Technology-based interventions reduce depression, anxiety and physical violence victimization among intimate partner violence survivors in the short term

Compared to non-technology-based interventions for survivors of intimate partner violence (IPV), technology-based interventions are effective in reducing adverse mental health and IPV outcomes. We found effect sizes that were small to moderate that should be interpreted with care.

What is the aim of this review?
This Campbell systematic review examines the effect of technology-based or digital interventions on the mental health outcomes – depression, anxiety and post-traumatic stress disorder (PTSD) – and victimization (physical, psychological, and sexual abuse) of intimate partner violence (IPV) survivors.

What is this review about?
The spread of IPV digital interventions provides a compelling reason to collect evidence of their intervention and treatment effects. Technology-based therapies come in many forms, including phone and web-based decision aids, conversational agents (chatbots), text message interventions, online support groups and telehealth services.

Although technology-based therapies have become acceptable, practical and feasible for supporting the health and well-being of IPV survivors, little is known about the size of their cumulative effects on IPV survivors’ health and well-being.

Furthermore, it is unknown how much, for whom and how long these effects last. The extent to which the type of digital intervention (smartphone vs web-based) contributes to this impact is also unknown.

This review and meta-analysis aim to fill these gaps in our understanding. Clarity on the pros and cons of digital IPV interventions have implications for intervention design, user engagement and adoption among IPV survivors. Only a few digital IPV therapies have been tested in (sub-optimal) ‘real-world’ situations. Even fewer attempts have been made to cumulate the intervention impact of digital interventions on survivors’ mental health, despite the commonality of depression, anxiety disorders and post-traumatic stress disorder (PTSD) among IPV survivors.

What studies are included?
We analyzed 17 experimental studies (randomized controlled trials), each with well-defined control groups. The studies were
published between 2007 and 2021, most published in 2016. Twelve of the 17 studies were conducted in the USA. One study each was included from Canada, Australia, New Zealand, Kenya and China. Most studies had a moderate risk of bias.

What are the main findings of this review?
Results from randomized controlled trials indicate that digital and technology-based interventions significantly reduce depression (up to three months), anxiety (up to three months), and physical violence victimization (at six months post-intervention) among female IPV survivors. Results from studies on psychological violence victimization are inconclusive. These effects, however, appear to fade over time for these outcomes. Also, the same digital interventions have no significant effect on PTSD or sexual violence victimization experiences at any time point.

Overall, digital treatments provide concrete benefits in terms of providing survivors with meaningful support, even if only temporarily, especially during increased emotional, mental and relationship distress.

What do the findings of the review mean?
This systematic review finds that digital interventions work. Intervention funders and violence prevention policymakers can use these results to set a baseline effect size for IPV digital interventions. These results can also inform health policy, to support providers’ reimbursement for offering or recommending digital interventions backed by evidence.

Results from the meta-analysis can be used to bolster calls for the inclusion of IPV digital therapies as add-on therapeutic devices during routine IPV screening of girls and women (ages 14 to 46 years).

These findings also help service providers to decide if digital approaches are beneficial, dependable and safe for assisting survivors’ emotional well-being.