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The Role of Computer Security Customer Support in Helping Survivors of Intimate Partner Violence

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Intimate partner violence (IPV)

Over **1 in 3 women** and **1 in 4 men** in the United States have experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime.

[CDC's 2011 National Intimate Partner and Sexual Violence Survey]

For the transgender community, the rate of experiencing IPV is over **1 in 2**.

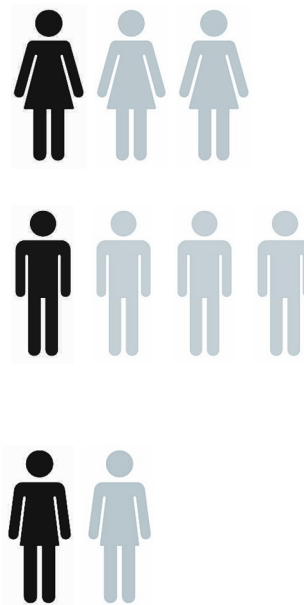[National Center for Transgender Equality's 2015 US Transgender Survey]

Image source: Tseng et al., 2021

IPV enabled by digital technologies

❑ Account or device compromise
❑ Harassing messages
❑ Revenge porn
❑ ...

[Matthews et al., 2017; Freed et al., 2018; Levy & Schneier, 2020]

10% of respondents reported **using an app to monitor** the SMS / phone calls / emails / photos of an intimate partner.

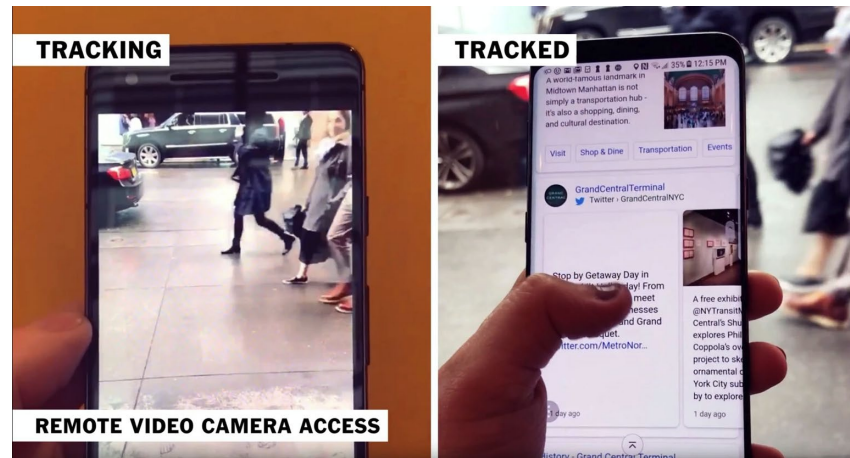[NortonLifeLock's 2020 Online Creeping Survey]

Image source: The New York Times

Why security customer support?

IPV professionals (e.g., social workers and lawyers) reported having **insufficient tech expertise**. [Freed et al. 2017]

Security clinics for IPV survivors exist but they are provided **on a limited scale**. [Tseng et al. 2021]

Computer security support agents specialize in products **crucial to IPV survivors** (e.g., antivirus), and they deal with help requests with **issues beyond products**. [Sharif et al., 2019]

Image source: corresponding organizations

However, helping IPV survivors requires extra caution and care...

What are the opportunities and challenges for computer security customer support to help IPV survivors?

Overview of methods

1

2

3

Analysis of support chat records

Focus groups with IPV professionals

Focus groups with support practitioners

Understand **if** support agents receive IPV cases and **how** they handle these cases.

Draw actionable recommendations that both cater to the **needs of IPV survivors** and consider the **real-world constraints** of customer support.

Preliminary analysis of support chat

Chat records from a large consumer-facing computer security company.

⬇

Support agents received help requests from IPV survivors but were **not prepared** to handle them.

> My ex-husband hacked my phone. He keeps getting my account passwords. I have changed phones so many times and got a restraining order on him, but he still managed to do this. Help me please.

> **Please do not worry about these problems if you have [product] installed.** We will do everything we can to help you further.

Image source: flaticon

Focus groups with multi-stakeholders

Five sessions with **professionals who support IPV survivors** (n=17)

❏ Present three chat scenarios
❏ Discuss how customer support can **better serve** IPV survivors

Four sessions with **customer support practitioners** (n=11)

❏ Present IPV professionals' suggestions
❏ Discuss potential **constraints** and **challenges** for implementation

Image source: inbound hype

Our findings

IPV professionals suggested **three principles** that computer security customer support should adhere to in interacting with IPV survivors.

Acknowledge the limits of security software

Provide IPV tech advice with caution and boundaries

Make external referrals

Our findings

IPV professionals suggested **three principles** that computer security customer support should adhere to in interacting with IPV survivors.

Acknowledge the limits of security software

Provide IPV tech advice with caution and boundaries

Make external referrals

The limits of security software

Support agents usually work as advocates for products, but security software **cannot fully protect IPV survivors**.

Please do not worry about these problems if you have [product] installed. We will do everything we can to help you further.

" The goal should be to **hear** and **be honest** about the limitations of what [product] can or cannot do in those moments. (P11, attorney) "

" Acknowledge that 'this is scary' and that 'it sounds like you're having a really hard time.' (P2, counselor) "

Image source: flaticon

Our findings

IPV professionals suggested **three principles** that computer security customer support should adhere to in interacting with IPV survivors.

| Acknowledge the limits of security software | Provide IPV tech advice with caution and boundaries | Make external referrals |

Advise with caution & boundaries

IPV survivors could benefit from **tech safety resources**, but they also **face risks of escalated violence** for routine privacy-protective behaviors.

Have a safety check-in

Avoid giving advice on topics not trained for

"Do you worry that someone might be listening to or recording our conversation?"

→ If not safe, offer to reconnect on a safe line. Let them decide.

Examples of out-of-scope advice: comprehensive IPV-related counseling, safety planning, legal advice...

Image source: flaticon

Our findings

IPV professionals suggested **three principles** that computer security customer support should adhere to in interacting with IPV survivors.

Acknowledge the limits of security software	Provide IPV tech advice with caution and boundaries	Make external referrals

Make external referrals

A feasible idea that builds on companies' existing practices, e.g., directing scam victims to government agencies.

💡 Give survivors the agency to decide, and avoid harmful labeling

" I'm not going to say 'you are a survivor of domestic violence'...You want to give them the opportunity to **call it in whatever ways they want**. (P14, counselor) "

Our contributions

Three recommendations to better address tech-enabled IPV via computer security customer support, verified by support practitioners.

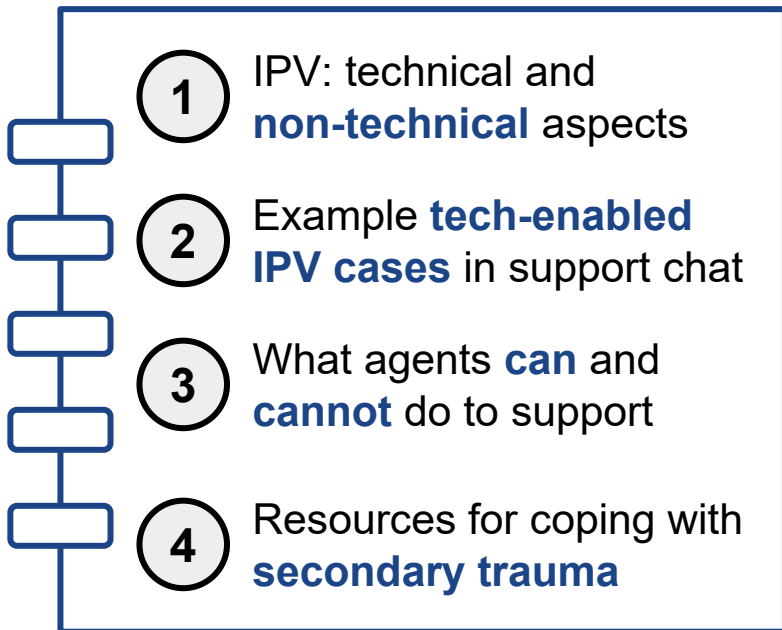| Train customer support agents for IPV cases	Track IPV cases to inform relevant decisions	Join forces with IPV professionals

Our contributions

Three recommendations to better address tech-enabled IPV via computer security customer support, verified by support practitioners.

Train customer support agents for IPV cases	Track IPV cases to inform relevant decisions	Join forces with IPV professionals

Train customer support agents

1. IPV: technical and **non-technical** aspects

2. Example **tech-enabled IPV cases** in support chat

3. What agents **can** and **cannot** do to support

4. Resources for coping with **secondary trauma**

💡 Support practitioners agreed on such training's **necessity**

> " Regular support agents **have no dedicated training** on this...There must be some awareness of these privacy issues and stalkerware. (S10, director) "

> " I think [emphatic language] is something that could be done regardless of whether I'm interacting with someone [with] IPV. This should be used **across the board**. (S6, director) "
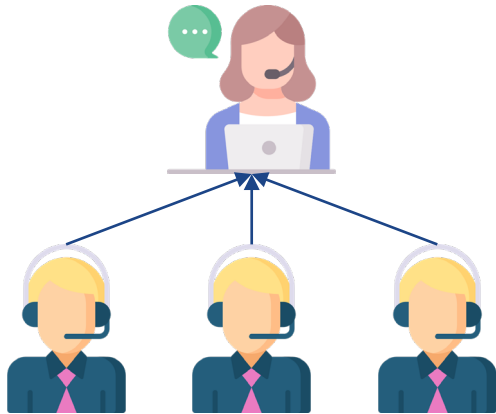
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Train customer support agents for IPV cases

Track IPV cases to inform relevant decisions

Join forces with IPV professionals

Track IPV cases to inform decisions

E.g., whether to have **a in-house specialized team** with more capacity and expertise to handle cases transferred from frontline agents

" I think our founder would have a genuine interest but we'd also need to **balance that with business needs**. We need to get a better sense of how many [IPV] calls we have coming in. (S3, director) "

Image source: flaticon

Our contributions

Three recommendations to better address tech-enabled IPV via computer security customer support, verified by support practitioners.

Train customer support agents for IPV cases

Track IPV cases to inform relevant decisions

Join forces with IPV professionals

Join forces with IPV professionals

Survivor support orgs

Digital rights advocacy

IT security companies

An enduring partnership provides **a learning pathway** for both parties, who have complementary strengths.

Collaborate to deploy **remote security clinics** for IPV survivors.

❏ Support agents: technical issues and basic tech safety tips
❏ IPV professionals: non-technical issues and in-depth safety planning

Three key principles for computer security customer support in interacting with IPV survivors

- ❏ Acknowledge the limits of security software
- ❏ Provide IPV tech advice with caution and boundaries
- ❏ Make external referrals

Three recommendations for computer security companies to better address tech-enabled IPV

- ❏ Train customer support agents for IPV cases
- ❏ Track IPV cases to inform relevant decisions
- ❏ Join forces with IPV professionals

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More relevant research: **www.ipvtechresearch.org**

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