

ANONYMITY, INTIMACY AND SELF-DISCLOSURE IN SOCIAL MEDIA

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maxiao.info



Yik Yak ✓
@YikYakApp

"when i die i want my group project members to lower me into my grave so they can let me down one last time"



Search Facebook



Xiao

Home 4



Update Status



Add Photos/Videos



Create Photo Album



When I die I want my group project members to lower me into my grave so they can let me down one last time.



Friends

Post



CORNELL
TECH



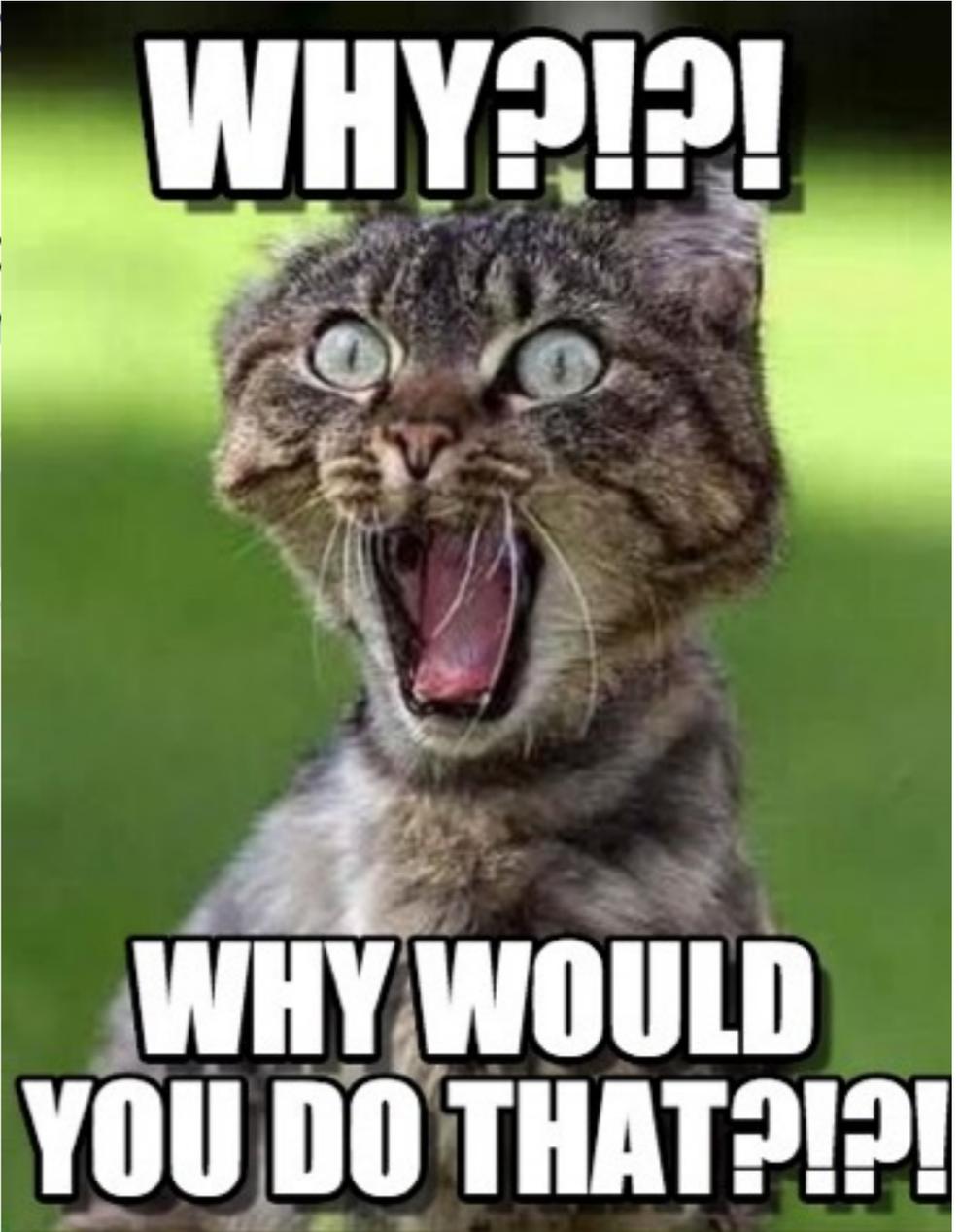
Stanford University

Update Status | Add Photos/Videos



When I die I want my group project members to be in my grave so they can let me down one last time

Facebook status update interface with icons for photo, tag, emoji, and location.



OUTLINE

1. Why we care about self-disclosure
2. Experiment set-up
3. Results and discussion

SELF-DISCLOSURE

“ The revealing of personal information to others. ”

— *Jourard & Lasakow (1971)*

BENEFITS



Therapeutic Effects



Socialization



Social Validation

RISKS



Loss of Privacy

BOOO!

Social Judgement



Context Collapse

TO DISCLOSE OR NOT TO DISCLOSE

Benefits



Risks

— *Bazarova & Choi (2014)*

RELATED WORK (F2F)

1. Intimacy of topic

Jourard and Lasakow 1971

2. Anonymity

Simmel 1950

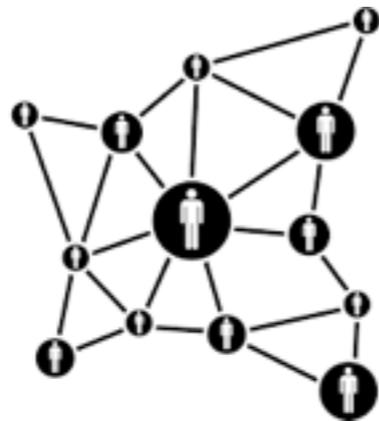
3. Audience

Rubin 1978

ANONYMITY/AUDIENCE



Real Name



Social Ties



Anonymous



People Nearby

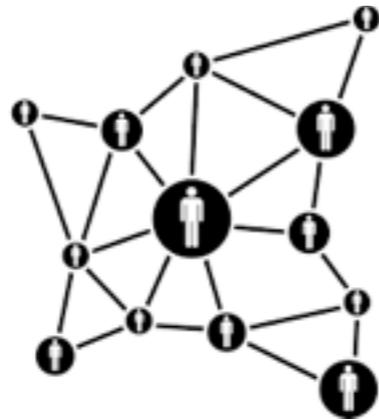
ANONYMITY/AUDIENCE



Real Name



Anonymous



Social Ties



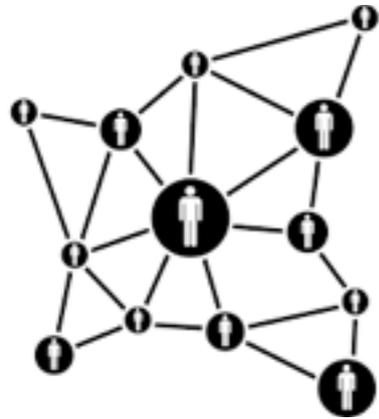
People Nearby



Real Name



Anonymous



Social Ties



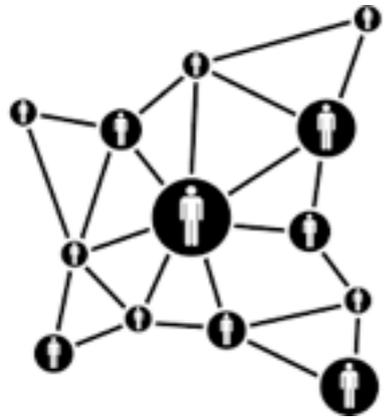
People Nearby



Real Name



Anonymous



Social Ties



Facebook



Secret



People Nearby



Tinder



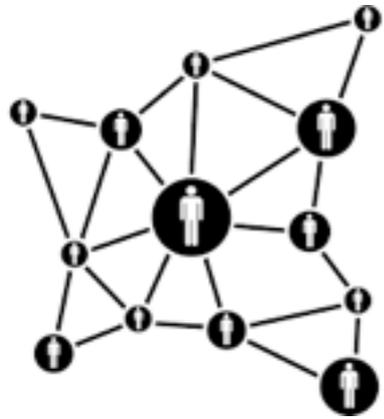
Yik Yak



Real Name



Anonymous



Social Ties



Facebook



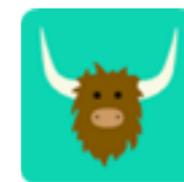
Secret



People Nearby



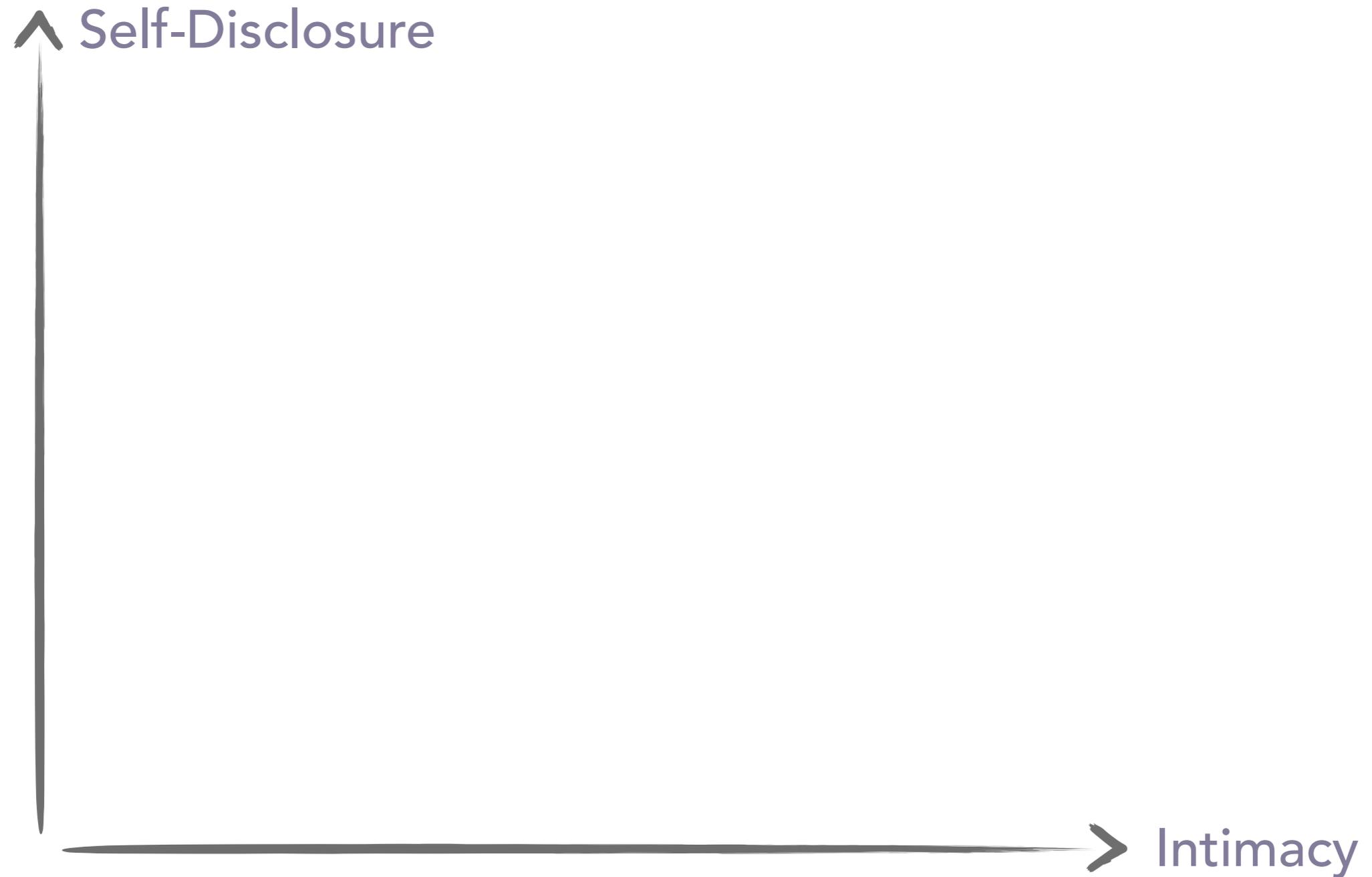
Tinder



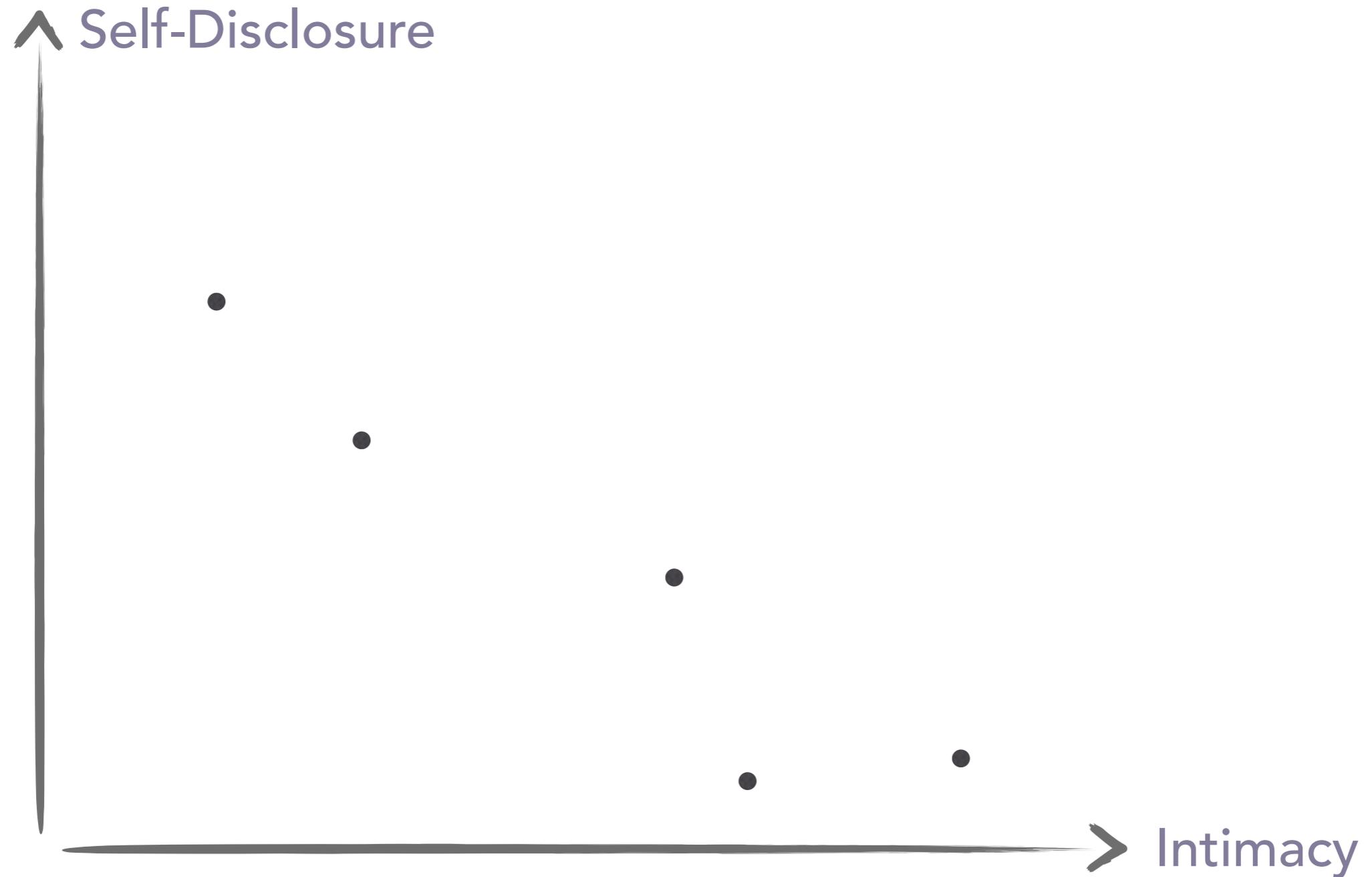
Yik Yak

— Kang et al. (2016);
Gang et al. (2016, 2014)

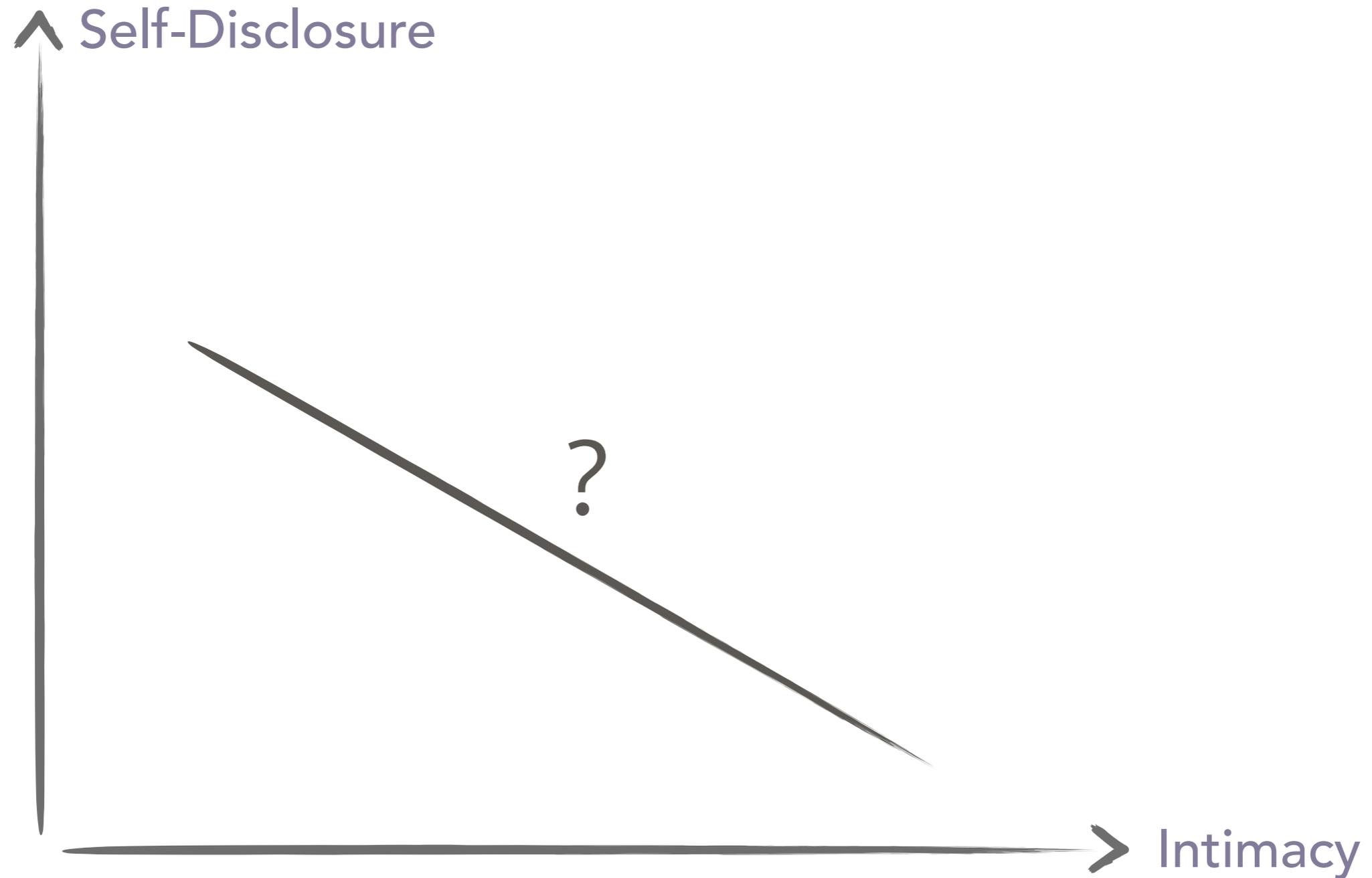
RQ1: DOES INTIMACY REGULATE SELF-DISCLOSURE?



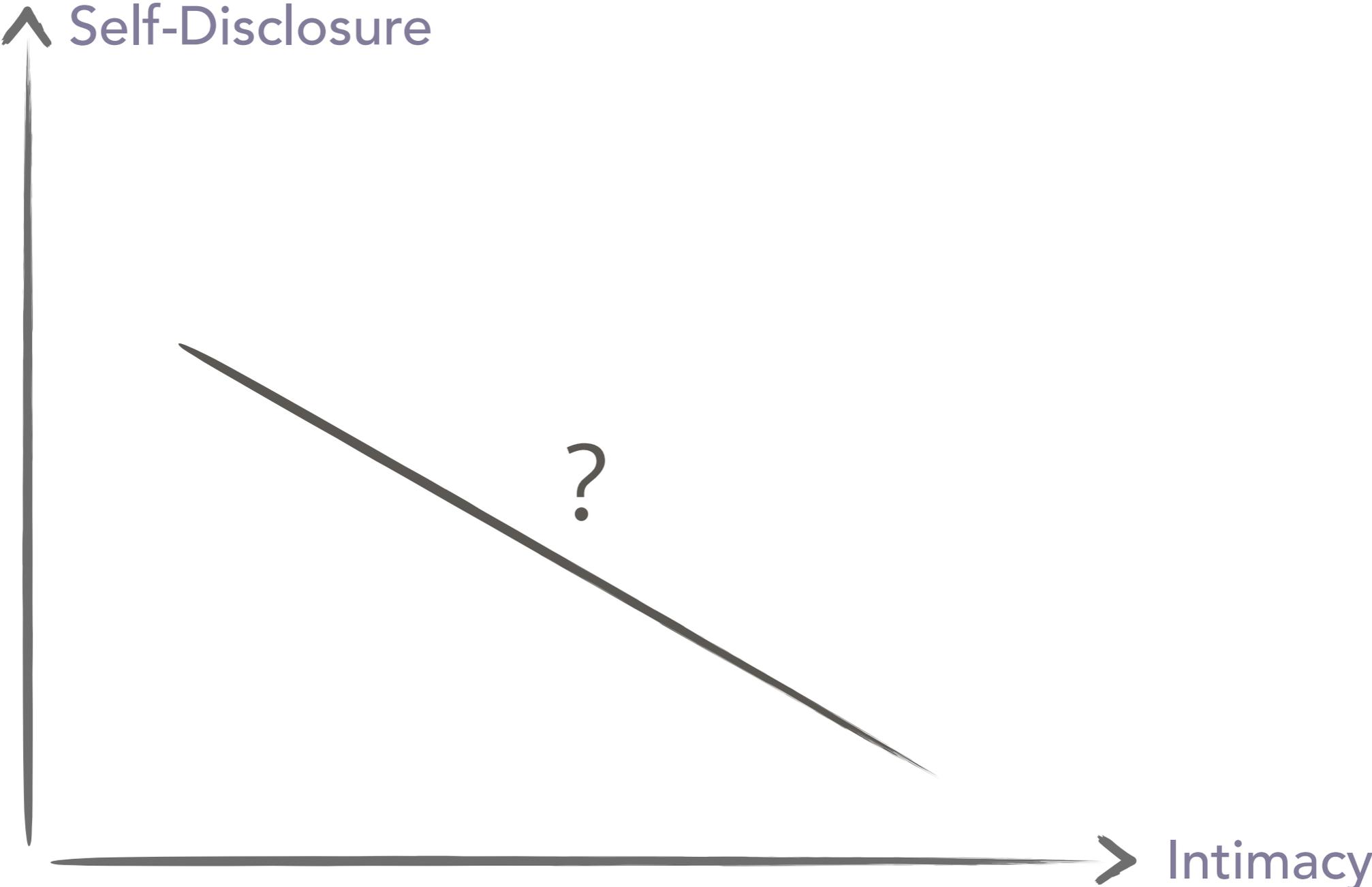
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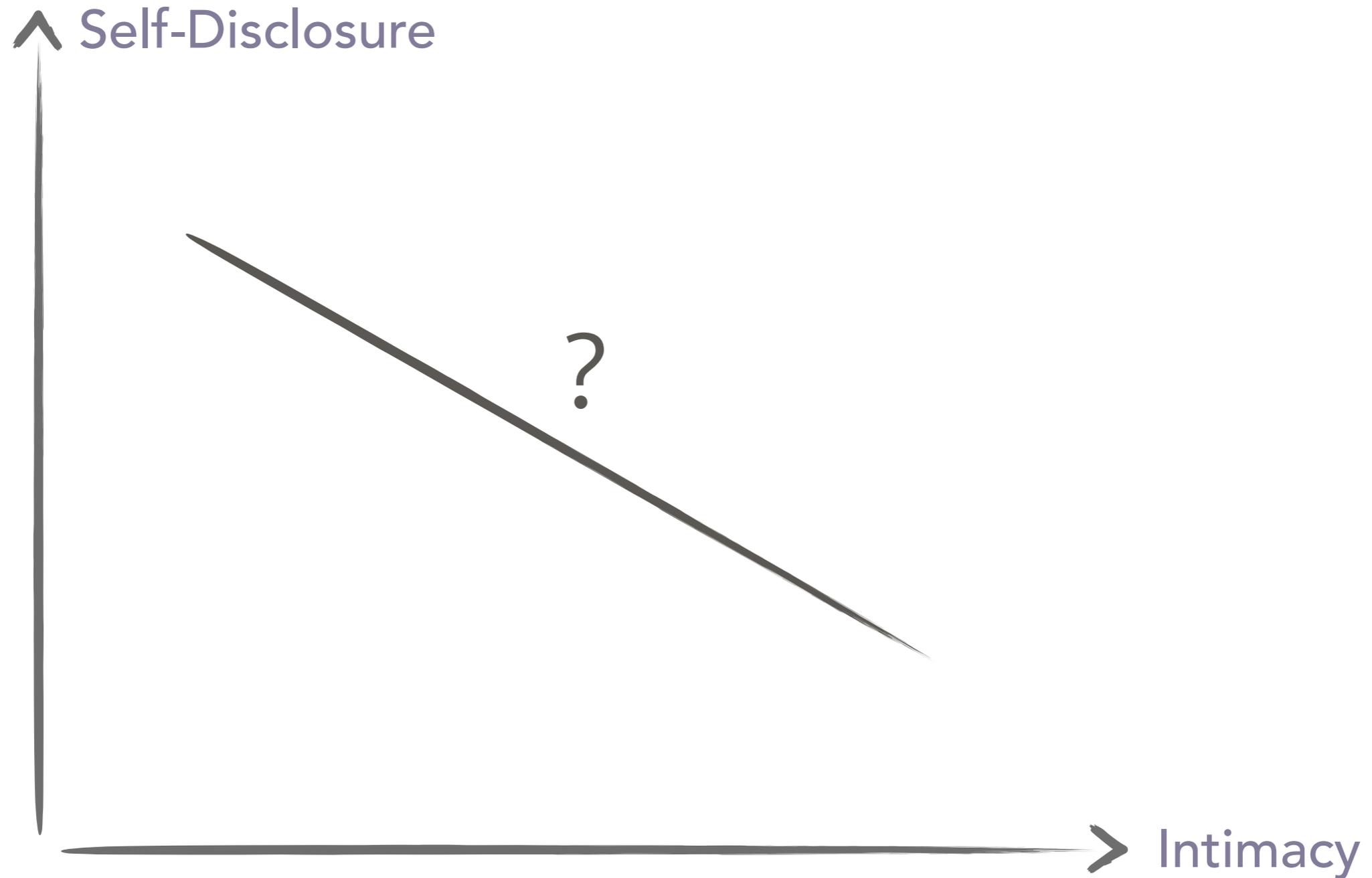
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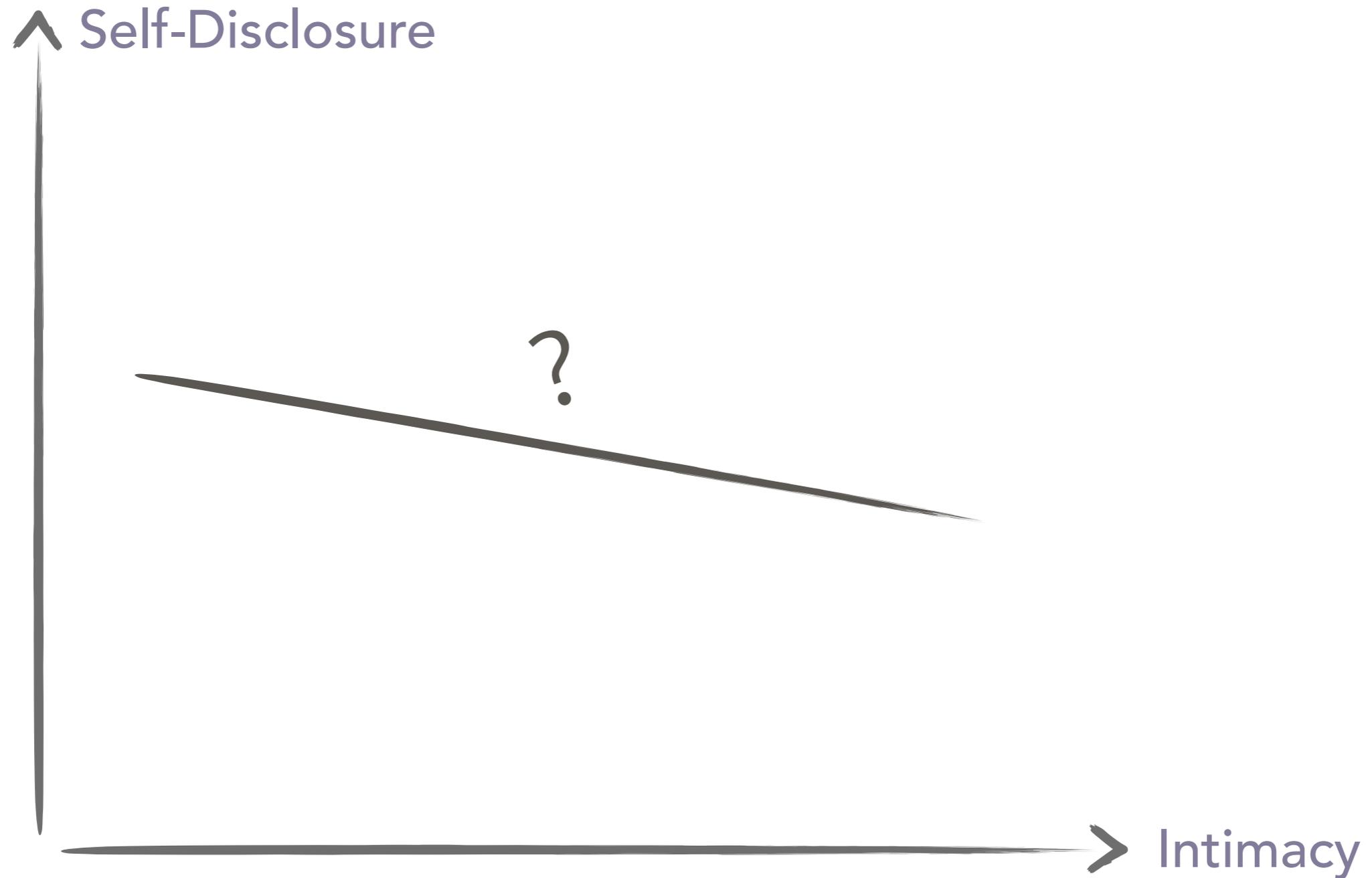
RQ2: HOW DOES ANONYMITY AFFECT SELF-DISCLOSURE?



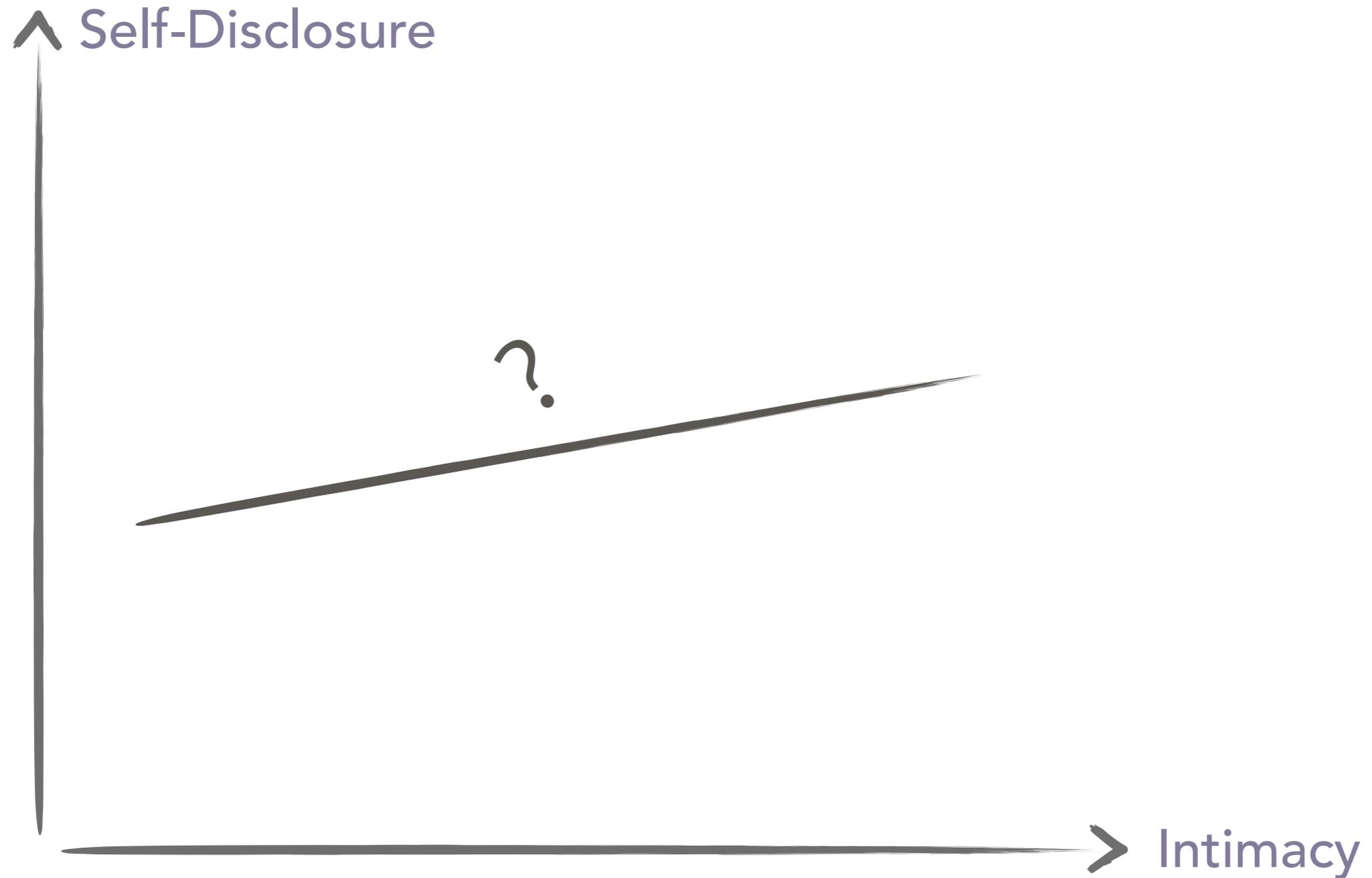
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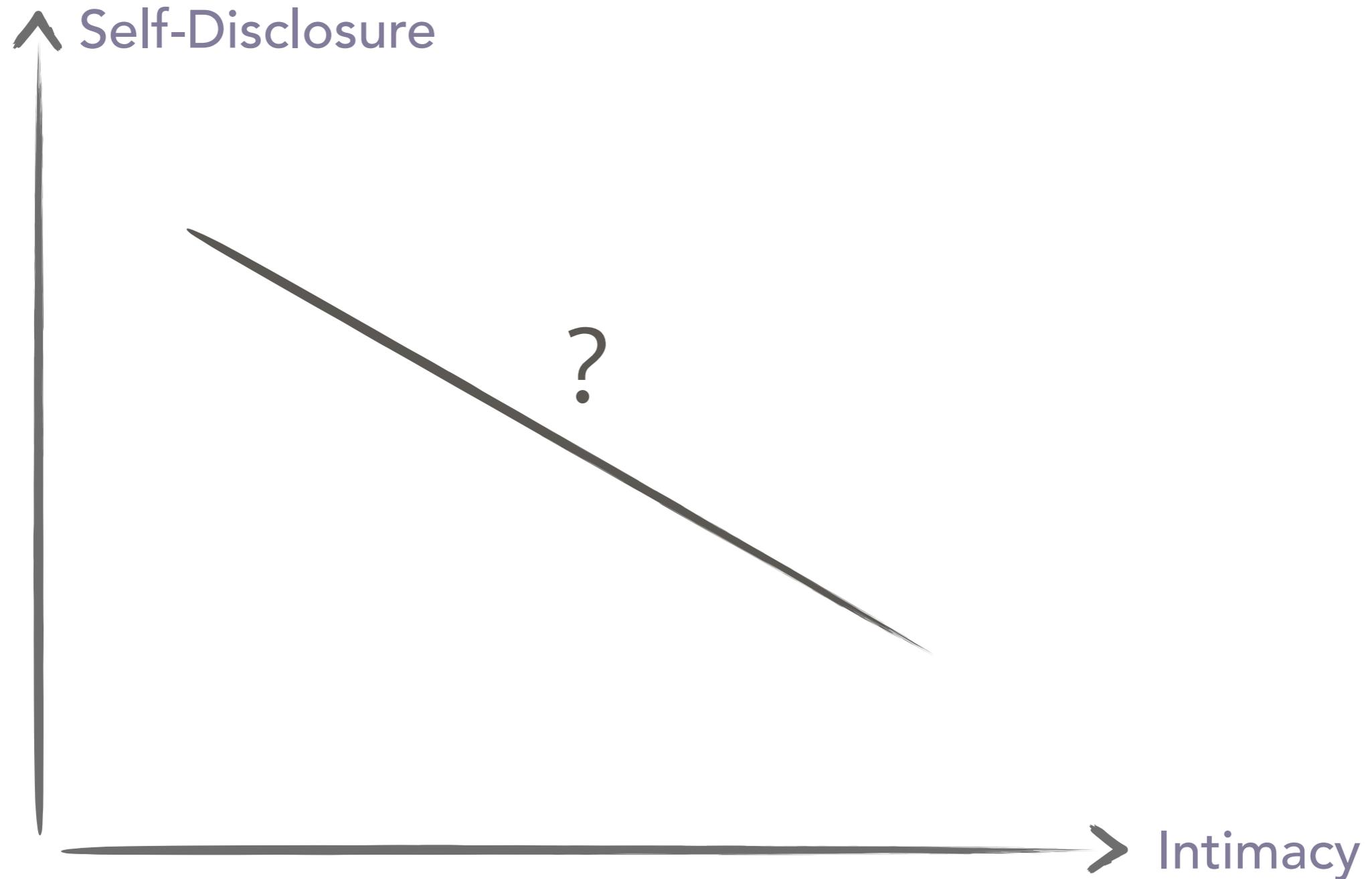
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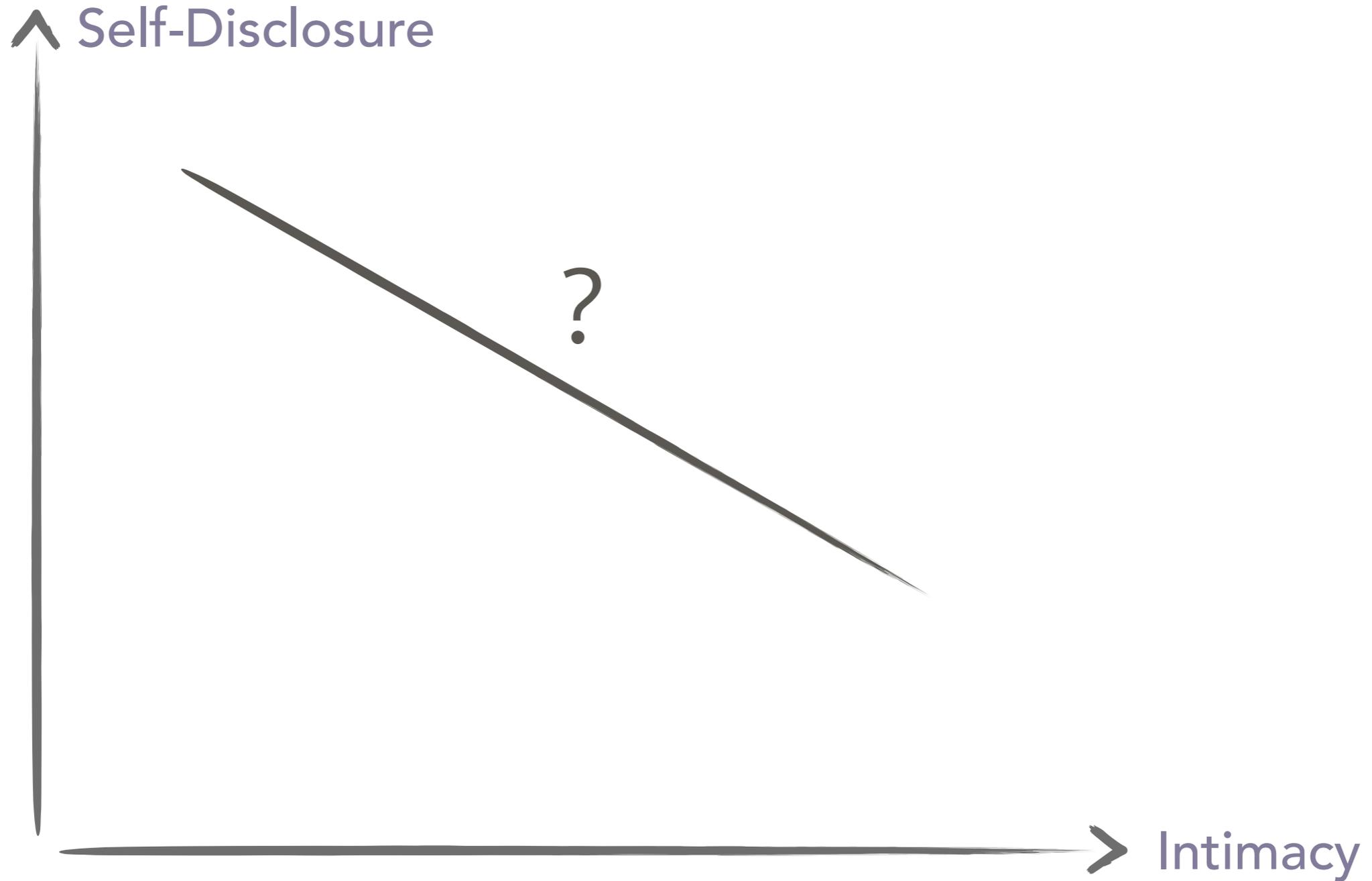
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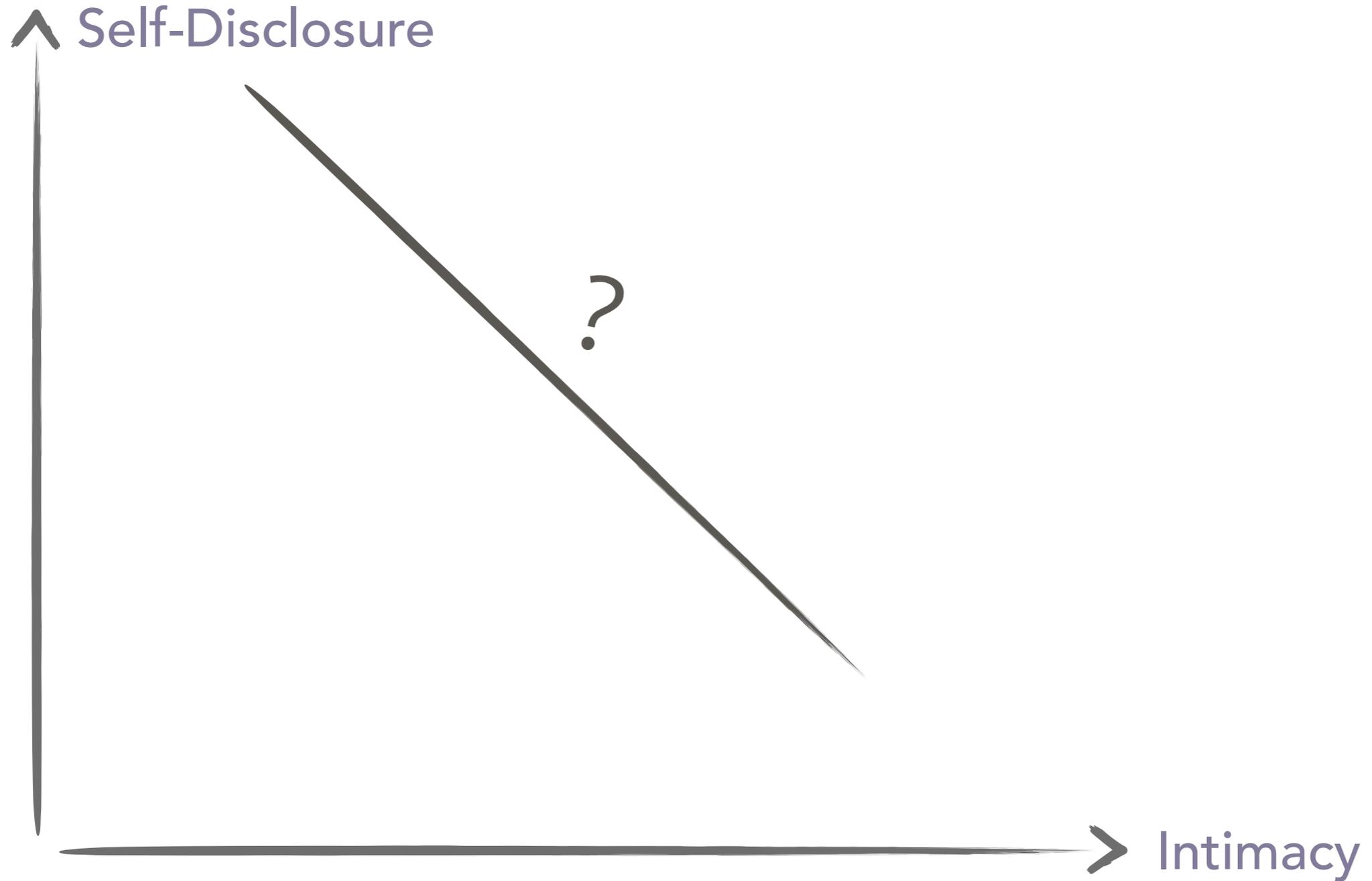
RQ3: HOW DOES AUDIENCE AFFECT SELF-DISCLOSURE?



RQ3: HOW DOES AUDIENCE AFFECT SELF-DISCLOSURE?



RQ3: HOW DOES AUDIENCE AFFECT SELF-DISCLOSURE?



METHOD

WHY NOT STUDY REAL PLATFORMS?

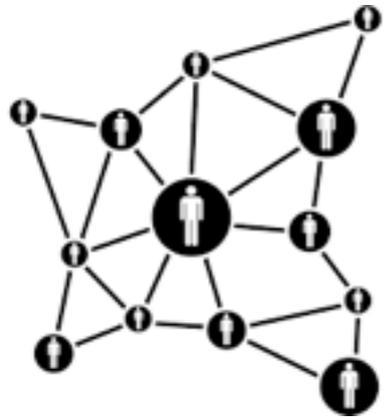
1. Specific platform affordance
2. Different demographics
3. Can't observe attitude



Real Name



Anonymous



Social Ties



Facebook



Secret



People Nearby



Tinder

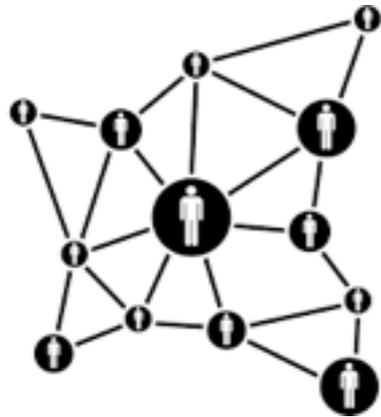


Yik Yak

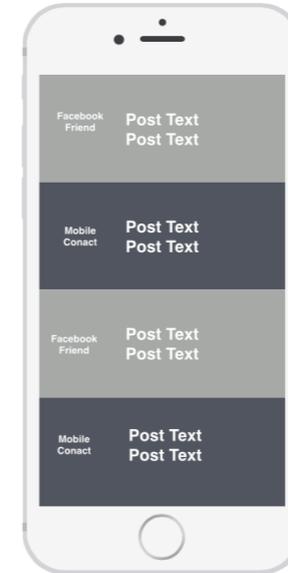


Real Name

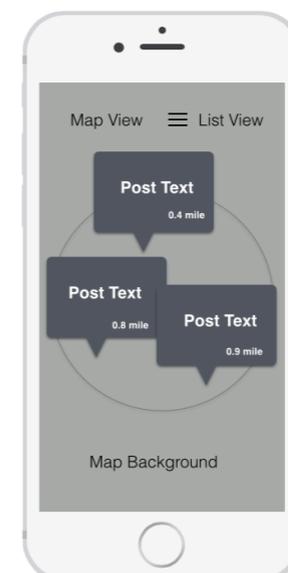
Anonymous



Social Ties



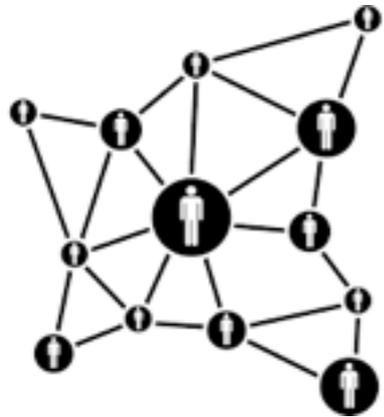
People Nearby





Real Name

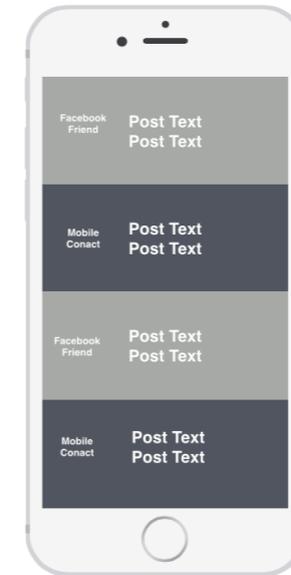
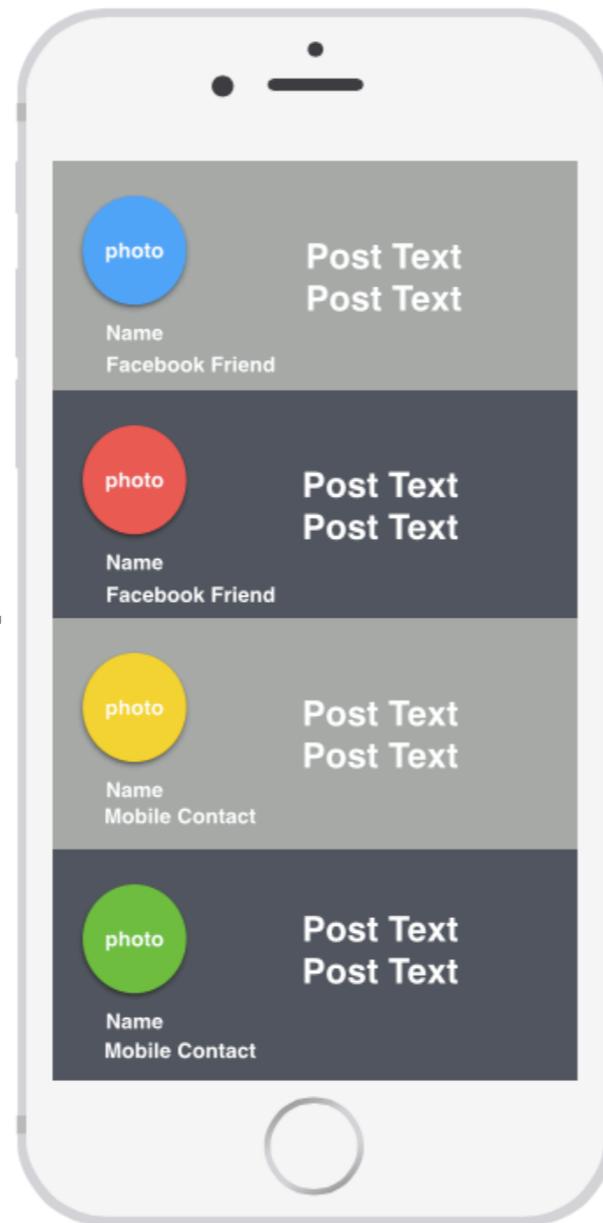
Anonymous



Social Ties



People Nearby





EXPERIMENT!

How comfortable do you feel about posting about the following item to this social media platform?

Pressures and strains in my work or study

Very uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Very comfortable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SELF-DISCLOSURE ITEMS DATASET

36 Items from:

I. Tastes and Interests

II. Attitudes and Opinion

III. Work or Studies

IV. Economic and Social Status

V. Interpersonal Relationships and Self-Concept

VI. Physical Appearance and Sex

SELF-DISCLOSURE QUESTIONNAIRES

I. Sex

1. My first sexual experience.
2. Persons with whom I have had sexual activity.
3. Feelings I have had after engaging in sexual activity.
4. The kinds of sexual activity I prefer.
5. Feelings about my sexual adequacy.
6. My feelings about my own sexual attractiveness.
7. The extent of my sexual experience.
8. My feelings about having premarital sexual intercourse.

II. Interpersonal Relations and Self-Concept

1. Disappointments or bad experiences I have had in love affairs.
2. Times when I felt that I was in love.
3. The things that I worry about most.
4. My attitudes toward my closest friends.
5. The kinds of things that make me especially proud of myself.
6. My thoughts about how intelligent I am compared to the other people around me.
7. Why some people like or dislike me.
8. My feelings about my parents.

III. Attitudes

1. My religious views.
2. How important school grades are to me.
3. My feelings about the Harvard student body.
4. The kind of work I would like to do in the future.
5. My feelings about my teachers at Harvard.
6. My feelings about the Vietnam War.

7. My opinion of the American political system.
8. My view of the Nixon administration.

IV. Tastes

1. How I feel about smoking pot.
2. Hobbies that I have or would like to have.
3. My tastes in clothing.
4. My likes and dislikes in music.
5. How I would like to spend my summer.
6. My likes and dislikes in fiction.
7. Types of newspapers and magazines I read.
8. My preferences in food.

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SIDNEY M. JOURARD AND PAUL LASAKOW

TABLE 1
THE SELF-DISCLOSURE QUESTIONNAIRE

- Attitudes and opinions
1. What I think and feel about religion; my personal religious views.
 2. My personal opinions and feelings about other religious groups than my own, e.g., Protestants, Catholics, Jews, atheists.
 3. My views on communism.
 4. My views on the present government—the president, government policies, etc.
 5. My views on the question of racial integration in schools, transportation, etc.
 6. My personal views on drinking.
 7. My personal views on sexual morality—how I feel that I and others ought to behave in sexual matters.
 8. My personal standards of beauty and attractiveness in women—what I consider to be attractive in a woman.
 9. The things that I regard as desirable for a man to be—what I look for in a man.
 10. My feelings about how parents ought to deal with children.
- Tastes and interests
1. My favorite foods, the ways I like food prepared, and my food dislikes.
 2. My favorite beverages, and the ones I don't like.
 3. My likes and dislikes in music.
 4. My favorite reading matter.
 5. The kinds of movies that I like to see best; the TV shows that are my favorites.
 6. My tastes in clothing.
 7. The style of house, and the kinds of furnishings that I like best.
 8. The kind of party, or social gathering that I like best, and the kind that would bore me, or that I wouldn't enjoy.
 9. My favorite ways of spending spare time, e.g., hunting, reading, cards, sports events, parties, dancing, etc.
 10. What I would appreciate most for a present.
- Work (or studies)
1. What I find to be the worst pressures and strains in my work.
 2. What I find to be the most boring and unenjoyable aspects of my work.
 3. What I enjoy most, and get the most satisfaction from in my present work.
 4. What I feel are my shortcomings and handicaps that prevent me from working as I'd like to, or that prevent me from getting further ahead in my work.
 5. What I feel are my special strong points and qualifications for my work.
 6. How I feel that my work is appreciated by others (e.g., boss, fellow-workers, teacher, husband, etc.).
 7. My ambitions and goals in my work.
 8. My feelings about the salary or rewards that I get for my work.
 9. How I feel about the choice of career that I have made—whether or not I'm satisfied with it.
 10. How I really feel about the people that I work for, or work with.
- Money
1. How much money I make at my work, or get as an allowance.
 2. Whether or not I owe money; if so, how much.

TABLE 1—Continued

3. Whom I owe money to at present; or whom I have borrowed from in the past.
 4. Whether or not I have savings, and the amount.
 5. Whether or not others owe me money; the amount, and who owes it to me.
 6. Whether or not I gamble; if so, the way I gamble, and the extent of it.
 7. All of my present sources of income—wages, fees, allowance, dividends, etc.
 8. My total financial worth, including property, savings, bonds, insurance, etc.
 9. My most pressing need for money right now, e.g., outstanding bills, some major purchase that is desired or needed.
 10. How I budget my money—the proportion that goes to necessities, luxuries, etc.
- Personality
1. The aspects of my personality that I dislike, worry about, that I regard as a handicap to me.
 2. What feelings, if any, that I have trouble expressing or controlling.
 3. The facts of my present sex life—including knowledge of how I get sexual gratification; any problems that I might have; with whom I have relations, if anybody.
 4. Whether or not I feel that I am attractive to the opposite sex; my problems, if any, about getting favorable attention from the opposite sex.
 5. Things in the past or present that I feel ashamed and guilty about.
 6. The kinds of things that just make me furious.
 7. What it takes to get me feeling real depressed and blue.
 8. What it takes to get me real worried, anxious, and afraid.
 9. What it takes to hurt my feelings deeply.
 10. The kinds of things that make me especially proud of myself, elated, full of self-esteem or self-respect.
- Body
1. My feelings about the appearance of my face—things I don't like, and things that I might like about my face and head—nose, eyes, hair, teeth, etc.
 2. How I wish I looked: my ideals for overall appearance.
 3. My feelings about different parts of my body—legs, hips, waist, weight, chest, or bust, etc.
 4. Any problems and worries that I had with my appearance in the past.
 5. Whether or not I now have any health problems—e.g., trouble with sleep, digestion, female complaints, heart condition, allergies, headaches, piles, etc.
 6. Whether or not I have any long-range worries or concerns about my health, e.g., cancer, ulcers, heart trouble.
 7. My past record of illness and treatment.
 8. Whether or not I now make special efforts to keep fit, healthy, and attractive, e.g., calisthenics, diet.
 9. My present physical measurements, e.g., height, weight, waist, etc.
 10. My feelings about my adequacy in sexual behavior—whether or not I feel able to perform adequately in sex-relationships.

— Rubin & Shenker (1978)

— Jourard & Lasakow (1971)



SELF-DISCLOSURE ITEMS DATASET

I. Tastes and Interests

II. Attitudes and Opinion

III. Work or Studies

IV. Economic and Social Status

V. Interpersonal Relationships and Self-Concept

VI. Physical Appearance and Sex

EXAMPLE ITEMS

Items or signals about how wealthy I am, e.g., luxury trips, accessories

Optimism about my future financial worth, e.g., getting job offers

...

Pressing need for money right now, e.g., outstanding bills, debts

Pessimistic views about my own future employment prospects and salaries

...

SELF-DISCLOSURE ITEMS DATASET

<https://github.com/sTechLab/SelfDisclosureItems>



PARTICIPANTS



N = 300

\$1.5/HIT

~11min

EXPERIMENT FLOW

Rate Intimacy

Present Platform

Rate Self-Disclosure

EXPERIMENT FLOW

Rate Intimacy

Present Platform

Rate Self-Disclosure

1/3: RATE INTIMACY

Rate Intimacy

Not intimate at all

Extremely intimate

Present Platform

1 2 3 4 5 6 7
○ ○ ○ ○ ○ ○ ○

Rate Self-Disclosure

Pressures and strains in my work or study

Pressing need for money right now, e.g.,
outstanding bills, debts

...

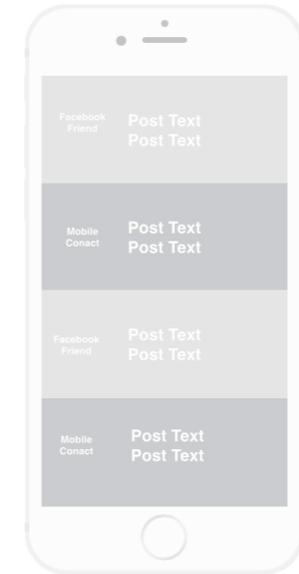
2/3: PRESENT PLATFORM

Rate Intimacy



Present Platform

Rate Self-Disclosure



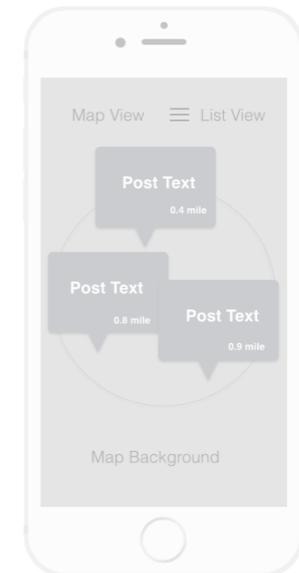
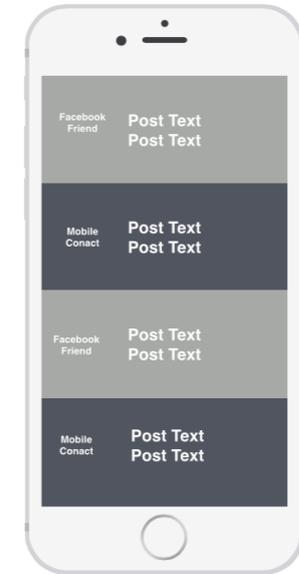
2/3: PRESENT PLATFORM

Rate Intimacy



Present Platform

Rate Self-Disclosure



2/3: PRESENT PLATFORM

Rate Intimacy



Present Platform

Rate Self-Disclosure



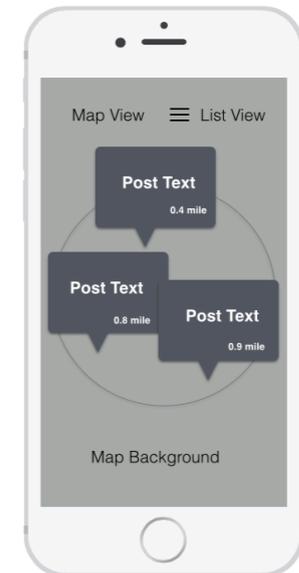
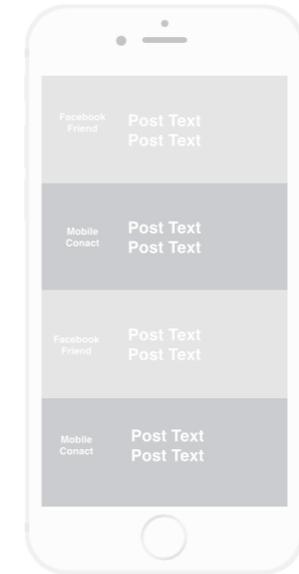
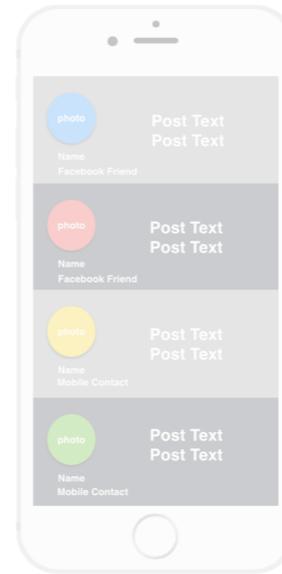
2/3: PRESENT PLATFORM

Rate Intimacy



Present Platform

Rate Self-Disclosure



HYPOTHESIS REGISTRATION

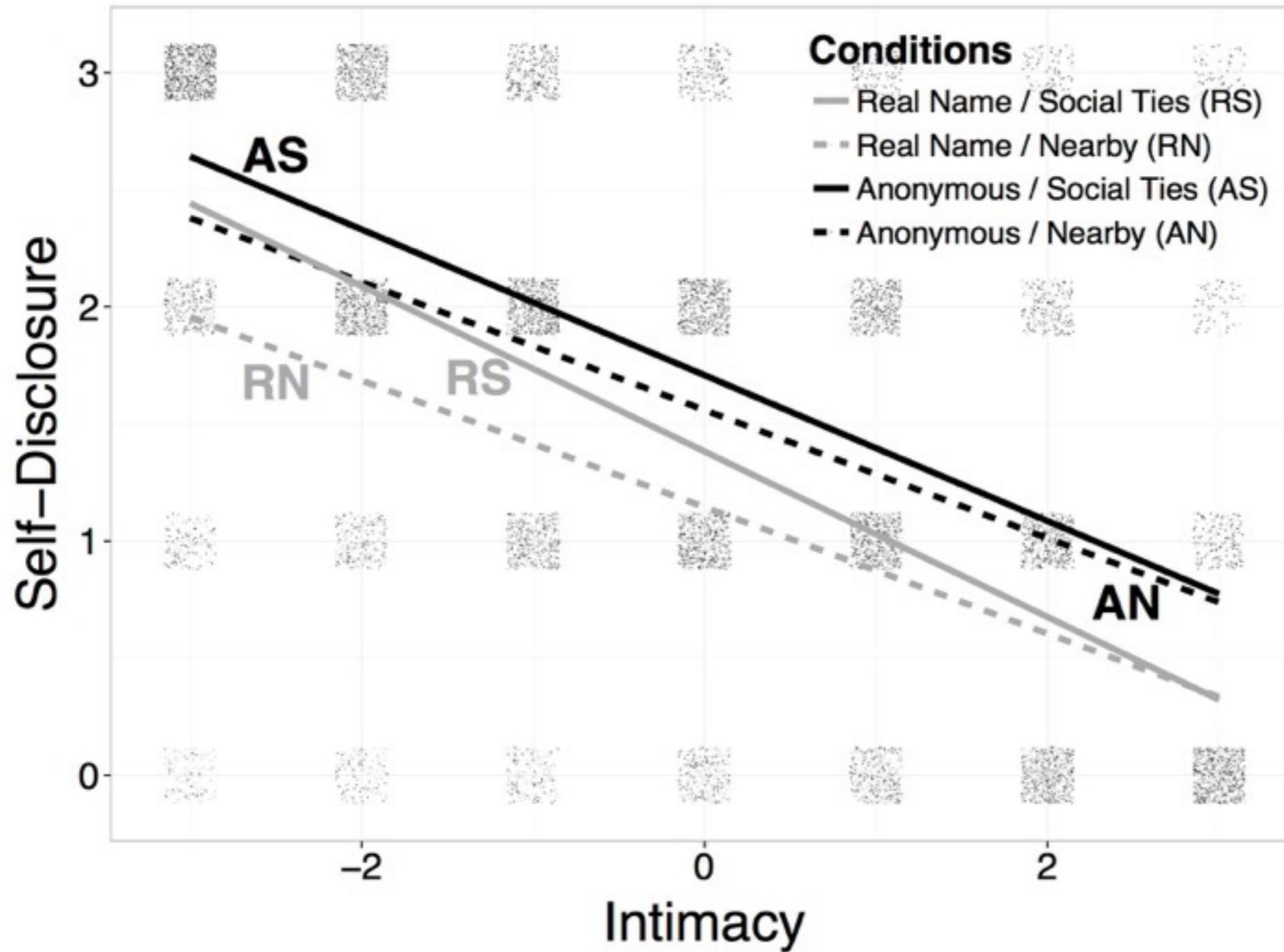
<https://www.socialscienceregistry.org/trials/840>

H	Hypothesis Summary
H1a	Disclosure is greater with anonymity vs. real name conditions
H1b	Disclosure is greater with social ties vs. nearby conditions
H2a	Regulation of intimacy in real-name conditions
H2b	Stronger regulation in <i>RS</i> than <i>RN</i>
H2c	Weaker regulation in <i>AS</i> than <i>RS</i>
H2d	No regulation in <i>AN</i>
H3a	Negative valence reduces disclosure in real-name conditions
H3b	Negative valence increases disclosure in anonymous conditions

Pre-registration reduces the risk of Type 1 errors caused by over-testing and “fishing” activities.

RESULTS

RESULTS

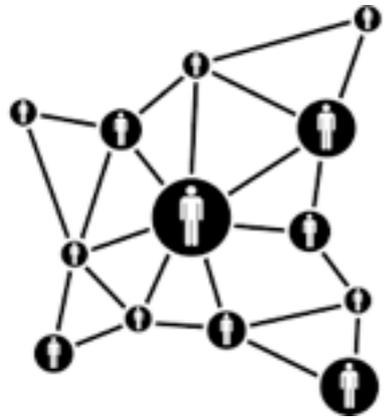




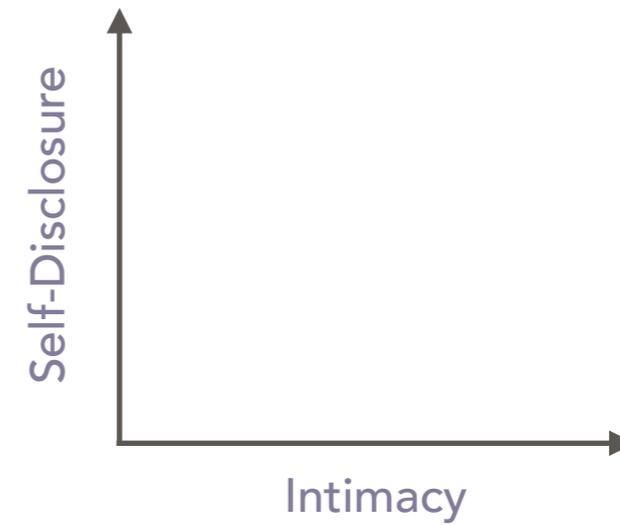
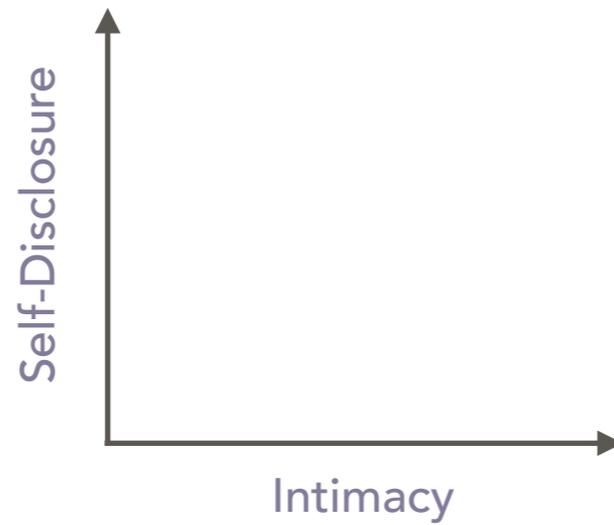
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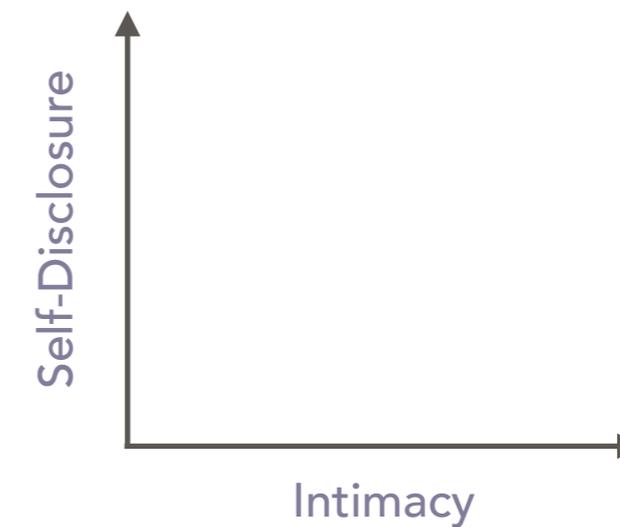
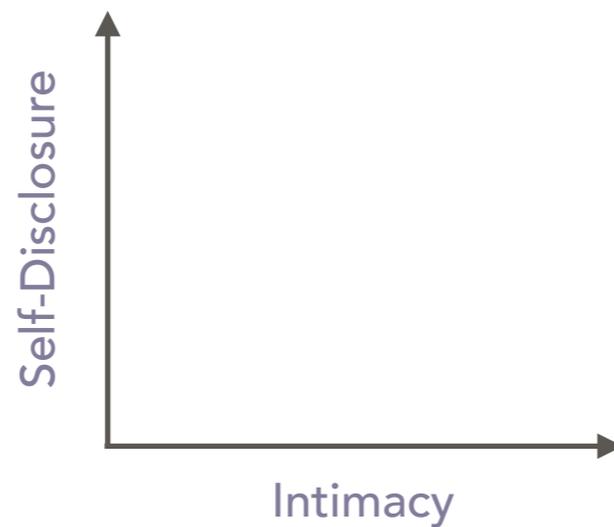
Anonymous



Social Ties



People Nearby

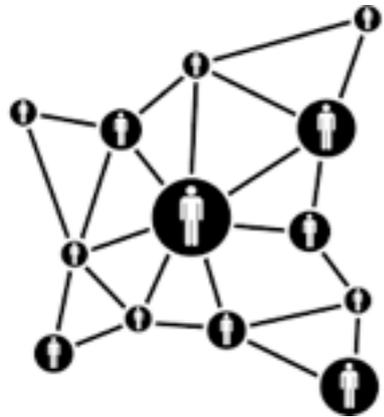




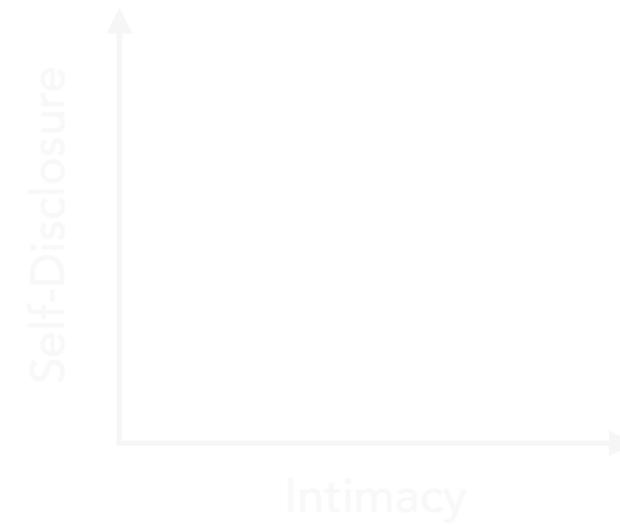
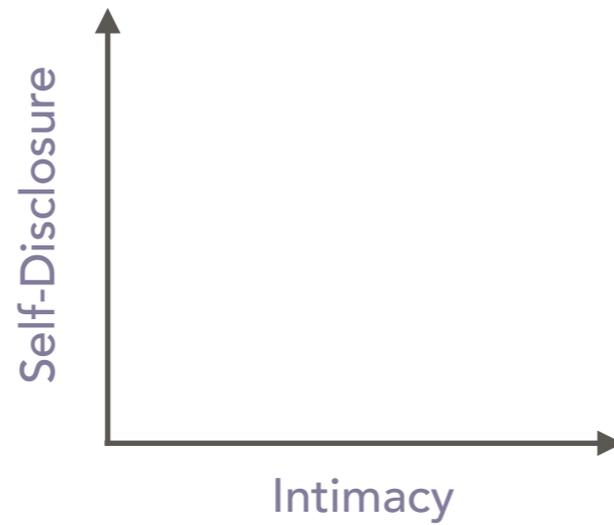
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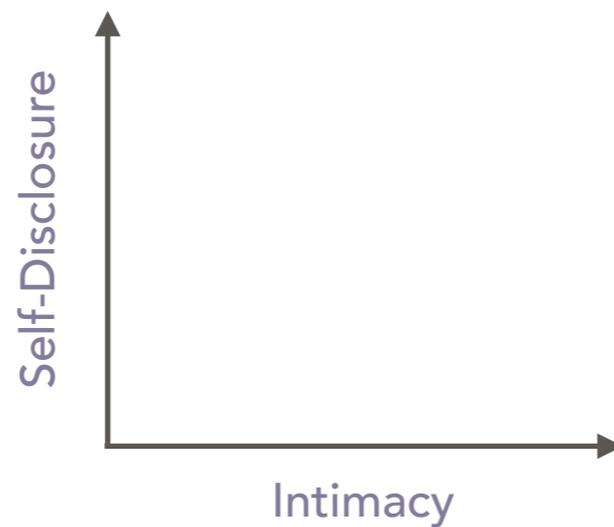
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Social Ties



People Nearby

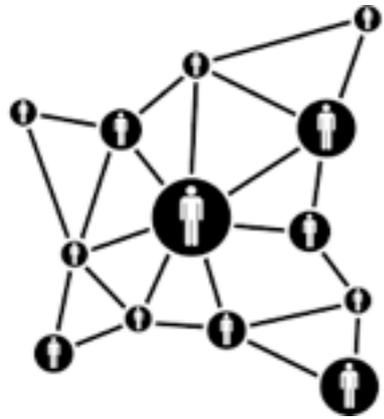




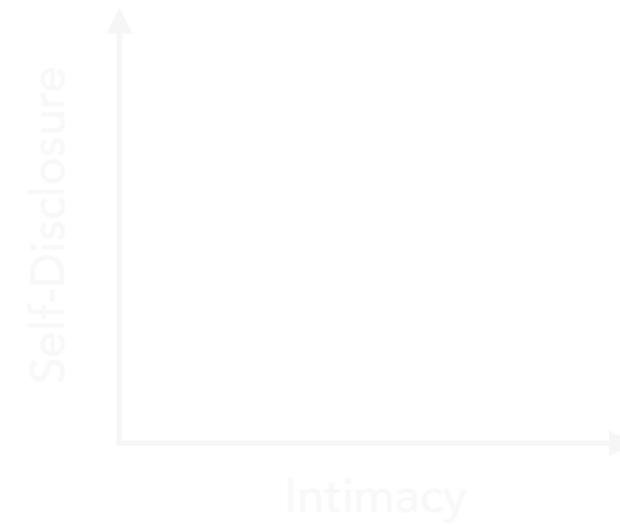
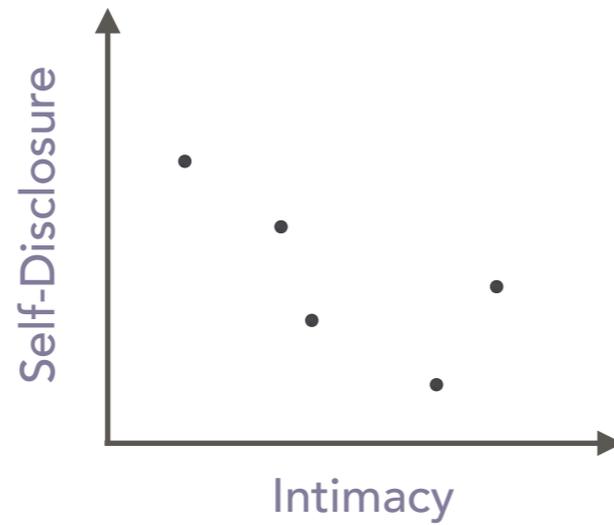
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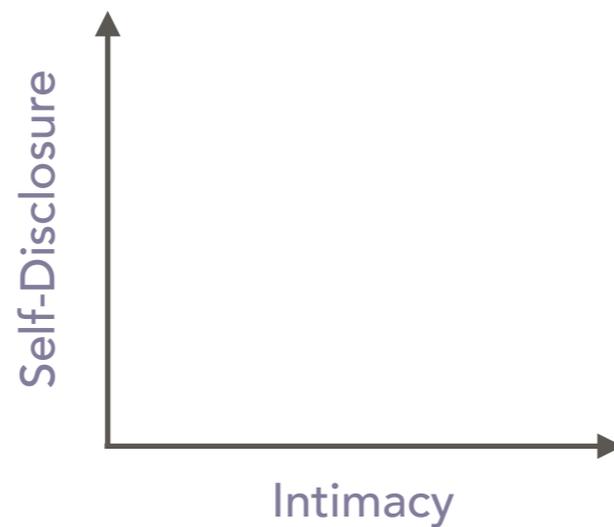
Anonymous



Social Ties



People Nearby

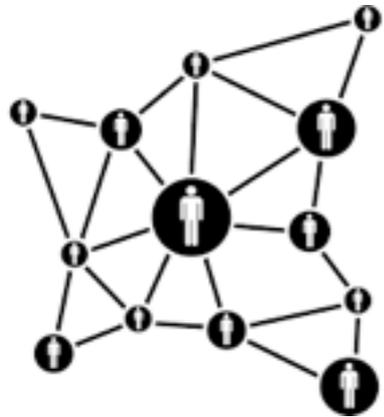




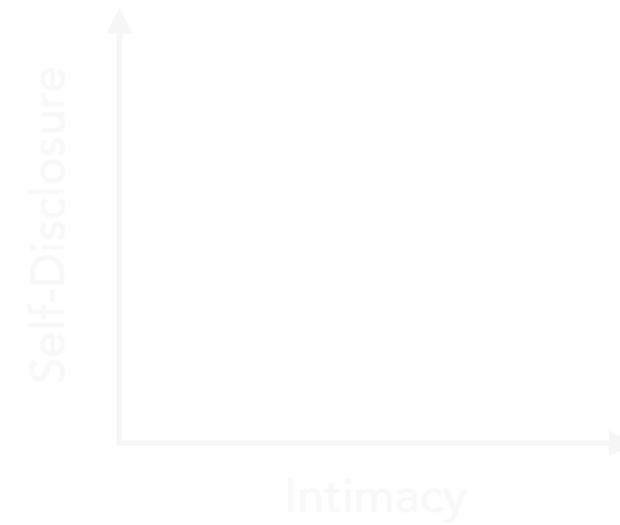
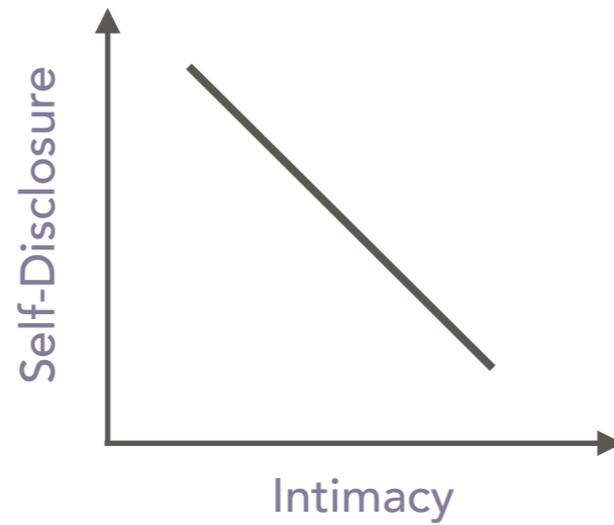
Real Name



Anonymous



Social Ties



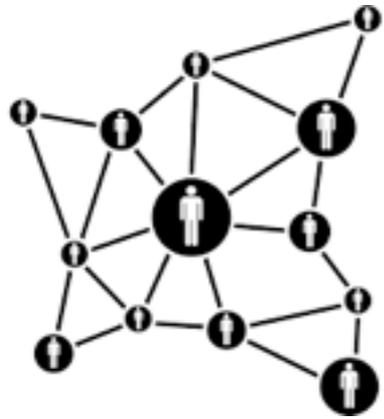
People Nearby



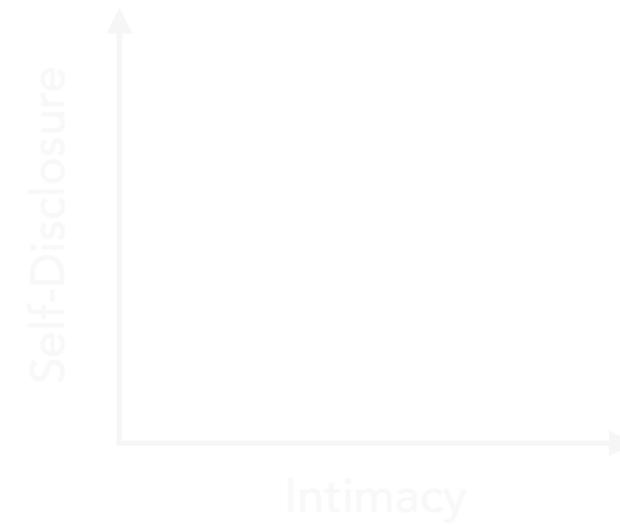
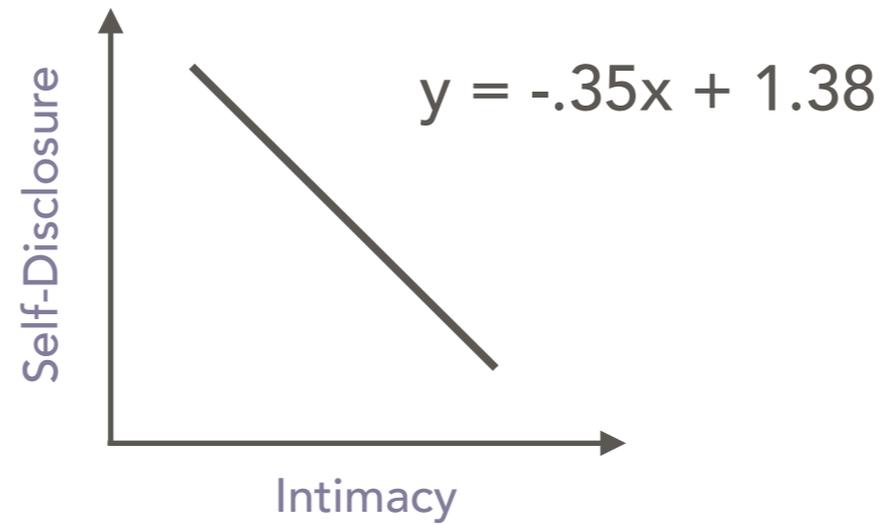


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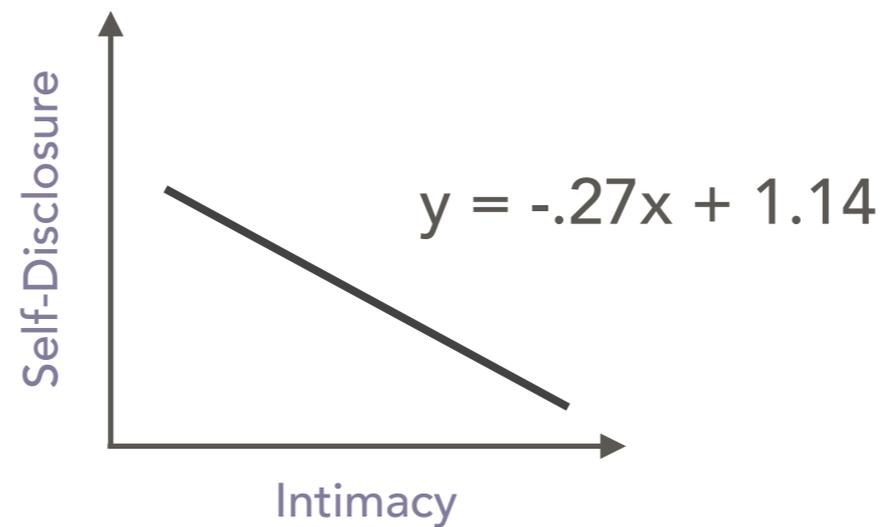
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Social Ties



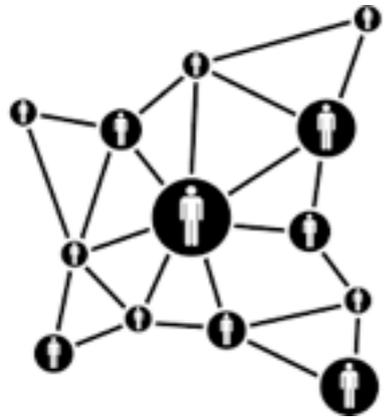
People Nearby



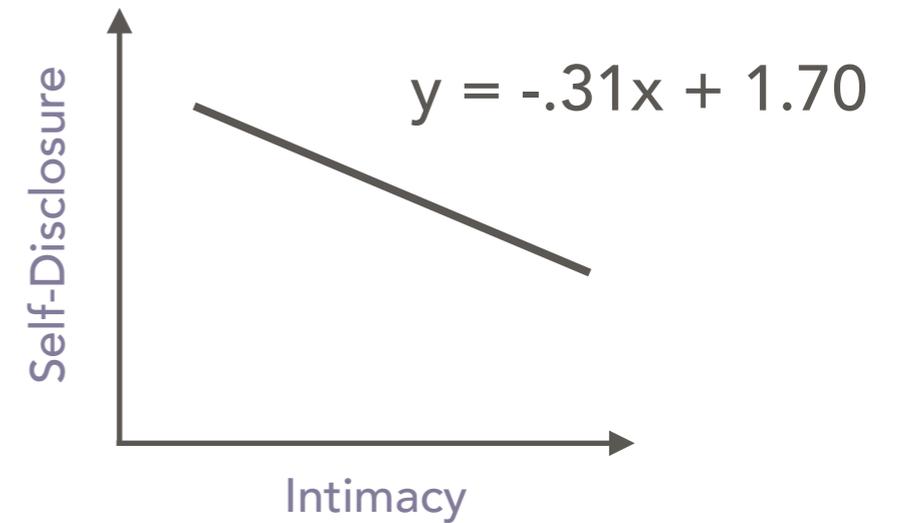
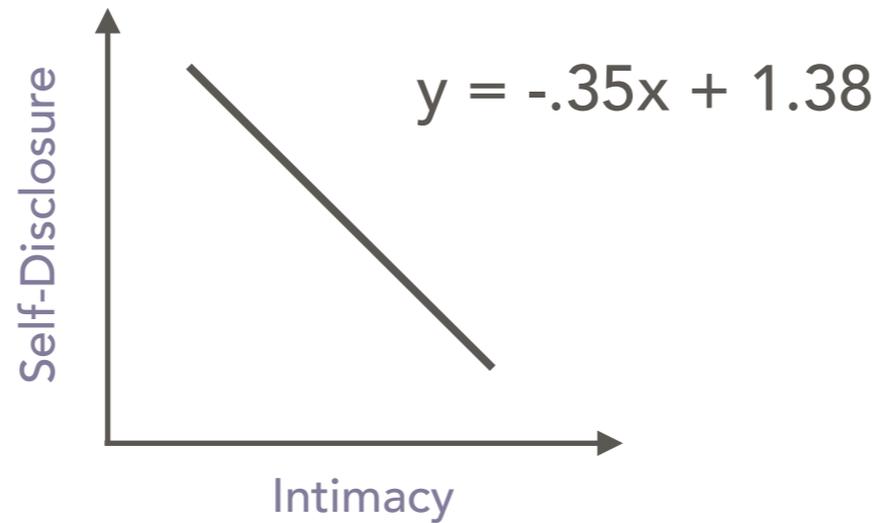


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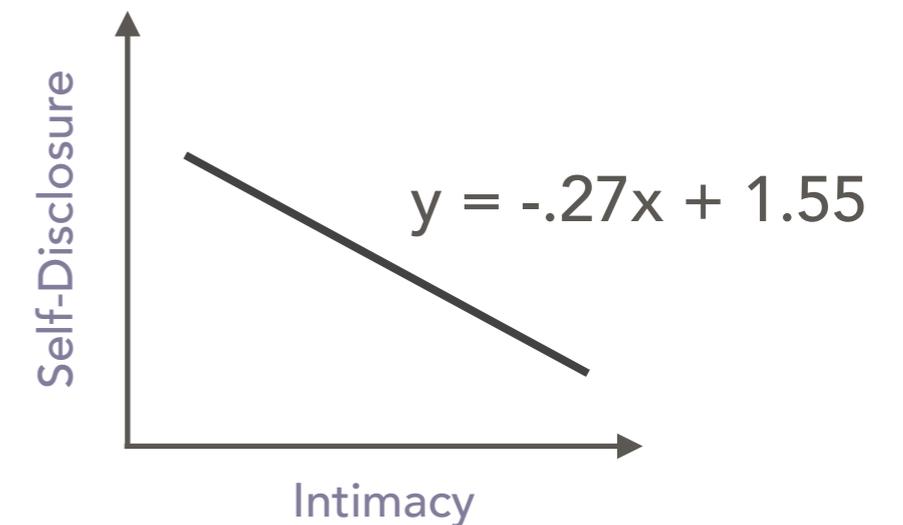
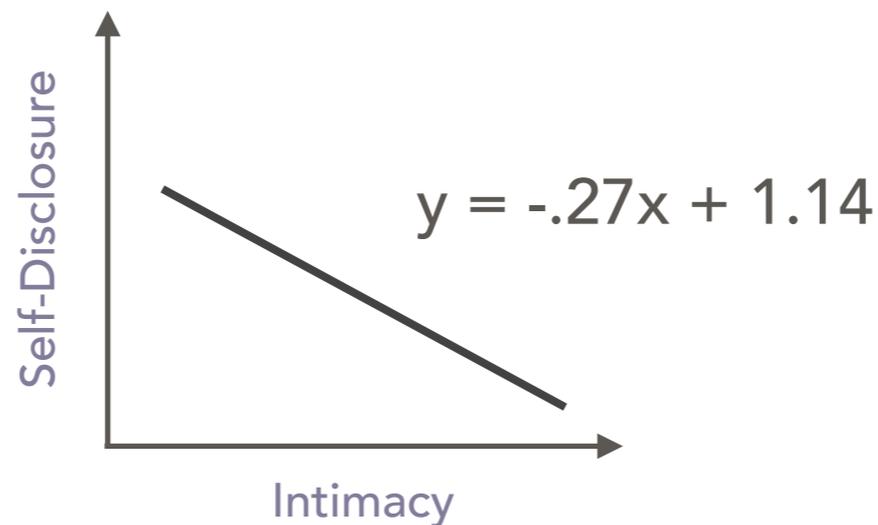
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Social Ties



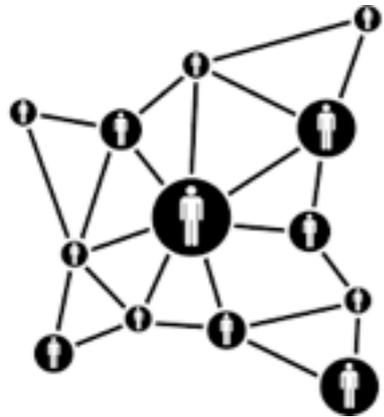
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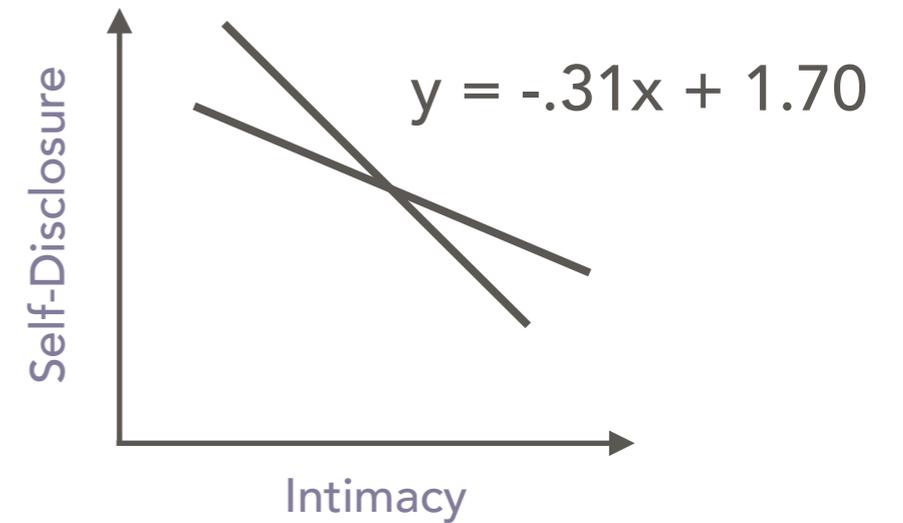
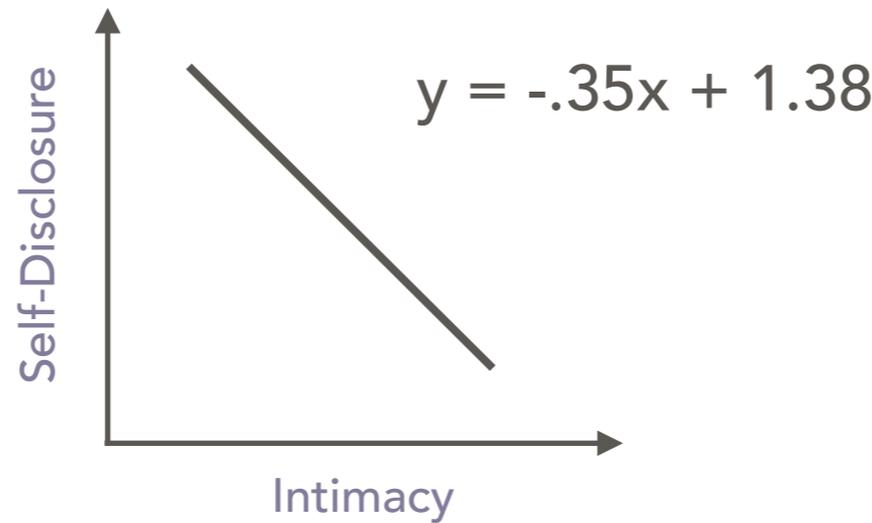


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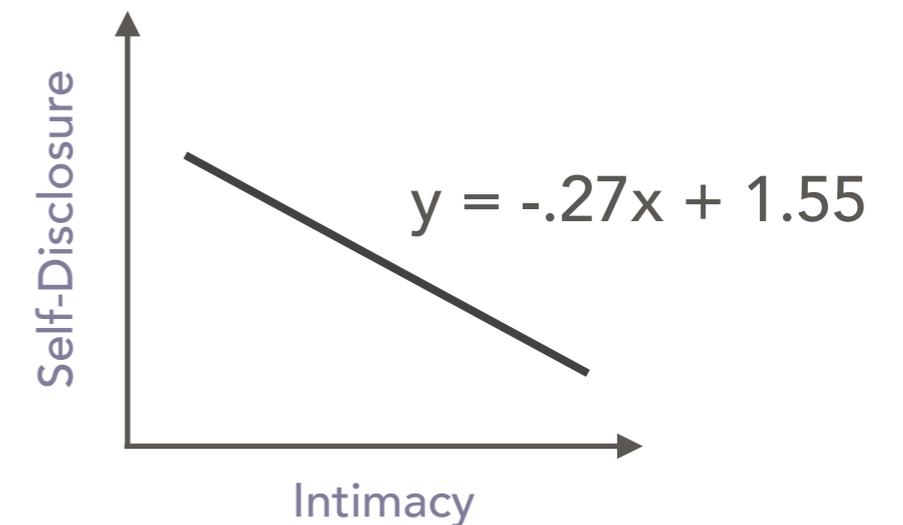
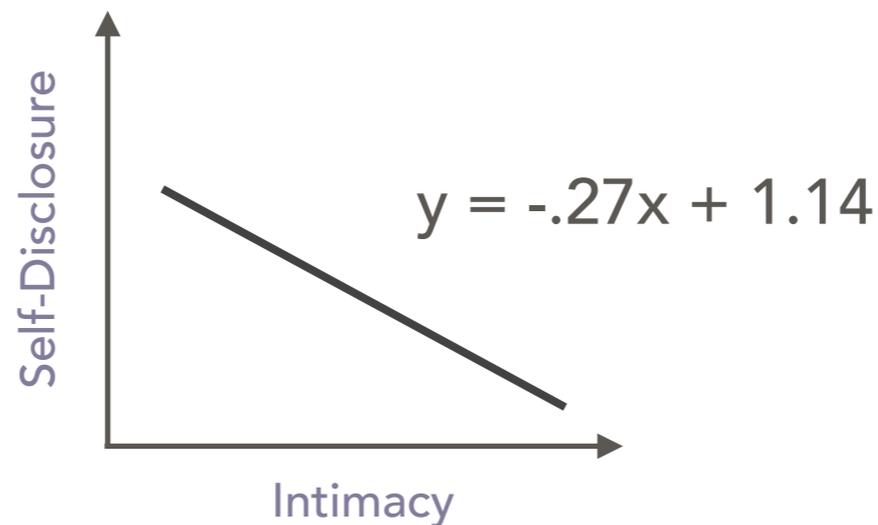
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Social Ties



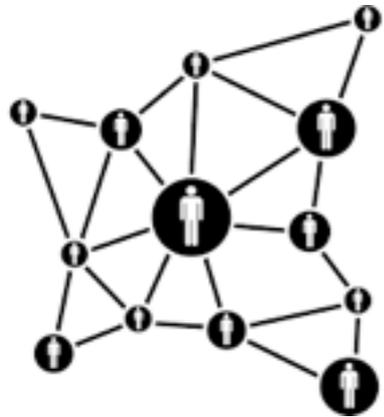
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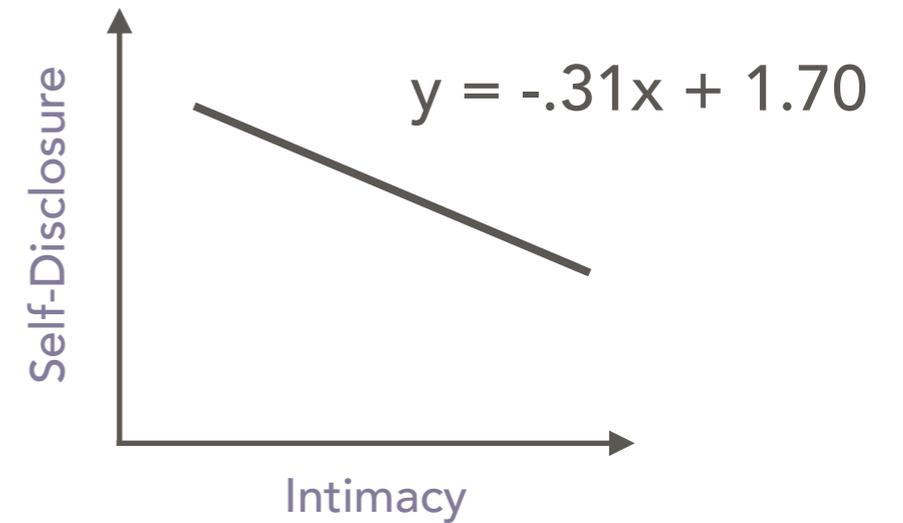
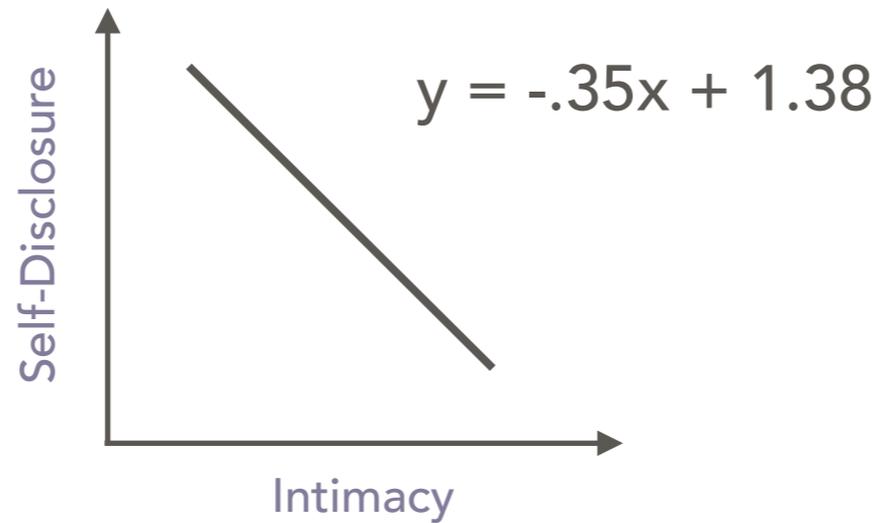


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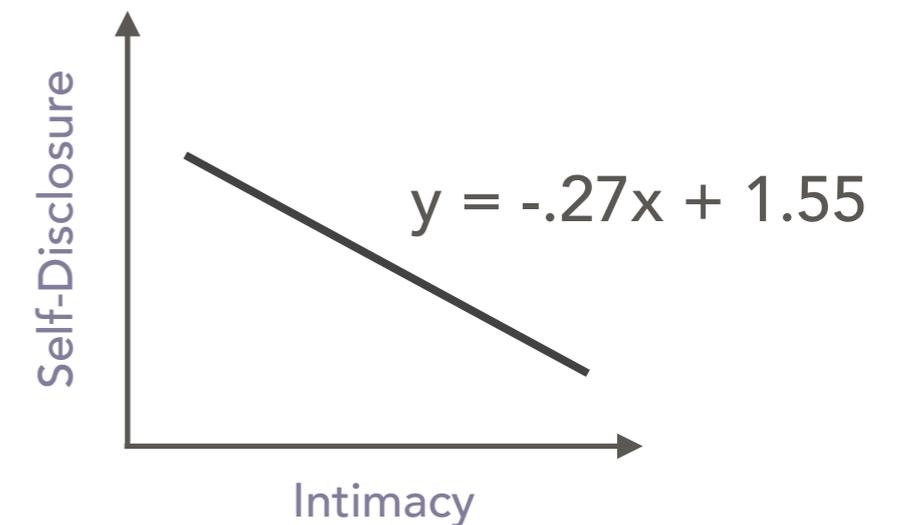
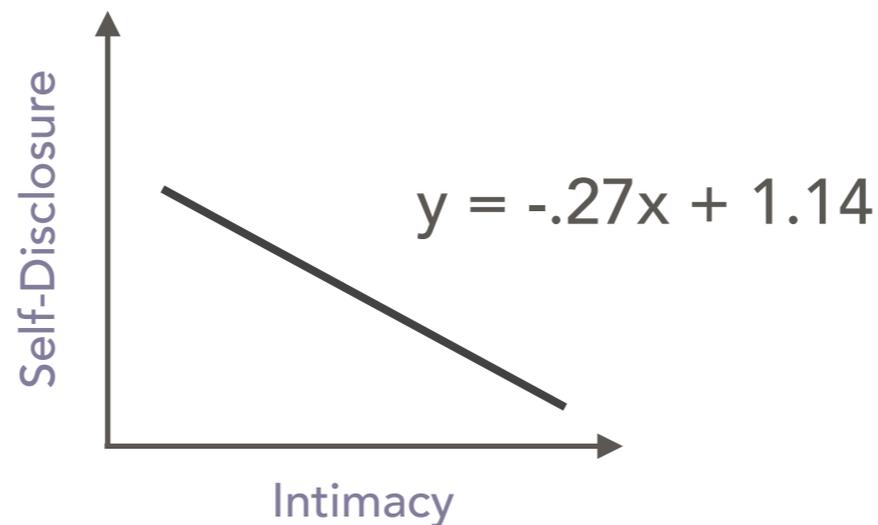
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Social Ties



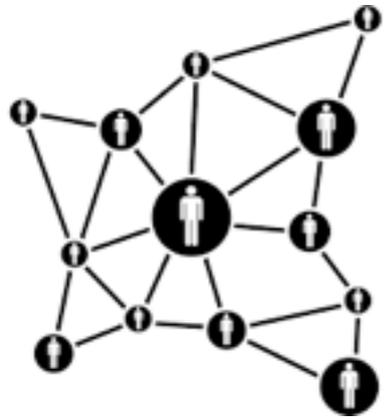
People Nearby



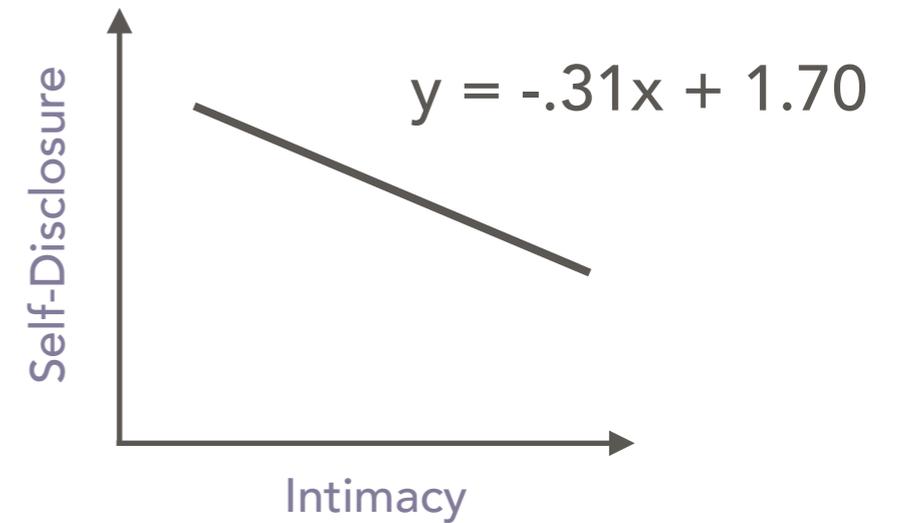
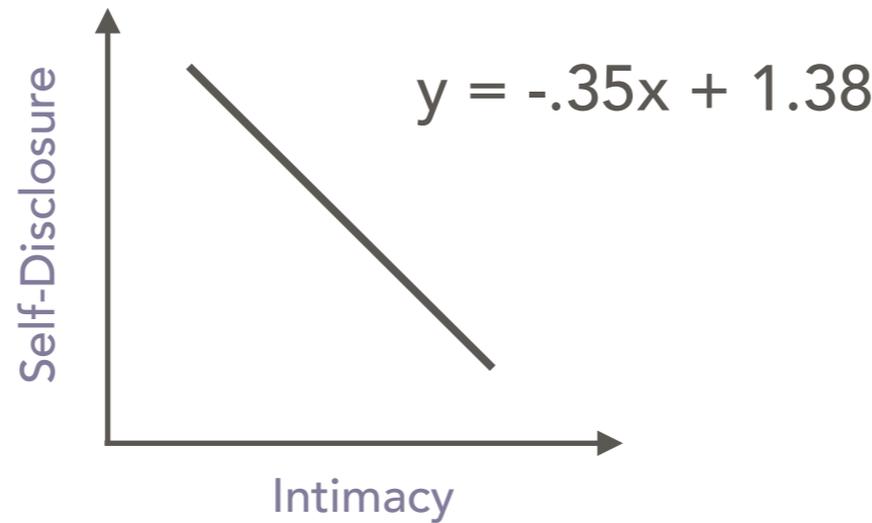


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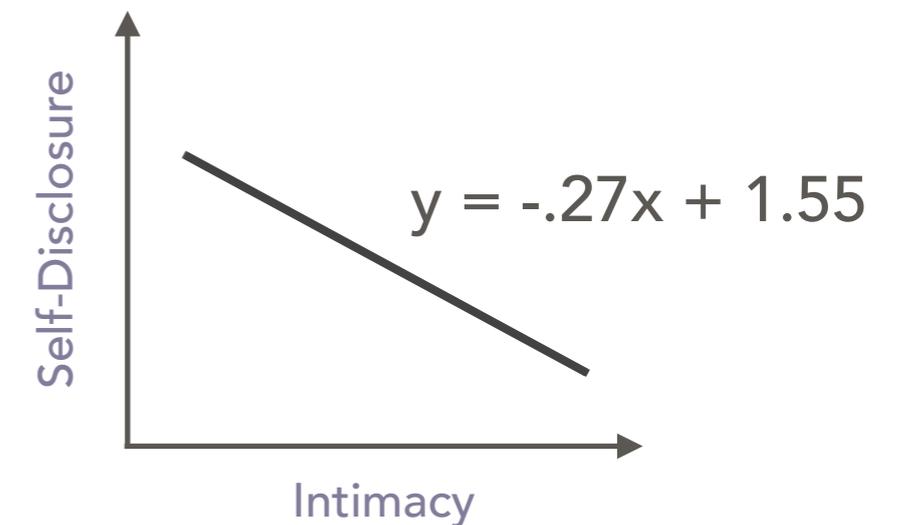
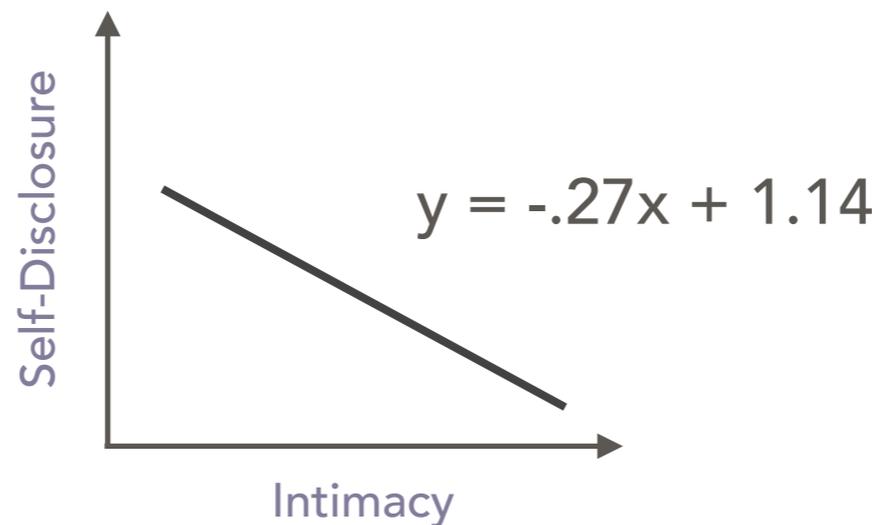
Anonymous



Social Ties



People Nearby



ONE MORE THING

VALENCE

Items or signals about how wealthy I am, e.g., luxury trips, accessories

Optimism about my future financial worth, e.g., getting job offers

...

Pressing need for money right now, e.g., outstanding bills, debts

Pessimistic views about my own future employment prospects and salaries

...

VALENCE

Items or signals about how wealthy I am, e.g., luxury trips, accessories

Optimism about my future financial worth, e.g., getting job offers

...

Pressing need for money right now, e.g., outstanding bills, debts

Pessimistic views about my own future employment prospects and salaries

...

VALENCE

Negative

Pressing need for money right now,
e.g., outstanding bills, debts

Pessimistic views about my own future
employment prospects and salaries

...

Positive

Items or signals about how wealthy I
am, e.g., luxury trips, accessories

Optimism about my future financial
worth, e.g., getting job offers

...



Yik Yak ✓
@YikYakApp

"when i die i want my group project members to lower me into my grave so they can let me down one last time"

SELF-DISCLOSURE ITEMS DATASET

<https://github.com/sTechLab/SelfDisclosureItems>

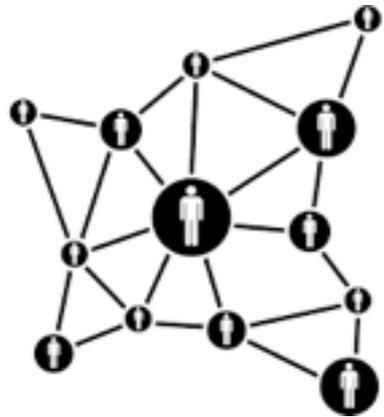




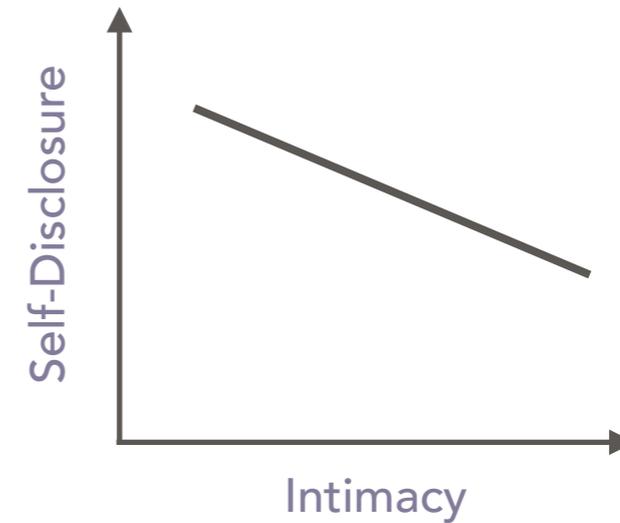
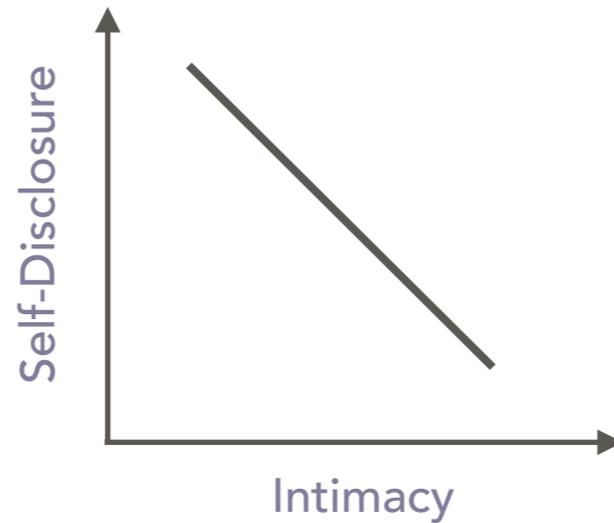
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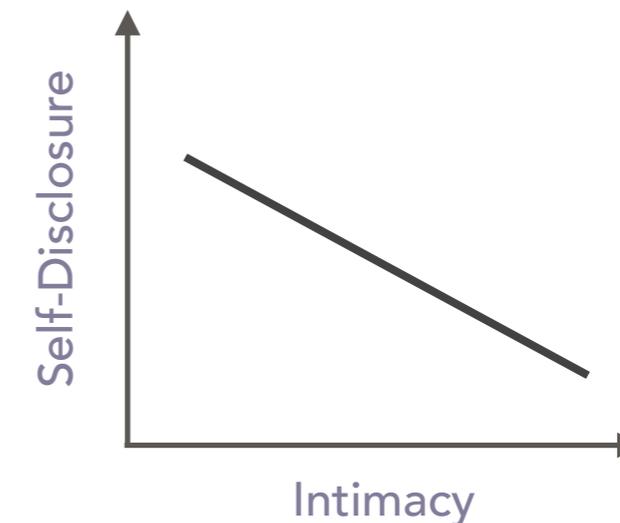
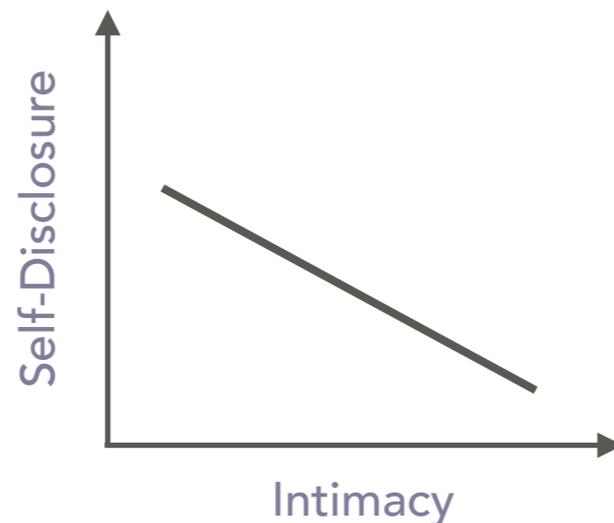
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Social Ties



People Nearby

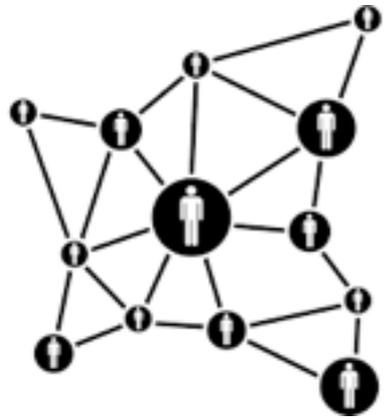


Valence: Negative — Positive —

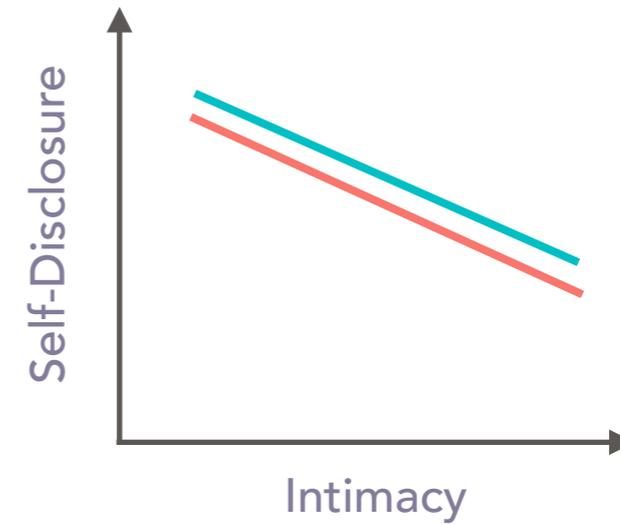
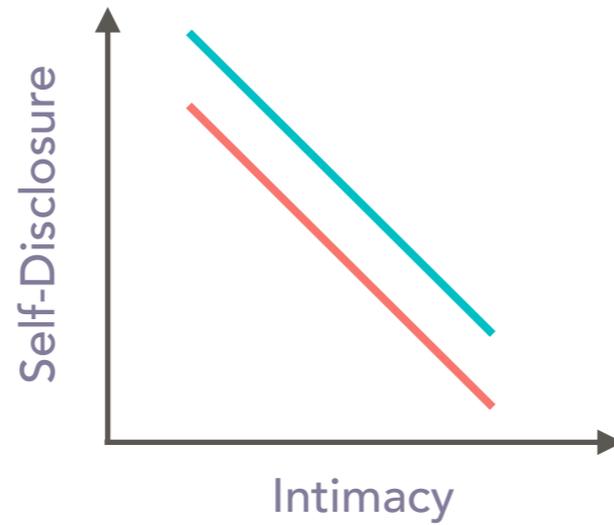


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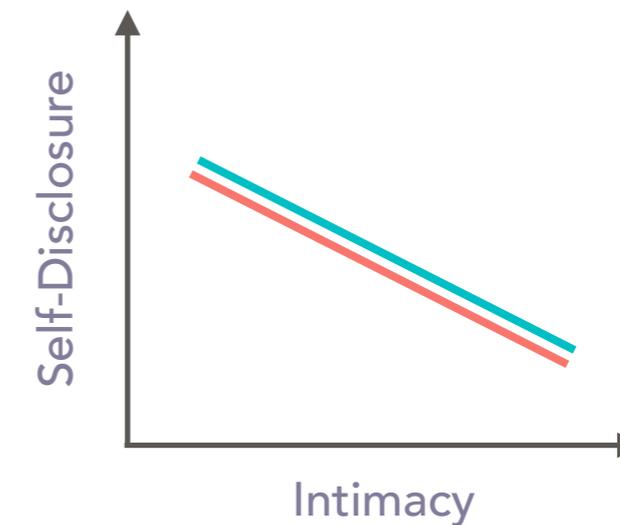
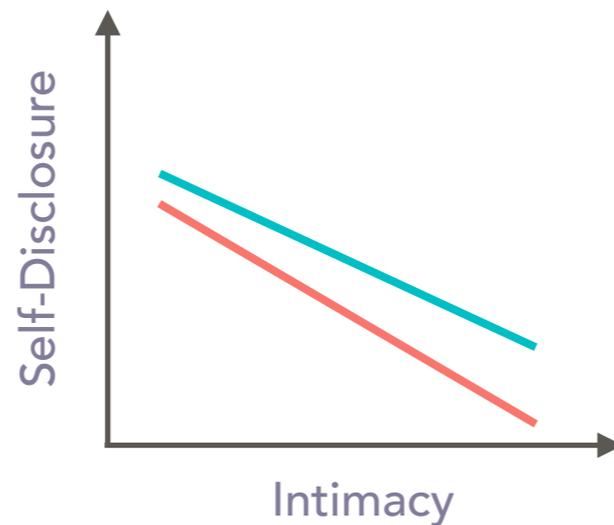
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Social Ties



People Nearby

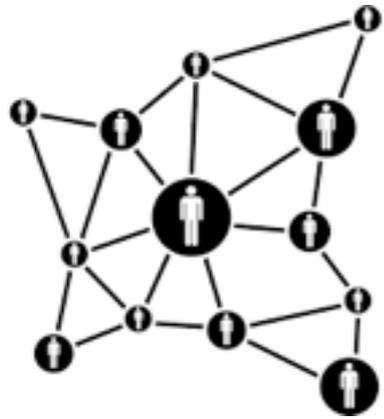


Valence: **Negative** — **Positive** —

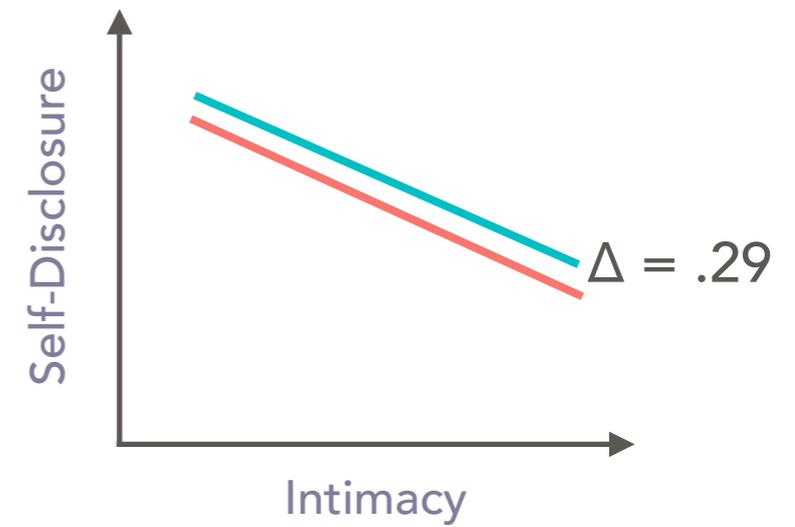
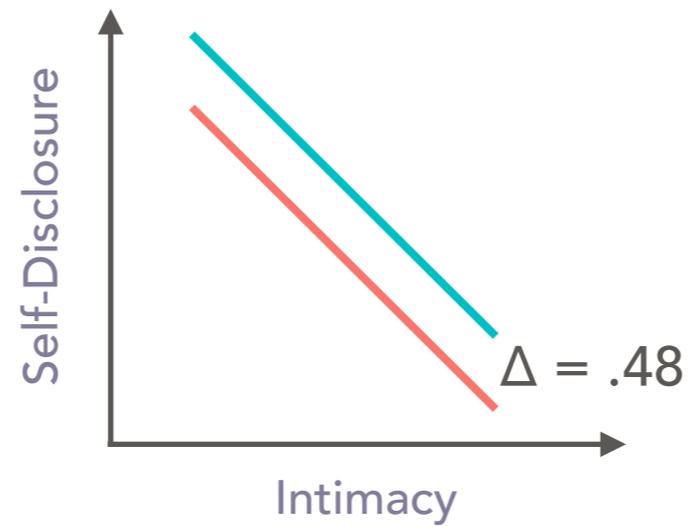


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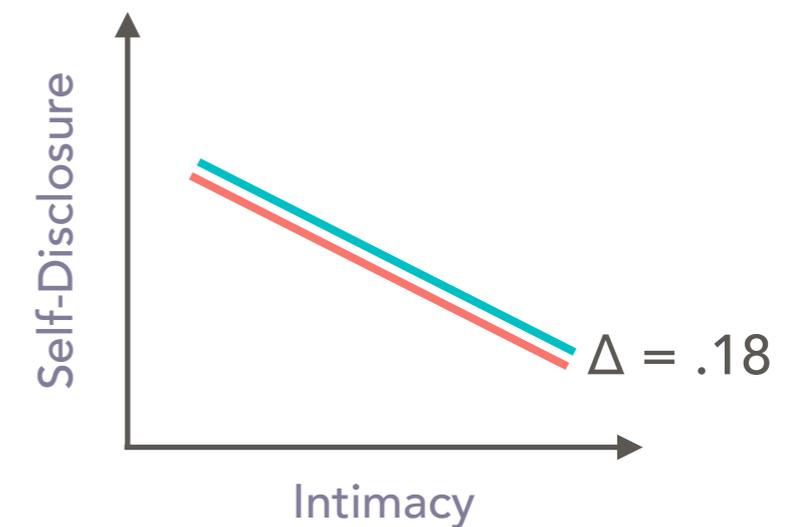
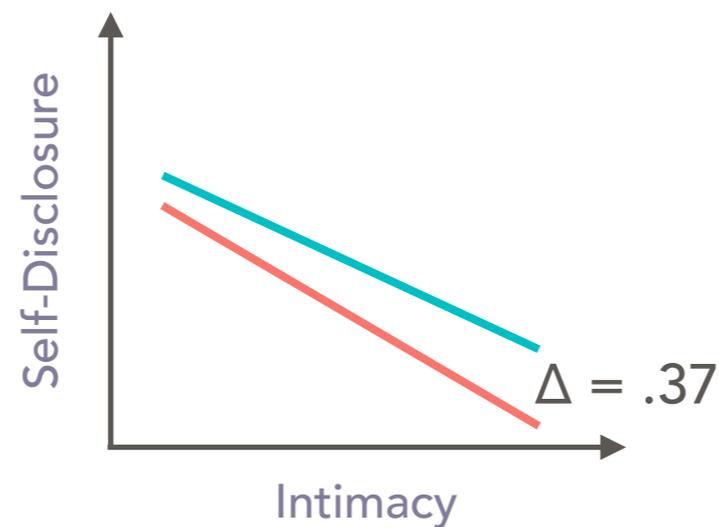
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Social Ties



People Nearby



Valence: **Negative** — **Positive** —

TAKEAWAY

1. Intimacy continues to regulate self-disclosure in all settings
2. Anonymity increases the self-disclosure baseline
3. Especially for negative valence
4. Functional model of self-disclosure

THANK YOU!

DATASET AVAILABLE AT:

<https://github.com/sTechLab/SelfDisclosureItems>

xm75@cornell.edu

maxiao.info

Anonymity, Intimacy, and Self-Disclosure in Social Media
[Xiao Ma](#), Jeff Hancock and Mor Naaman, CHI'16

