The Problem of Problem Selection

A CCC Research Supporting At-Risk Users (SARU) Brief

Research supporting at-risk users (SARU) is key to improving systems for everyone; however, this work can itself pose risks, to participants, researchers, broader communities, and society. While Institutional Review Boards (IRBs) can assist researchers with mitigating risks to individual research participants, SARU research can require specialized risk assessments beyond IRBs' expertise [1-3]. Assessing risk in SARU research is deeply sociotechnical, requiring expertise across computational and social scientific methods to define and evaluate potential harms. Researchers must also grapple with how to assess risk across a range of interaction types, and how mitigating risk for one population might inadvertently affect risks for another.

Research teams setting out to conduct potentially risk-bearing SARU work might consult guidance such as Walker et al. [4] and Bellini et al. [5] on digital-safety research with at-risk populations, or AoIR's Risky Research Guide [6]. To this slate of resources, we contribute a **socio-ecological process model (see the end of this document), analyzing potential risks throughout a project lifecycle**, from project ideation all the way through to publication and wider dissemination.

Across the process model, **researchers should always return to their underlying problem selection**: Why do research with populations who already bear risk? There are endless challenges in the world, and endless ways for the tools of research to drive positive real-world impact. What's needed is **strategic discernment to pick the right problem at the right time**, before moving to providing research-based "solutions." Key questions to guide problem selection include:

Will research help address the problem?

Research impact often accrues over the long term. Building robust bodies of evidence can take years of work from many researchers across many disciplines. Be clear and specific about **how research will contribute** to the desired outcome, and **who stands to benefit** from said outcome. What will change as a result of the research? What new information is necessary to make the situation meaningfully different, and for whom? What role can research in general, and a proposed project in specific, play in achieving this goal? Is the identified problem a strategic priority for the impacted community? If research isn't the right way to improve the situation, **there could still be other ways to make an impact** through capacity building and resource development. At an individual level, this might look like volunteering with people who are directly impacted, or serving on the board of a non-profit.

What is your relationship to the topic area?

Personal investment in a topic area can make the risks of research both easier and more difficult to navigate. Understand the relational complexities first. Why are you drawn to the problem? Will this motivation carry through spending months, years, and potentially the length of a career becoming an expert on this issue? Conversely, understand whether over-investment in a topic area might make it hard to realistically assess the risks of the research, or remain open to other perspectives. Do you have enough perspective to make well-reasoned, evidence-based conclusions on the topic? What will your reaction be if research findings run counter to your experience? **A successful project requires researchers to remain invested, but retain perspective and continuously reflect.** To enact this structure, you might consider creating an external advisory board who can help assess research risks beyond your individual or team-wide perspective.

Can the perspective of my discipline address some aspect of the problem?

Problems facing at-risk populations are varied, but not all of them sit at the intersection between people, information, and technology. What can a sociotechnical perspective (e.g., specific methods or theories) bring to bear on the problem in question? Does your research team have the right expertise, resources, and institutional support to address a meaningful aspect of the problem? Is this problem one where a sociotechnical approach can make change that would be meaningful to the impacted population? It can be incredibly powerful to **collaborate with experts on complementary disciplines to make progress, or sharpen your research questions** to those you are best suited to address.

References

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Supporting At-Risk Users Through Responsible Computing

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Socio-Ecological Process Model for Assessing Risk in SARU Research

Socio-Ecological Impact

	Ideation	Study Design	Study Execution	Paper-Writing	Post-Publication Publicity
Policy, Funding, Advocacy	What will publishing on this issue do for **advocates and researchers** working in this space?	Should this be a **participatory project?**	How can we **ensure study activities don't interfere** with advocates' work?	How can we **involve on-the-ground advocates** in the paper-writing process, if at all?	How can our work **support broader advocacy** for the at-risk population? On top of publishing, consider expert testimonies, consultations, and other ways to disseminate your science.
Research Community	**What will bringing this research *to this field* do** for the issue and the people who face it? (e.g., What is the role of tech in this?)	What **ethical research standards** might we apply—*beyond* our field's norms? IRBs are not monolithic; we might **look to fields** that traditionally center at-risk populations (e.g. health).	How can we **give and receive feedback** on study design throughout the execution process? We might look to trusted mentors and to the broader SARU research community.	What are the **implicit norms** around how long it takes to synthesize and write papers about this work? **Will those norms work** for this paper, and if not, how can we communicate that this work will take time?	How can we **institutionally support the extra labor** our work takes, e.g., in tenure, promotion, and award processes, in implicit and explicit labor around the community, in publication norms, and in career advising?
Institution (e.g., Dept, College, Unit)	Do our **institution's resources and policies** align with this work?	Does our university's **data protection policy** meet our needs? If not, can we manage our own data?	How are we proactively **managing our study data** throughout?	Does our institution offer writing support groups like bootcamps, or other ways to **get feedback on our drafts?**	If our work becomes high-profile, what are our institutional supports for **handling media attention**, including possible hate and harassment?
Lab	Are we equipped to **support each other** doing this work? Are we **the right people** to do it? With what groups can we **collaborate** to bring expertise we lack?	Do we have the **support systems** we need to support this research through the full lifecycle of this project?	Are we consistently doing our **group and 1:1 check-ins** in multiple formats and settings, especially around crucial milestones?	How can our **lab culture** fully respect how long this work can take?	How has this work **changed our risk landscape**, and how can we **adapt** for the next project?
Individual	How difficult will **deeply immersing** in this research be for you?	What is your **personal care plan**, and how can it work alongside the deadlines and deliverables of doing this study?	Are you consistently **revisiting your care plan** and adapting as new concerns arise?	Are you keeping track of **emerging feelings and concerns** through analysis, and communicating them to your team? Are you doing the same for teammates who may be feeling the same on their projects?	Do you, personally, feel comfortable **advertising your work on the public Internet**? It's ok if not! How else can you **publicize the work** among your lab and community?

Research Life Cycle

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