Trauma-informed Design

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Talking about trauma can
affect us in unpredictable ways.

Agenda

1. Trauma
2. Trauma-informed design
3. Current research underway
4. Considerations when prototyping

Defining trauma

Individual trauma results from an **event**, series of events, or set of circumstances that is **experienced** by an individual as physically or emotionally harmful or life threatening and that has lasting adverse **effects** on the individual's functioning and mental, physical, social, emotional, or spiritual well-being.

– *SAMHSA's Concept of Trauma (2014)*

When something happens to the body that is too much, too fast, or too soon, it overwhelms the body and can create trauma.

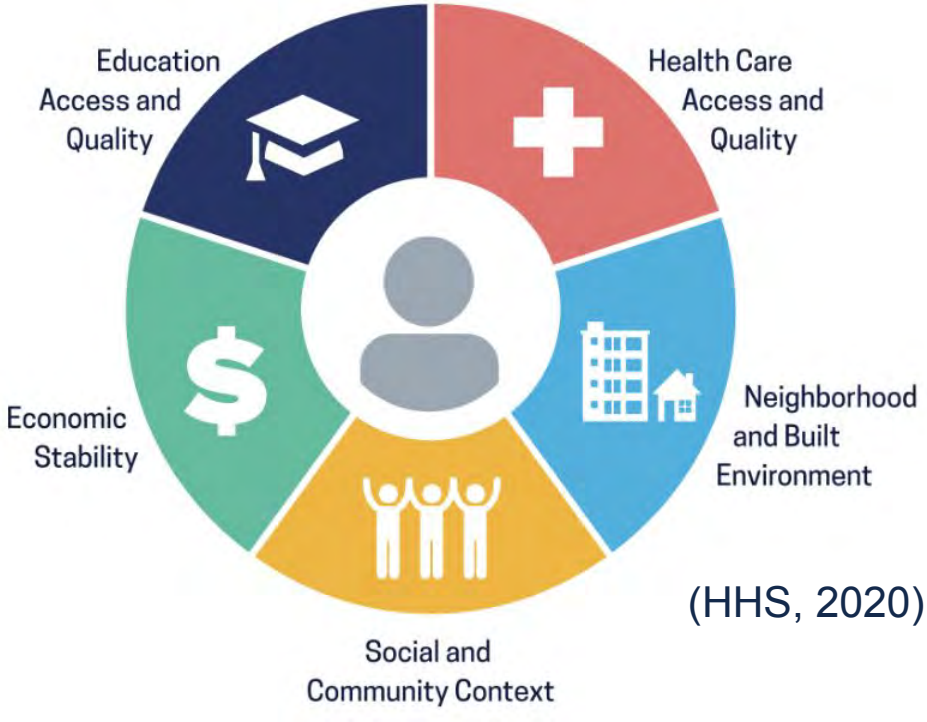
– Resmaa Menaken,
My Grandmother's Hands (2017)

Trauma is common…and many people recover quickly…but some don't

70% of the population has experienced 1 trauma globally per WHO surveys.

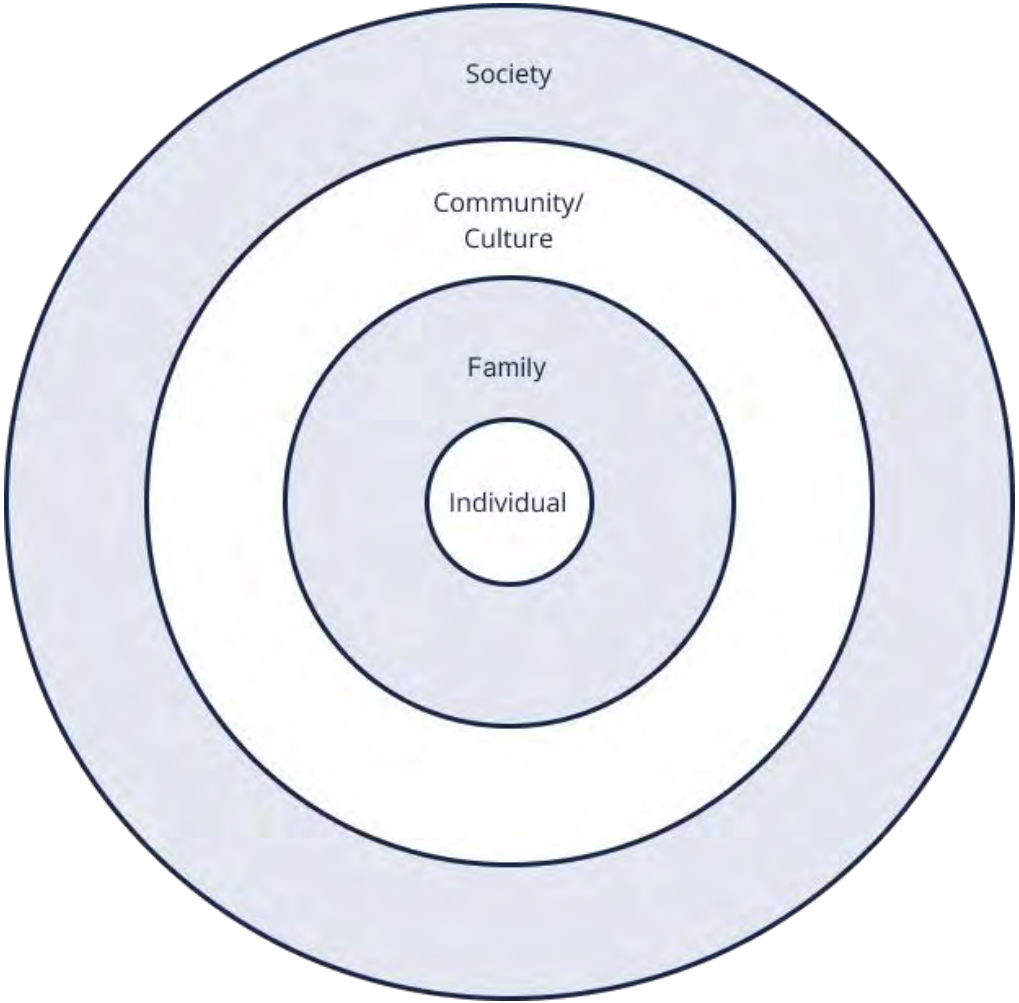
30% report 4 or more experiences of trauma.

(Benjet et al, 2016)



(HHS, 2020)

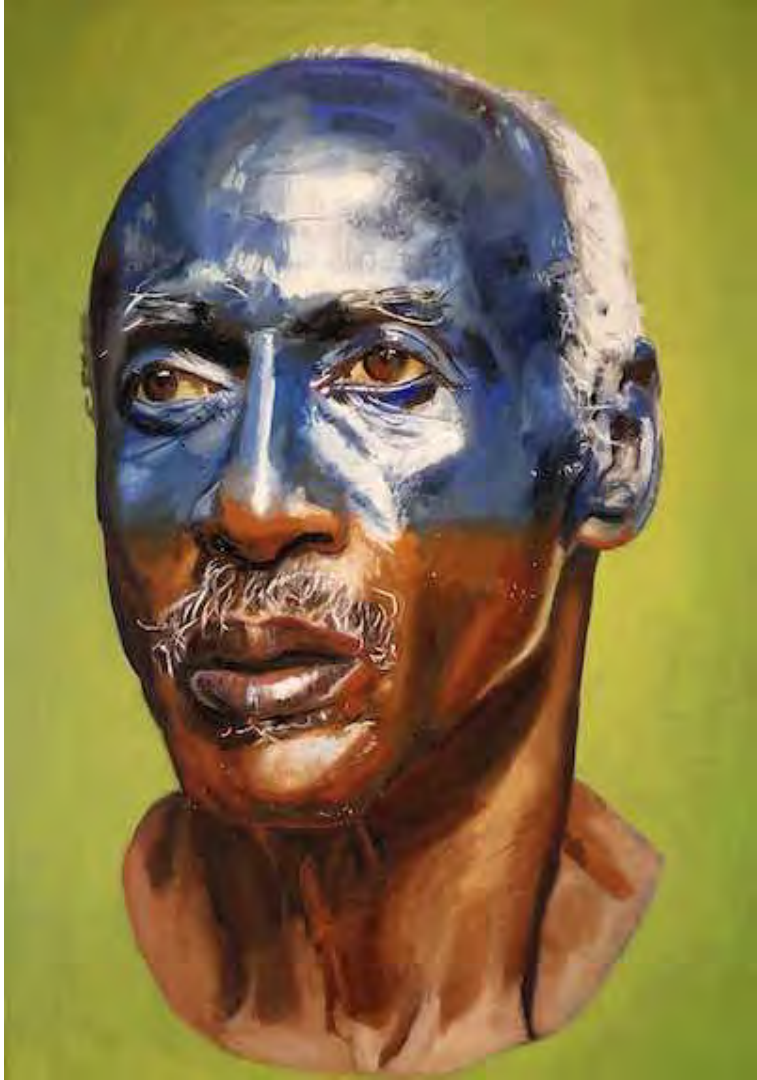
Trauma is a public health issue…not merely an individual issue to address.



See Scott et. al 2023 for information on trauma specifically written for those in tech.

“What would it look like if that trauma or adversity was shown on the skin? Would it invite people to be kinder to each other?”

William Paul Thomas
Tamara’s father, 2019



If you are designing for humans, you must account for the effects of trauma.

Image from Pavel Danilyu on Pexels

Trauma-informed principles from SAMHSA

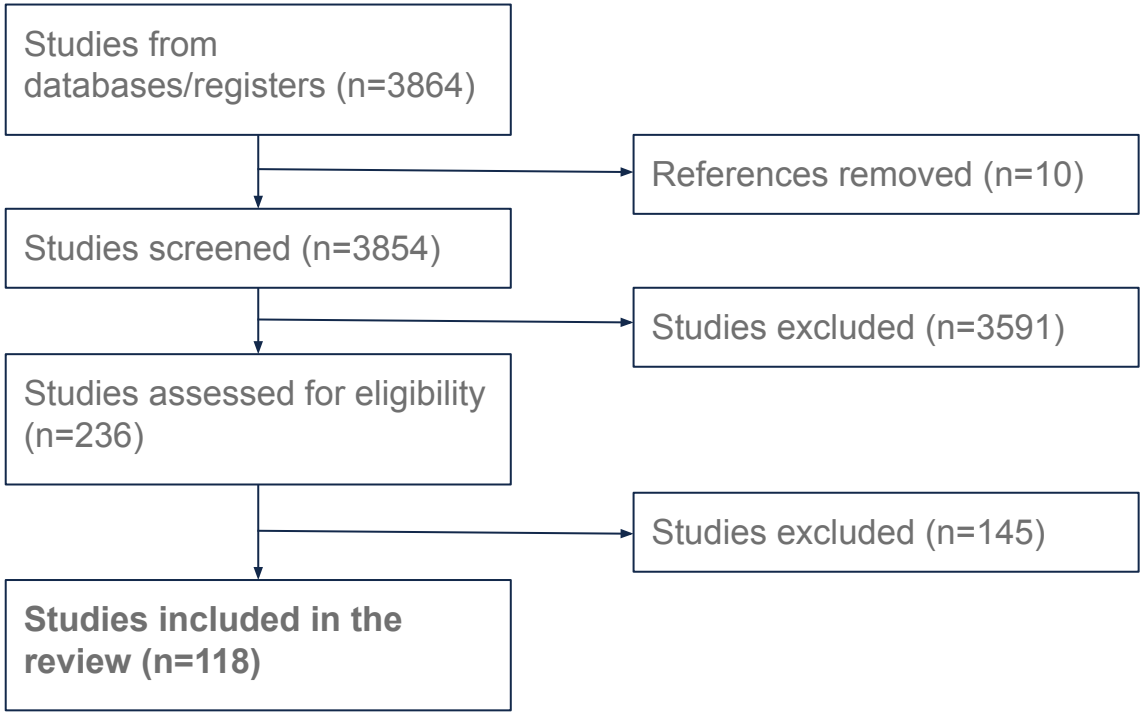
(Image by CDC, 2020, based on SAMHSA, 2014)

Current scoping review project

What is the current state of research on trauma-informed digital design and technology?

- Which types of digital design and technology are applying the concepts of trauma-informed care?
- What organizations and types of practitioners are exploring the concept of trauma-informed design and technology?
- In what settings are the concepts of trauma-informed design and technology being applied?

PRISMA diagram



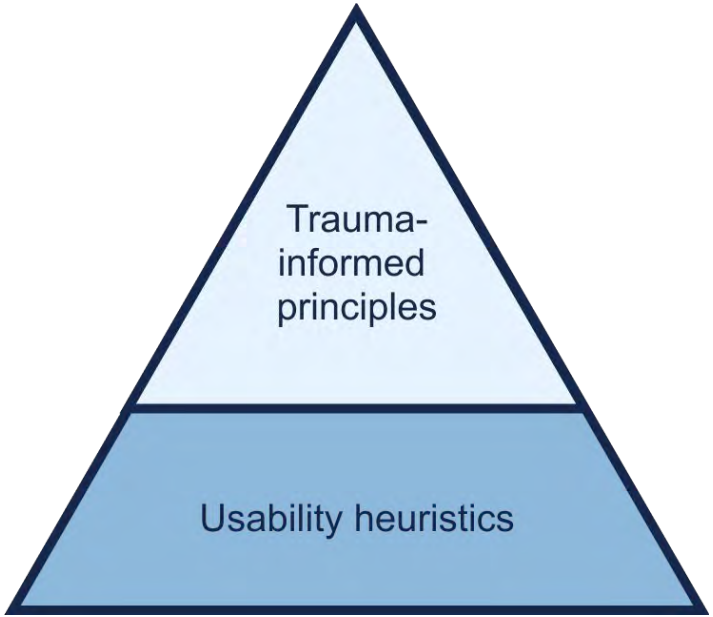
Learnings so far

- More than half of the articles were published from 2020-2023 (56.6%, n=64)
- 44.2% (n=50) of the articles focused on research in the U.S.
- Most of the technologies designed were websites (46.0%, n=52) and mobile apps (42.5%, n=48)
- With regards to topics, the most common ones were cancer (33.6%, n=38), abuse/violence (14.2%, n=16), and substance use (11.5%, n=13)

Learnings so far

- Only 1% of the articles (n=1) explicitly referenced a set of trauma-informed care principles
- Most of the studies (98.2%, n=111) involved people from higher education institutions, 23.0% (n=26) involved people from corporations, 15.9% (n=18) of the studies involved people from government orgs, and 13.3% (n=15) of studies involved people from nonprofit orgs.
- These technologies were designed to be implemented mostly in the general community (43.8%, n=49) and hospitals/clinics (24.1%, n=27).
- Most of the articles (83.6%, n=95) involved people with lived experience of trauma in the design of their technologies.

Prototyping considerations



(Eggleston and Noel, 2024)

Trauma-informed heuristics (Kelly et al., 2021)

- Created by communication design researchers at Michigan State University as they were creating a university resource website
- Developed iteratively with feedback from students and design colleagues
- Based on definitions published by The Institute on Trauma and Trauma-Informed Care (ITTIC)

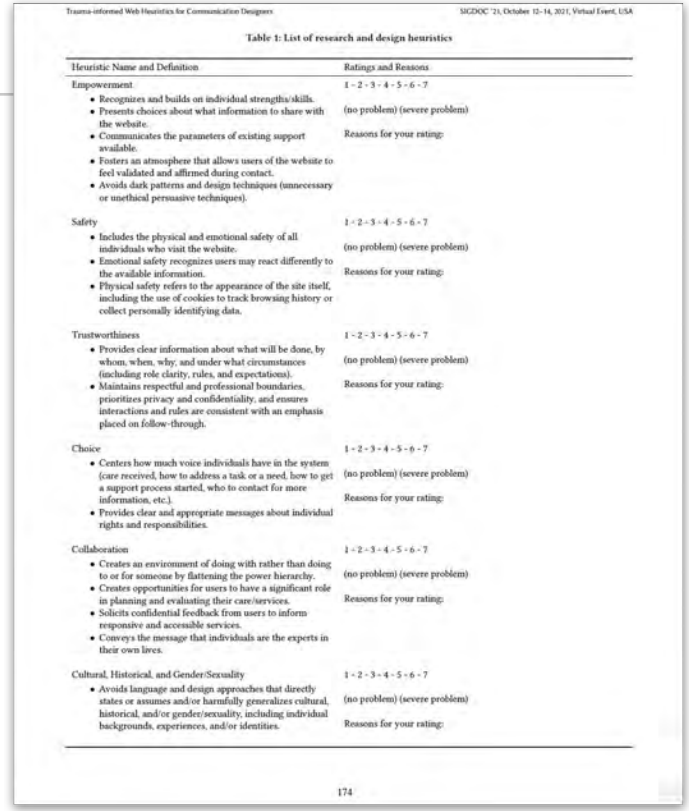


Table 1: List of research and design heuristics

Heuristic Name and Definition	Ratings and Reasons
Empowerment • Recognizes and builds on individual strengths/skills. • Presents choices about what information to share with the website. • Communicates the parameters of existing support available. • Fosters an atmosphere that allows users of the website to feel validated and affirmed during contact. • Avoids dark patterns and design techniques (unnecessary or unethical persuasive techniques).	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:
Safety • Includes the physical and emotional safety of all individuals who visit the website. • Emotional safety recognizes users may react differently to the available information. • Physical safety refers to the appearance of the site itself, including the use of cookies to track browsing history or collect personally identifying data.	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:
Trustworthiness • Provides clear information about what will be done, by whom, when, why, and under what circumstances (including role clarity, rules, and expectations). • Maintains respectful and professional boundaries, prioritizes privacy and confidentiality, and ensures interactions and rules are consistent with an emphasis placed on follow-through.	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:
Choice • Centers how much voice individuals have in the system (care received, how to address a task or a need, how to get a support process started, who to contact for more information, etc.). • Provides clear and appropriate messages about individual rights and responsibilities.	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:
Collaboration • Creates an environment of doing with rather than doing to or for someone by flattening the power hierarchy. • Creates opportunities for users to have a significant role in planning and evaluating their care/services. • Solicits confidential feedback from users to inform responsive and accessible services. • Conveys the message that individuals are the experts in their own lives.	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:
Cultural, Historical, and Gender/Sexuality • Avoids language and design approaches that directly states or assumes and/or harmfully generalizes cultural, historical, and/or gender/sexuality, including individual backgrounds, experiences, and/or identities.	1 - 2 - 3 - 4 - 5 - 6 - 7 (no problem) (severe problem) Reasons for your rating:

Planning for care…and research going awry

- Avoid questions you aren't equipped to hear answers to
- Make time for processing when researching in sensitive areas
- Have resources to support people who are activated
- Protect your participants, yourself, and your fellow researchers

Image by Zen Chung

Becoming trauma-informed is a paradigm shift

Pre-aware

Trauma aware

Trauma sensitive

Trauma responsive

Trauma informed

(Missouri Model, 2014)

Resources for further learning

https://bit.ly/dforge24

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