkers.org/LinkClick.aspx?fileticket=WTrDbQ6CHx%3D&portalid=0

Nguyen-Feng, V. N., Frazier, P. A., Greer, C. S., Howard, K. G., Paulsen, J. A., Meredith, L., & Kim, S. (2015). A randomized controlled trial of a web-based intervention to reduce distress...
among students with a history of interpersonal violence. *Psychology of Violence*, 5(4), 444–454. https://doi.org/10.1037/a0039596

*Nguyen-Feng, V. N., Frazier, P. A., Greer, C. S., Meredith, L., Howard, K., & Paulsen, J. (2016). Testing the efficacy of three brief web-based interventions for reducing distress among interpersonal violence survivors. *Translational Issues in Psychological Science*, 2(4), 439–448. https://doi.org/10.1037/tips0000099

Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. https://doi.org/10.11124/JBIES-20-00167

*Ragavan, M. I., Ferre, V., & Bair-Merritt, M. (2020). Thrive: A novel health education mobile application for mothers who have experienced intimate partner violence. *Health Promotion Practice*, 21(2), 160–164. https://doi.org/10.1177/1524839919890870

Rempel, E., Donelle, L., Hall, J., & Rodger, S. (2019). Intimate partner violence: A review of online interventions. *Informatics for Health & Social Care*, 44(2), 204–219. https://doi.org/10.1080/17538157.2018.1433675

Roesch, E., Amin, A., Gupta, J., & Garcia-Moreno, C. (2020). Violence against women during covid-19 pandemic restrictions. *British Medical Journal*, 369, m1712. https://doi.org/10.1136/bmj.m1712

Sabri, B., Hartley, M., Saha, J., Murray, S., Glass, N., & Campbell, J. C. (2020). Effect of COVID-19 pandemic on women’s health and safety: A study of immigrant survivors of intimate partner violence. *Health Care for Women International*, 41(1–12), 1294–1312. https://doi.org/10.1080/07399332.2020.1833012

Slakoff, D. C., Aujla, W., & PenzeyMoog, E. (2020). The role of service providers, technology, and mass media when home isn’t safe for intimate partner violence victims: Best practices and recommendations in the era of COVID-19 and beyond. *Archives of Sexual Behavior*, 49(8), 2779–2788. https://doi.org/10.1007/s10508-020-01820-w

Smith, S.G., Chen, J., Basile, K.C., Gilbert, L.K., Merrick, M.T., Patel, N., & Jain, A. (2017). *The National intimate partner and sexual violence survey (NISVS): 2010-2012 state report*. https://www.cdc.gov/violenceprevention/pdf/nisvs-statereportbook.pdf

Spencer, C. M., Stith, S. M., & King, E. L. (2021). Preventing maltreatment at home: A meta-analysis examining outcomes from online programs. *Research on Social Work Practice*, 31(2), 138–146. https://doi.org/10.1177/1049731520969978

Stark, E. (2007). Coercive control: How men entrap women in personal life. New York: Oxford University Press.

*Tarzia, L., Cornelio, R., Forsdike, K., & Hegarty, K. (2018). Women’s experiences receiving support online for intimate partner violence: How does it compare to face-to-face support from a health professional? *Interacting with Computers*, 30(5), 433–443. https://doi.org/10.1093/ iwc/ iwy019

*Tarzia, L., Iyer, D., Thrower, E., & Hegarty, K. (2017). ‘Technology doesn’t judge you’: Young Australian women’s views on using the internet and smartphones to address intimate partner violence. *Journal of Technology in Human Services*, 35(3), 199–218. https://doi.org/10.1080/15228835.2017.1350616

Tricco, A., Lillie, E., Zarin, W., O’Brien, K., Colquhoun, H., Levac, D., & Straus, S. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. https://doi.org/10.7326/M18-0850

Usher, K., Bradbury Jones, C., Bhullar, N., Durkin, D. J., Gymfi, N., Fatema, S. R., & Jackson, D. (2021). COVID-19 and family violence: Is this a perfect storm? *International Journal of Mental Health Nursing*, 30(4), 1022–1032. https://doi.org/10.1111/imm.12876

Veritas Health Innovation. (2021). Covidence systematic review software. Australia. https://www.covidence.org

World Health Organization. (2017). *Intimate partner and sexual violence against women: Fact sheet*. http://www.who.int/media-centre/factsheets/fs239/en/

World Health Organization. (2021, March 9). Devastatingly pervasive: 1 in 3 women globally experience violence [Press release]. https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence

World Health Organization. (2020). *Addressing violence against children, women and older people during the COVID-19 pandemic: Key actions*, 17 June 2020. https://www.who.int/publications/i/item/WHO-2019-nCoV-Violence_actions-2020.1

*Young-Hauser, A. M., Eden, K. B., Wilson, D., & Koziol-McLain, J. (2014). Intimate partner violence: modifying an internet-based safety decision aid to a New Zealand context. *Journal of Technology in Human Services*, 32(4), 297–311. https://doi.org/10.1080/15228835.2014.967905

*Zlotnick, C., Tzilos Wernette, G., Raker, C. A., & Raker, C. A. (2019). A randomized controlled trial of a computer-based brief intervention for victimized perinatal women seeking mental health treatment. *Archives of Women’s Mental Health*, 22(3), 315–325. https://doi.org/10.1007/s00737-018-0895-1