

IANA

A Self-Reporting App for Mental Health
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Concept

IANA - 'I Am Not Alone' is a self-reporting social computing platform for teens who are experiencing depression and anxiety symptoms in various incidences through a time period (day, week, month). IANA enables self-reflection, connection with others, interpersonal assistance, and access to valuable resources. Emotional regulation strategies show strong negative associations with acceptance and strong positive associations with avoidance, suppression, and rumination.¹ Therefore, feelings of rejection, feeling alone can result. IANA hopes to achieve support to its users to not feel alone, grow a social network of similar medical conditions, build strong and weak ties to feel supported by coaxing the users into cognitive reappraisal, problem solving, and acceptance.¹



¹Schäfer JÖ, Naumann E, Holmes EA, Tuschen-Caffier B, Samson AC. Emotion Regulation Strategies in Depressive and Anxiety Symptoms in Youth: A Meta-Analytic Review. J Youth Adolesc. 2017;46(2):261-276. doi:10.1007/s10964-016-0585-0

Problem Addressed with this Concept

Almost one in three high school students (32 percent) report feeling so sad or hopeless that they stopped doing some usual activities almost every day for two or more weeks in a row during the past year. Female high school students (41 percent) were almost twice as likely as male high school students (21 percent) to report depressive symptoms in 2017. Untreated depression can lead to serious consequences, including suicide.¹

Motivation

Why would teens use IANA? Devices and social computing apps are integral part of their lifestyle and means of communicating to friends and meeting new friends through existing friendships. During the COVID-19 shelter-in-place order, most teens have 'survived by staying connected to friends'. But, those who do not have social ties amongst peers are most likely have been suffering the most. Troubled teens default to coping strategies of avoidance, suppression, and rumination as mentioned in the IANA's concept. The self-reporting feature offers catharsis and having a choice to do this privately or publicly within their select individuals or group.

¹Centers for Disease Control and Prevention. (2018). Youth Risk Behavior Surveillance - United States, 2017. Morbidity and Mortality Weekly Report, 67(8).

Building IANA's safe network and retention.



IANA is designed to be:

Entertaining - somewhat enjoyment fun

Teachable - demonstrate on to do something or tell something we don't know.

Inspire excite, encourage, lift people up

Inclusive help people feel apart of something. have similarities, something in common with people, be possible to understand.

Empathy show ability to share the feelings of another.

Be Useful - Be Coherent - Be Real

IANA UX - What framework would an IANA user's interaction look like?

What is the framework for Iana's social interaction?

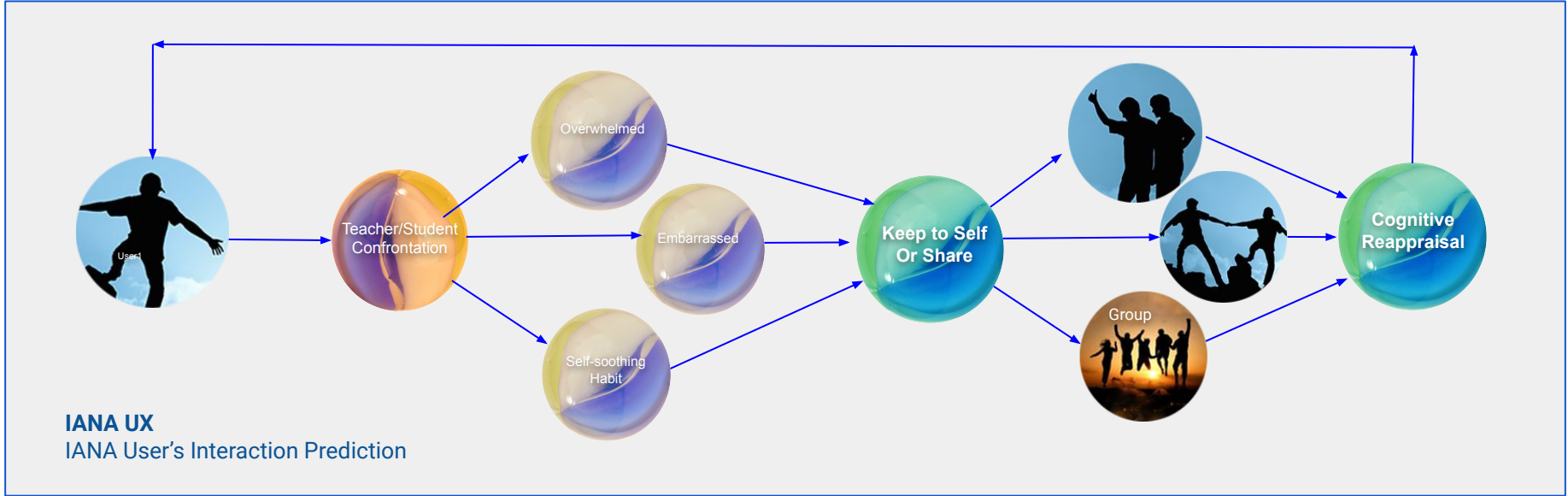
User + Stressor = Buddy

User + environment (external) incident, social incident, or internal trigger = Journals, Reaches out to friend, group, public, therapist.

User establishes ties with group + environment incident, people incident, or activity incident.

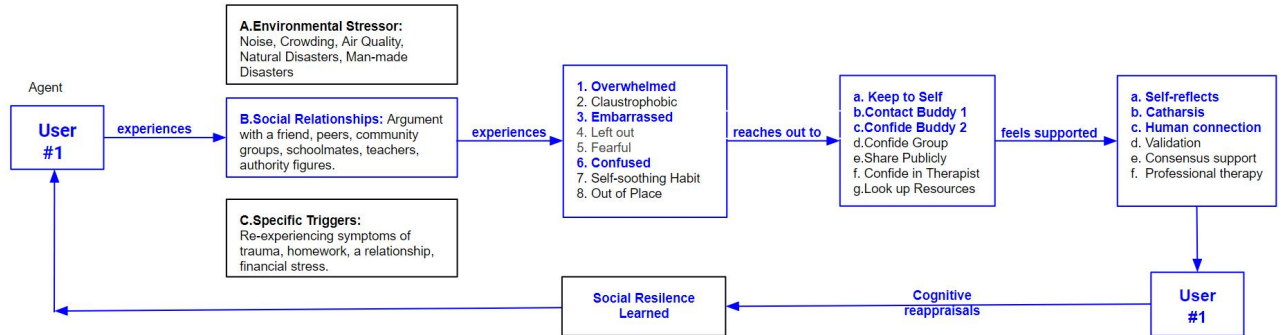
User + incident = seeks help from a clinician/professional, relates to people in similar incident, or activity incident.

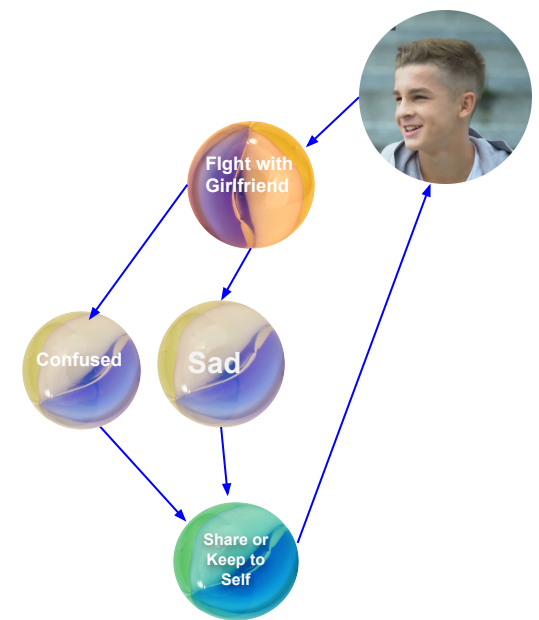
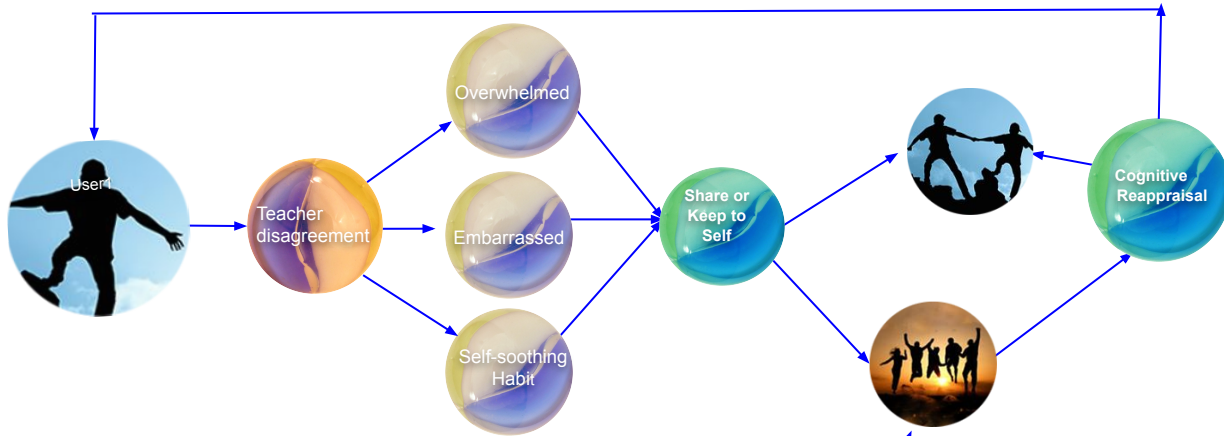




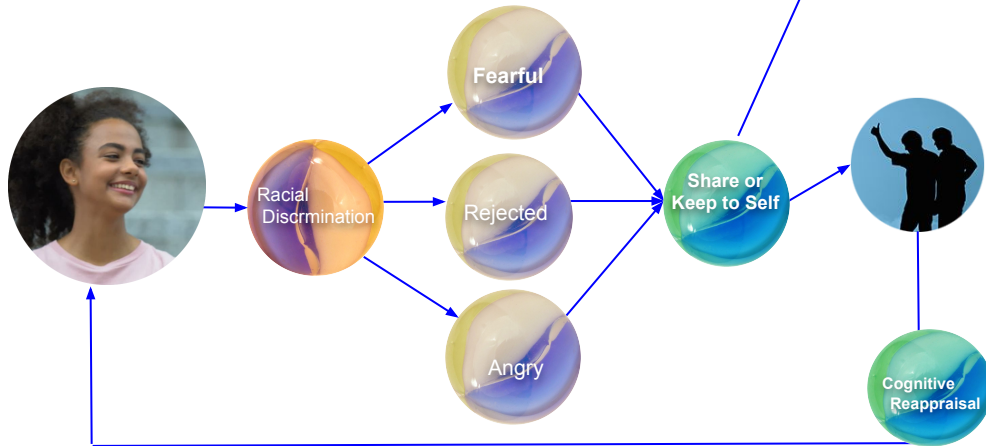
User Engagement Gauges:

- 1.How recently have you messaged?
- 2.How long ago did you first message?
- 3.How often do you talk a lot to each other?





IANA UX - Multi-User Example



Plan for Prototyping - *What questions will the prototypes be answering?*

1. How will the social dynamic playout?
2. What type of incident triggers prompts the user need for support?
3. What type of incidents will be shared or kept private by the user?
- 4, Who would the user mostly share their thoughts with? A friend, group of friends, publicly, professional therapist.

The IANA prototype is designed with the following design goals of IANA's safe network:

- **Self-Reflection:** Toolkit would include a diary, journaling feature, a 'hive' visual of where the user is in company of other peers who are in the same emotional state. Rate your feelings, then it will populate with icons representing people who also feel the same.
- **Circle of Support:** Attract new users and continue engagement of account users which encourages strong and weak ties. Strong ties (family support system, therapist) and weak ties (anonymous buddies, professional help) will be measured through If the user does not have a support system, IANA would connect the user to someone In the network.
- **Professional Resources:** Access to professional therapists will also be available as well with articles and help centers in the area. A 911 Mental Health call button would be available to contact professional help.
- **Visual Design:** Colorful, Clean, Upbeat and highly interactive with touch screen capabilities. Appealing to teens.
- **Strong and Weak Ties** will be developed within IANA's network.
- **Interaction must be salient**

Potential Shortcomings - Negative Behaviors, Moderation, Central Ethical Risks, Privacy

Negative behaviors such as trolling, scamming, malicious, intent, inconsideration, and insensitivity, bullying, coercion, dialoguing therapy without licensed therapists. IANA will establish injunctive norms like open-mindedness, respect, and attentiveness to others; negative behaviors will be strictly prohibited. IANA will encourage positive descriptive norms. Awards such as buttons, gift certificates for 1 year active account, etc, will be given to those following IANA's injunctive norms. Community moderation will exist via reporting systems. Algorithmically, keyword filters will be used to report bad behavior. Paid moderators will then review reports and identify negative users. Escalating consequences for negative behavior include warnings, short account suspensions to permabans.

For privacy, we will ask users for their personal information when they sign up to discourage bad actors. However, we will allow users to share as much or as little information as they want with other users. For their own privacy and safety, users can 'private' information and selectively reveal information to friends. We will also ask users to refrain from sharing other users' personal information and stories. We will also prevent users from taking screenshots of personal information and conversations. IANA's policy will not be selling user information or using it in ways besides described but used explicitly for the system. Since our system is mainly used by a vulnerable group - teens, we hope by encouraging positive norms and prioritizing user privacy, we can create a safe space for people to share personal stories and seek support. User account that specifies that they will sign releases for personal information to be released and indicate with an option of who (parent or physician), they want access, reports, flags, or alerts.

Privacy concern: input personal information in order to get access to an account. Secured but anonymous - (optional information sharing), monitored.

If friends with someone, then information shows up. If not, then appears as anon to them.

Potential Shortcomings - Negative Behaviors, Moderation, Central Ethical Risks, Privacy

What is our moderation model?

Preventing Negative Outcomes: Flagging Keywords: Mention of Suicide, cutting, drug, going to sleep for a long time and immediately notifies, a professional vetted licensed therapist to come into chat to de-escalate or offer free one-on-one consult. Community moderation will exist via reporting systems. Algorithmically, keyword filters will be used to report bad behavior. Paid moderators will then review reports and identify negative users. Escalating consequences for negative behavior include warnings, short account suspensions to permabans. Follow mandated reporter policy - reporting suicide or self-harm, flagging keywords: Mention of Suicide, cutting, drug, going to sleep for a long time, and immediately reported to licensed therapist to de-escalate emotions to positive emotions by personally messaging user.

What privacy concerns exist with your data, and how will you address them?

Vocabulary

Trolling: creating discord on the Internet by starting quarrels or upsetting people by posting inflammatory or off-topic messages in an online community.

1. **A social media troll** is someone who purposely says something controversial in order to get a rise out of other users.

Scamming: a strategic plan of deceptively gaining information, money, property from unsuspecting people.

Descriptive norms

1. We are influenced by what we see as common behavior in the environment.
2. Norms that describe common behavior.

Injunctive norms

1. We are also influenced by what we believe to be expected, even if we don't see it.
2. These are known as injunctive norms: norms that describe what you should or should not do.

The IANA prototype is designed with the following UI features which align with IANA's goals:

1. **Personal Assessment Check in:** User rates overall mood with icons representing emotions (Emojicons) of. Wordless or visual 2-second self-report of emotional/physical state. Quick self-reporting is based on a rating system
2. **Emotional states** such as Great/Good/OK/Bad.
3. **Physical states** such as nauseated, tired, feeling wired, and can't sleep.
4. **Emotional Tracker** with option to share or keep private.
5. **Peer Support** enable the teen to share their feelings in a group or in a smaller group of choice of buddies.
6. **Chat Rooms:** A welcoming space which teens can connect and communicate - DM or Chat or public forum. An additional space for teen to 'break out' with another teen or choose a therapist.
7. Private chat rooms ('Water Fountain' or 'Bench Buddy') can be reserved and use for a break away from a public chat room. The rooms are modeled after high school social groups that are offered on campus.
8. **Journaling** within a digital diary with the option to share or keep private.

App Features:

1. Emoji Icon to represent over all mood.
2. User inputs incident type or trigger.
3. User uses Anonymous Username Alias, perceptible by Content Mods
4. Report Buttons of negative behavior.
5. Group messaging - support group
6. Group Discussions - Support groups
7. Semi-private/breakout rooms - regulated and moderated
 - a. Possibly only make accessible after having spent X amount of time in support groups?
8. Private Messaging with a Therapist
9. Registration
10. Login
11. Profile editing
12. Social integration
13. Messaging
14. Geolocation
15. Push notifications
16. Settings
17. Interaction with other teens using the same medication

UI/UX Prototyping - Bricolage

Referred to existing apps for mood reporting and eating disorders. MindShift, Calm, Recovery are self-reporting apps available on IOS and Android. Vanderbilt NICHQ Assessment Scale is a paper rating scale that Teachers and Parents use to rate the affected behavior of ADHD medication.

Social bricolage will be used for the feasibility of the UI/UX design. In regards to testing the IANA app, different types of low-fi prototypes to present to potential users in interviews. The users were teens and their network of friends. Honest feedback was given with suggestions.

Group Me: Group Text Message App does not share phone numbers

Tumblr

Slack

Discord

Evaluating social network interactions and their strengths/weaknesses and retention.

Show how the ties are personally bonded or have a shared identity.

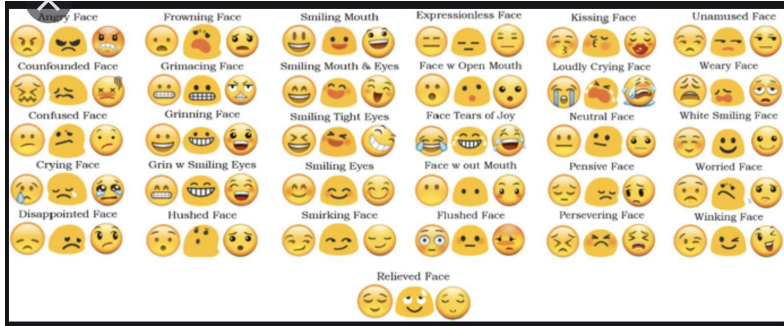
Ask questions to user to find if the tie has gotten stronger or is a strong tie already.

Moderator/Therapist

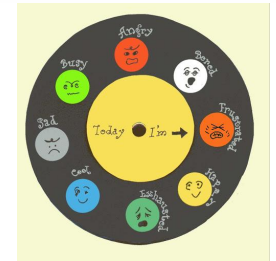
Determinants if UI/UX is working.

- No one Chats
- Some chat participation
- Full Engagement

Visual Charts



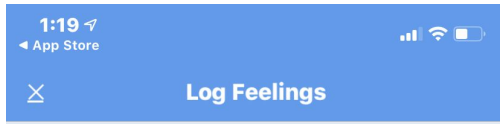
MOOD METER



N



Recovery Road



How are you feeling overall?

Average



How energetic are you feeling?

Average

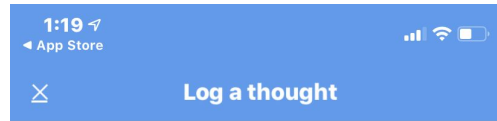


Happy

Tired

Anxious

Sad



What thoughts or concerns are going through your mind?

Submit

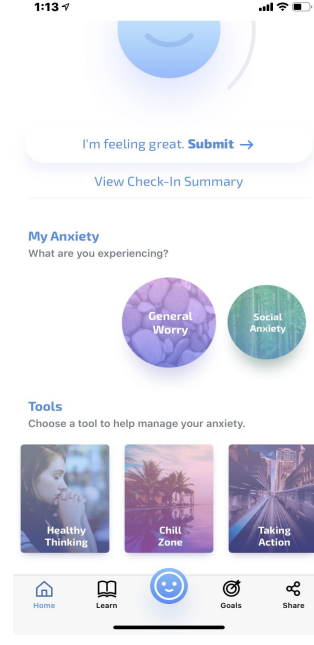
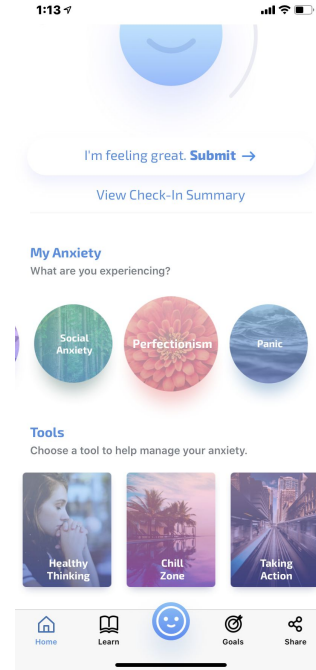
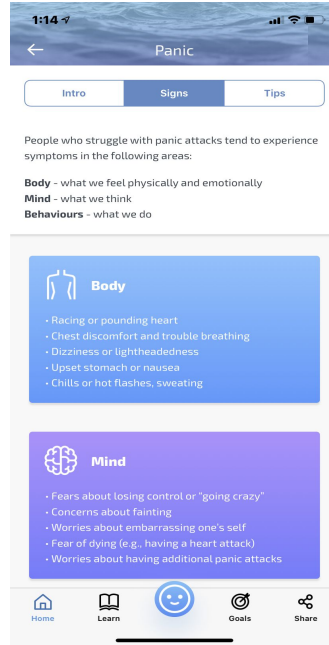
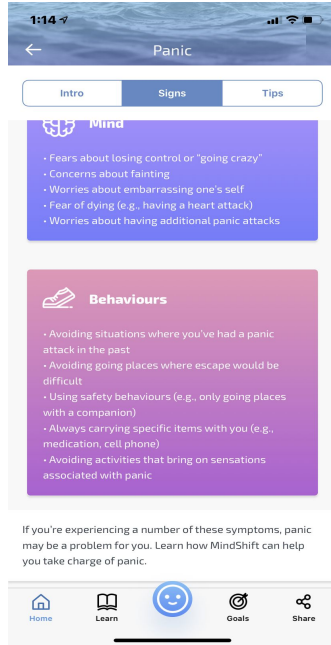
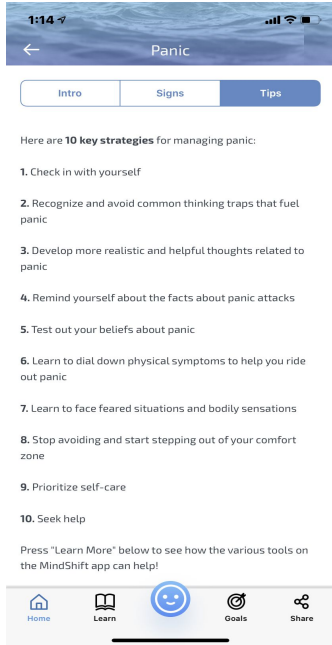




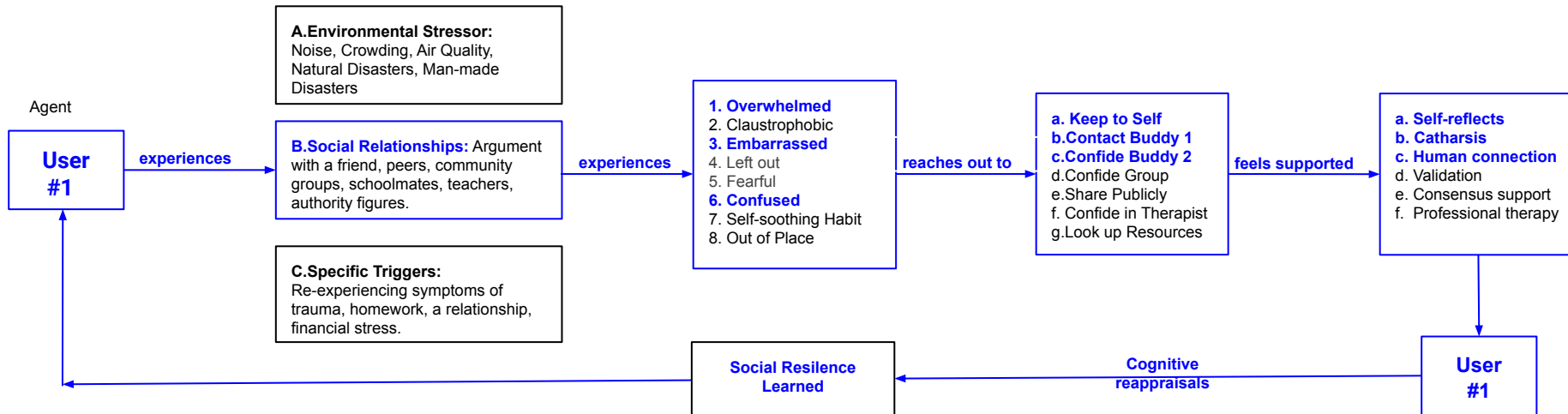
When would user want to connect to a buddy, get approval, or be with a group of friends.
What is the reciprocal factor between the relationships?

Friend

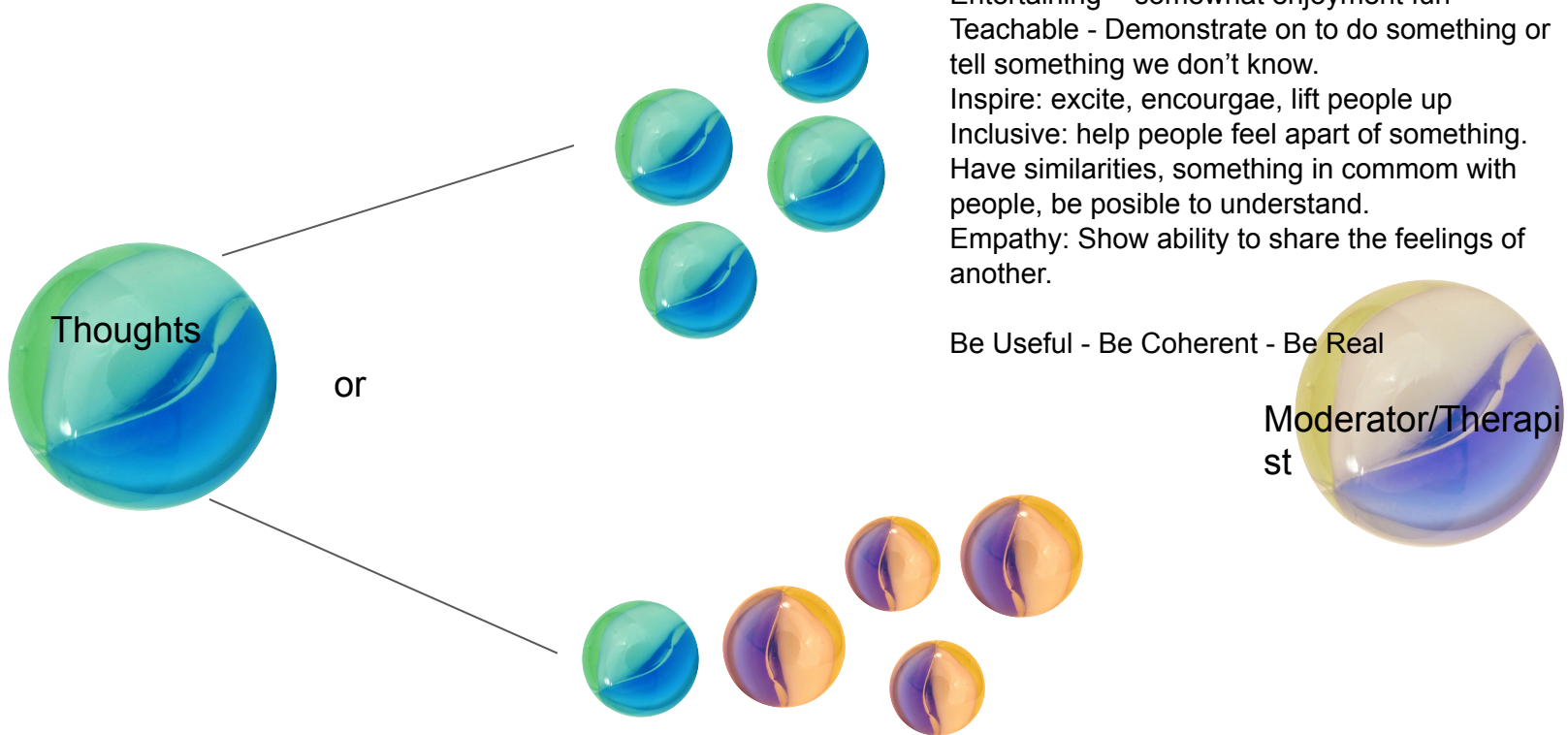
MindShift



IANA UX - IANA user's interaction predicted.



Building IANA's safe network and retention.



Concept: Safe Network - Buddy, 'Older Mentor', Friends, Other Peers, Approval

Feature of Identifying Emotion



Concept: What does a safe network consist of?



Approval

- Social Transparency:**
- Visibility
 - Awareness
 - Accountability



Buddies



Me



Friend



Friend Group 1



Approval

Weak Ties:
Anonymous buddies,
professional help



Friend Group 2

Recovery Road

1:20

App Store

Log Behaviors

How are you feeling overall?

Average

Did you restrict food intake?

No Yes

E.g. Deliberately limit the amount of food you ate.

How strong is your urge to restrict now?

Not at all

Did you binge?

No Yes

E.g. Eat an unusually large amount of food and experience loss of control.

How strong is your urge to binge now?

Not at all

1:20

App Store

Log Feelings

Stressed

Irritable

Angry

Depressed

Motivated

Excited

Grateful

Joy

Loved

Thought Diary

Submit

1:20

App Store

Log Feelings

Frustrated Moderate

Guilt

Shame

Disgust

Numb

Bored

Physical Pain

Intrusive Thoughts

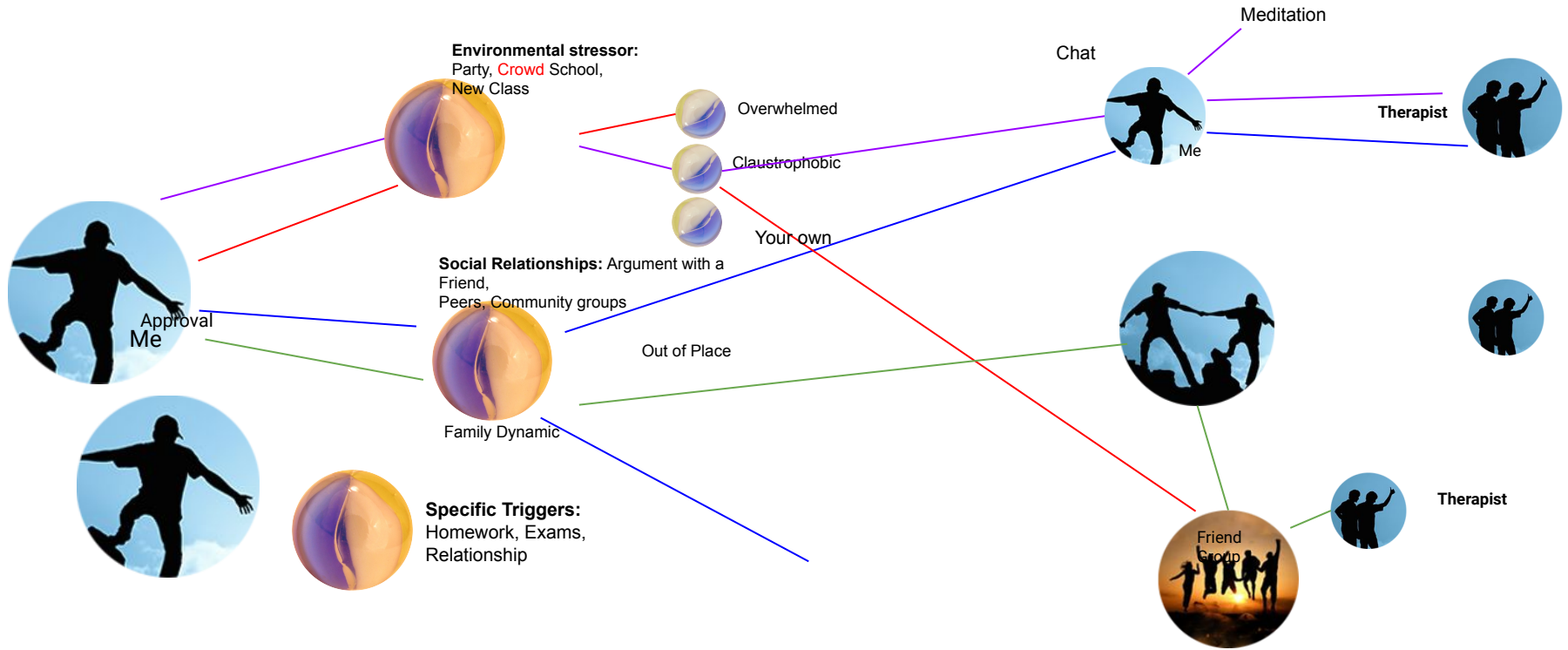
Dizzy/Headache

Stressed

Irritable

Angry

Depressed



Concept: Safe Network - Buddy, 'Older Mentor', Friends, Other Peers, Approval



What would the social formulas be:

User + Stressor = Buddy

User - joins a buddy + environment (external) incident, social incident, or internal trigger

User - joins a group + environment incident, people incident, or activity incident.

User - seeks help from a clinician/professional + environment incident, people incident, or activity incident.