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

Yixin Zou, Allison McDonald, Julia Narakornpichit, Nicola Dell, Thomas Ristenpart, Kevin Roundy, Florian Schaub, Acar Tamersoy
Intimate partner violence (IPV)
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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.

[Image source: Tseng et al., 2021]

[CDC's 2011 National Intimate Partner and Sexual Violence Survey]
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[CDC’s 2011 National Intimate Partner and Sexual Violence Survey](https://www.cdc.gov/violenceprevention/index.html)

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

[National Center for Transgender Equality’s 2015 US Transgender Survey](https://www.ncteq.org/)

Image source: Tseng et al., 2021
IPV enabled by digital technologies

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

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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?
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IPV professionals (e.g., social workers and lawyers) reported having insufficient tech expertise. [Freed et al. 2017]
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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]
However, helping IPV survivors requires extra caution and care...
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What are the opportunities and challenges for computer security customer support to help IPV survivors?
Overview of methods

1. Analysis of support chat records
2. Focus groups with IPV professionals
3. Focus groups with support practitioners
Overview of methods

1. Analysis of support chat records
   Understand if support agents receive IPV cases and how they handle these cases.

2. Focus groups with IPV professionals
   Draw actionable recommendations that both cater to the needs of IPV survivors and consider the real-world constraints of customer support.

3. Focus groups with support practitioners
Preliminary analysis of support chat

Chat records from a large consumer-facing computer security company.
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Support agents received help requests from IPV survivors but were not prepared to handle them.
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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.
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
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
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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)"
Our findings

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- 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.
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Have a safety check-in

“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.
Advise with caution & boundaries

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- **Have a safety check-in**
  
  “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.

- **Avoid giving advice on topics not trained for**
  
  Examples of out-of-scope advice: comprehensive IPV-related counseling, safety planning, legal advice...

Image source: flaticon
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Image source: corresponding organizations
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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
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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
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3. What agents can and cannot do to support

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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)"
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“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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- 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
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"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)"
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Coalition Against Stalkerware

Survivor support orgs
Digital rights advocacy
IT security companies

Image source: corresponding organizations
Join forces with IPV professionals

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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

Image source: corresponding organizations
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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