

Responsibly Assisting Technology-Facilitated Abuse Survivor Support Ecosystem Stakeholders with Generative AI

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Introduction

Technology-Facilitated Abuse (TFA)—a form of intimate partner violence—leverages digital tools (phones, dual-use apps, spyware, account compromise through shared password) to harm survivors.

Challenges: Technology clinics provide critical security support but are:

- Volunteer-run
- Resource-constrained
- Limited in geographic reach
- Facing growing service bottlenecks

Goal: Develop a purpose-built LLM-powered AI assistant (Tech-Buddy) for stakeholders (not survivors directly), to responsibly augment the survivor support ecosystem.

Research Questions

RQ1: How do stakeholders within the TFA support ecosystem perceive the potential role of AI in supporting their work?

RQ2: How could AI assist stakeholders in their workflows?

RQ3: How does a purpose-built AI assistant compare to state-of-the-art models (e.g., ChatGPT, Claude)?

Method

1. **Needs assessment:** Stakeholder Interviews and qualitative analysis
2. **Responsible RAG-based AI assistant development**
3. **Usability Study & Evaluation:** Stakeholder involved real-world A/B testing, and feedback collection
4. **Analysis:** Qualitative analysis of feedback to gauge user experience and preference

RQ1 Findings (preliminary)

1. **Strong Willingness to Use AI Assistance:** All 9 participants indicated they would use AI in some capacity

“When you said this is for the tech support folks... this is amazing. That’s so fantastic.” — P8

“Absolutely... I would primarily see it as a very helpful feature or tool during the appointments.” — P6

“If I had this when I started as a consultant, it would have been incredibly valuable.” — P5

However: AI as augmentation — not replacement

“I wouldn’t plan on using a chatbot indiscriminately... I would do the same checks as I would with information I found elsewhere.” — P9

RQ2 Findings (preliminary)

1. **Observed Stakeholder Workflows**
 - **Non-Tech Consultants** (e.g., Lawyers): Provide general help, less on technical side
 - **Tech consultants:** Preparation; Consultation (follows mental model of Triage → Verify → Mitigate); Post-consultation note synthesis
2. **Where AI Could Assist**
 - **Non-tech consultants:** Desired model of assistance: Triage → Verify → Mitigate

“Validating what was going on... and giving us directions on how to disable the features... It seems very practical.” — P1

- **Tech consultants:** Desire integration in all stages of workflow

- **Preparation:** Walkthrough checklists

“It includes an introductory script... and things we generally look at.” — P3

- **In consultation:** Up-to-date platform steps

“Pull[ing] documentation if possible would be really handy.” — P6

- **Post consultation:** Consultation brief generation

“It would be great to highlight... these were the main checks that we did.” — P6

3. Desired Features

Content

- **Safety warnings in responses**
“When you make a change here, this might alert the other person.” — P9
- **TFA-contextualized responses**
“Not go on a programming side... more on DV.” — P2

User experience

- Trust markers (expert-verified, citation)
- High-level overview + navigable access
- Running checklist for consultations
- Transparency on how chatbot is built

4. Concerns

- Privacy & survivor data leakage
- Organizational compliance
- Risk of re-traumatization

“Some recommendations... didn’t proactively give potential drawbacks.” — P5

Ongoing Work

- Needs assessment
- AI assistant development
- A/B study with stakeholders

Contributions

- Demonstrates strong stakeholder openness to AI augmentation
- Identifies workflow-specific integration points
- Surfaces critical safety & ethical constraints
- Proposes a framework for responsible generative AI deployment in high-risk domains