

Navigating Traumatic Stress Reactions During Computer Security Interventions

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Some people disproportionately benefit from direct support from privacy and security experts.



refugees
e.g. Simko, Lucy, et al.



journalists
e.g. McGregor et al



LGBTQ+ community
e.g. Geeng et al



intimate partner violence
(IPV) survivors
e.g. Havron, et al

60+% of survivors report being subjected to technology-based abuse.

-Journal of Family Violence 2020



harassment



stalking

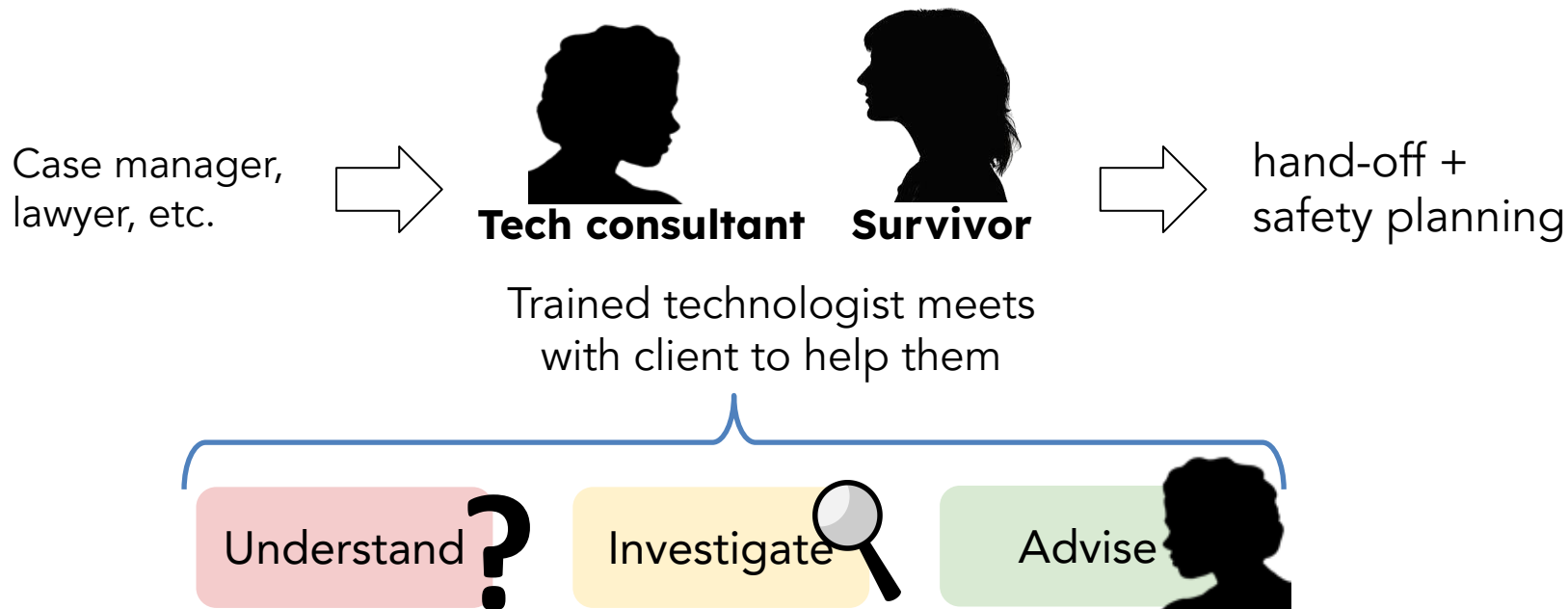


financial harm



surveillance

2018-2019: clinical computer security protocols



Havron, Sam, et al. "Clinical computer security for victims of intimate partner violence." 28th USENIX Security Symposium (USENIX Security 19). 2019.

revisiting the protocol: motivation



**Tech
consultant**

Understand

"Hi, can you tell me about what's been going on?"

"Every device I own is instantly hacked!! My calls keep dropping, my phone is hot..."

Investigate

"That's awful! I'm so sorry to hear that. Let's take a look."

"OK, I have 3 phones and 5 email accounts that I need you to check."

Advise

"We've checked everything and I think your devices are safe."

"Are you sure? There has to be something. Can you check my WiFi router?"



Survivor

Trauma results from experiences that are emotionally disturbing or life-threatening with lasting adverse effects on the individual's functioning:

hopelessness

anxiety and fear

irritability

hypervigilance

intrusive thoughts

numbing

dissociation

hallucinations

nightmares

panic attacks

memory impairment

overwhelm

emotional
dysregulation

anger

sleeplessness

so how do digital privacy and security experts effectively deliver security interventions to people who may have experienced severe technology-related trauma?

two phase study design

Phase I: Identify gaps in training

Interviewed 11 experienced technology consultants at three clinical sites.

Phase II: Analyze patterns in real sessions

Analyzed 18 transcripts of clinic sessions (w/ subject matter experts in mental health).



Practical Guidance

Clinically informed tools, strategies, and education for technology consultants.

Gap #1: Interrupt long narratives or not?

"I don't know if it's better to let them keep talking and let them get more emotional, but we let them because it seems therapeutic."

"Some of this is helpful. Some of this is not. All of it is taking up some time. Am I doing you a disservice by just letting you continue talking?"

Pattern #1:
Retraumatization
and oversharing

In transcripts, survivors sometimes seem to be oversharing because:

- ❖ they think they *must* to convey the complexity of the tech abuse
- ❖ they are trying to convince the technologist the tech abuse is real
- ❖ or they are wrapped up in revisiting traumatic events and would benefit from grounding

Gap #1: Interrupt long narratives or not?

Pattern #1:
Retraumatization and oversharing

Practical Guidance

- the "compassionate interruption"
- strategies for gently refocusing clients
- grounding techniques
- language to help survivors share narratives with intentionality.

Gap #2: Is all validation healthy?

"Clients can, entirely understandably, conflate normal, standard technology behavior with the malicious or malign actions of an abuser."

"We try to make sure that people feel valid and feel heard but if nothing is happening, I worry that it might make them more paranoid."

"But what is healthy validation and what is not yeah?"

Pattern #2:
Deprogramming
protective beliefs
about technology.

In transcripts, survivors were not always receptive to information shared by technologists:

- ❖ this reticence might be because that belief protected them against a potential threat.
- ❖ contradicting that belief therefore might feel threatening to the survivor.
- ❖ changing these beliefs takes sustained work, and is often impossible to do in a single session.

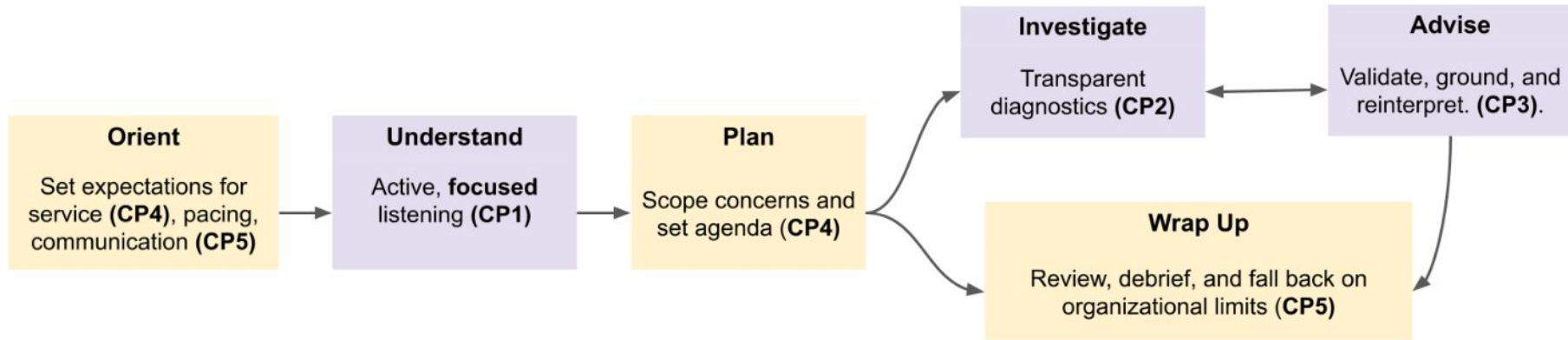
Gap #2: Is all validation healthy?

Pattern #2:
Deprogramming protective beliefs about technology.

Practical Guidance

- specific, targeted strategies for validation
- when to back off and when to proceed with challenging the belief
- language for offering survivors tools to re-frame their past experiences

revisiting the protocol



Incorporation of practical guidance into an updated protocol that includes new stages (yellow) and recommended practices in each stage.

Takeaways

- ★ Computer security professionals are now first-responders, and we need robust trauma-informed guides (not just for IPV!)
- ★ Trauma-informed care is context-sensitive and not always intuitive.
 - kind intentions can be harmful!
 - can and should rely on experts.



questions?