

Needfinding

Inclusive Design

Team



Helen Fang



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Needfinding Methodology

Gina Wei

WHO

Student Teacher, Bay Area High School

Former Counselor, The Bridge Peer
Counseling Center



personal connection | in-person

Gina Wei

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Student Teacher, Bay Area High School

Former Counselor, The Bridge Peer
Counseling Center



personal connection | in-person

Sydney Maples

WHO

Stanford University, Symbolic Systems

Executive member of CS+Mental
Health



personal connection | in-person

Alyssa Noll

WHO

Researcher, Juno Therapeutics

American Sign Language Instructor

CODA (Child of Deaf Adults)



personal connection | over Skype



Guiding Our Needfinding

gina

sydney

alyssa

Why do people reach out to the Bridge?

Based on your experience at the Bridge, what has been the most effective way of helping callers and why?

Tell us about a challenging counseling session. How did it make you feel and why?



Guiding Our Needfinding

gina

sydney

alyssa

How did you get involved with CS+Mental Health?

Tell me about a project you were involved in.

How did this experience shape your views about this space?



Guiding Our Needfinding

gina

sydney

alyssa

What are the challenges/nuances of communicating with your parents?

Tell me about the ways you and your family use technology

Can you describe a unique live-event experience your parents have had?

Interview Results & Analysis

Gina Wei

tensions

contradictions

surprises

“People come to Bridge because they don’t want to **burden their friends**. Friends are just busy.”

“There is pressure **to be perfect**.”



Gina Wei

tensions

contradictions

surprises

“Anyone can become a peer counselor...but it takes a lot of training.”

The Bridge is a good source of help, but it isn't long-term solution.

Gina Wei

tensions

contradictions

surprises

Bridge simply provides **anonymity/confidentiality**, and points to **other resources**.

Peer counselors **never give advice/speak from personal experience**, but help people formulate their own thoughts & plans.



Sydney Maples

tensions

contradictions

surprises

Mental health as a discipline is pretty “subjective,” “mood-based,” and “not quantitative.”

Knowledge gap is a major roadblock for integrating tech in mental health.



Sydney Maples

tensions

contradictions

surprises

Tech can unlock data wealth but is also limited (hippocratic oath, patient confidentiality).

“People in academia are interested in unpacking data but don’t have technical backgrounds to do so, and vice versa for computer scientists.”



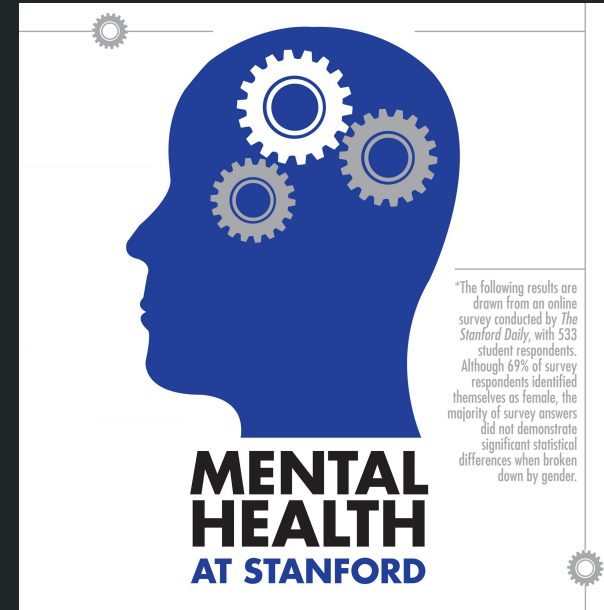
Sydney Maples

tensions

contradictions

surprises

User interfaces of existing tools (i.e. DISC Predictive Scale) are **very outdated** and people don't like using it.



“Anonymity and confidentiality”

“Vulnerable”

“Burden”

“Knowledge Gap”

“Not quantitative”

SAY



THINK

Engaged, eye contact

DO



FEEL

Conscientious of speech (Gina)

Fidgeted when talking
about project challenges

Engaged, otherwise (Sydney)

Empathize

Never give advice

Never follow up

Ethical/legal limitations

Frustrated by red tape

Excited by multidisciplinary interest

Safety, but limited by protocol

Empathetic but restrained in
voicing personal opinions

NEEDS

To **feel safe** while vulnerable.

Bridge the knowledge gap between medical professionals and engineers.

INSIGHTS

Everyone can help, but at the same time a lot of time and training is required.

When approaching mental health, we need to keep in mind the legal and ethical protocols that are in place to protect these people.

Alyssa Noll

tensions

contradictions

surprises

Hearing people are often **distrustful of interpreters**, esp. over phone.

People **make fun of** interpreters, deaf people's voices, deaf culture.

Hearing people **complain** about deaf accommodations.



Alyssa Noll

tensions

contradictions

surprises

Automated captioning is now the **most common translation method**, but deaf community **does not prefer it** (“automated craptions”).

Communication is **much easier now with smartphones**, but many deaf people **do not own** them.



Alyssa Noll

tensions

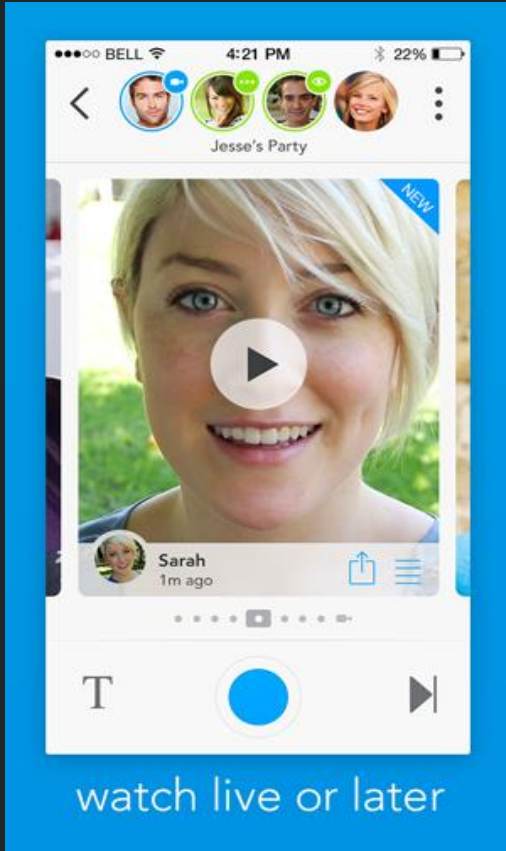
contradictions

surprises

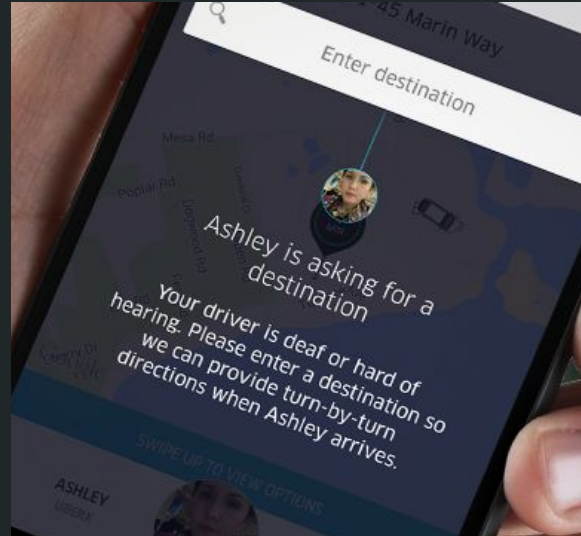
ASL communication relies heavily on **body language, facial emotions.**

A lot of people don't realize **English is a second language** for deaf people.

Audio live events are **really enjoyable** with a good live interpreter.

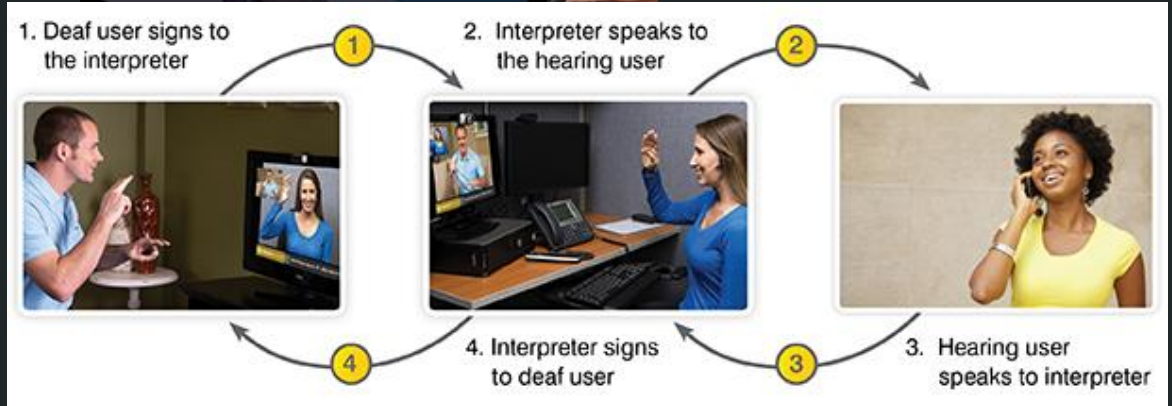


1. **Glide**



2. **Uber**

3. **VRS**



“Captioning is a barrier”

“Full audio experience”

“For once the intended audience”

“Experiencing live events”

SAY



Wish her parents could access more content

Information sharing is extremely valued

Liked the Inclusion in Uber’s app



THINK

Gestured a lot with hands

DO



FEEL

Demonstrated ASL signs

Pronounced facial expressions

Frustrated by stigma/ignorance

Upset by translation deficiencies

Excited by new technologies

NEEDS

Access to **equal amounts** of content

Better **translation** methods

More **understanding/empathy** from
the hearing community



INSIGHTS

Huge role that technology can play in improving communication

Cannot have inclusion for deaf community without first gaining the empathy of hearing people

Summary

There is a lot of need in the mental health space, but difficult to address due to its **qualitative nature** and **ethical/legal hurdles**.

Technology can play a huge role in giving the deaf community experience that **hearing people take for granted**.

Moving Forward

- Zina Jawadi: Hearing Loss Association of America, hard of hearing
- Cathy Haas: American Sign Language lecturer (Stanford), deaf
- Janet Nystrom: Director of Deaf Services of Palo Alto DSPA
- ASL interpreters

Image Sources

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