Ethics, Rapport & Recruitment
Think-Aloud Protocol

INF2300H
iSchool, University of Toronto

Velian Pandeliev
Oct. 28, 2019

My office hours: BL710

Wednesdays 1:30 - 5 pm

15-minute slots

https://velian.youcanbook.me

Evaluate me:

http://bit.do/2300mid

Anonymous mid-term evaluation survey

Assignment 2: Gameplay Observation

Going away for reading week?

Assignment 3:
Heuristic Evaluation

You will perform individual heuristic evaluation between Nov. 1 and 14.

Look out for the assignment handout this week.

Research Ethics

Research ethics

1. Do no harm

2. Informed consent

    a. Disclosure

    b. Capacity

    c. Voluntariness

3. Privacy and data security

4. Respect for participants

I understand that gameplay footage I submit as part of **Assignment 1** in INF2300 during the Fall term of 2019 will be **anonymized** and **disassociated** with my name, identity, likeness, and demographic information. I understand that opting out of any uses of my video will **not** adversely impact my grades, opportunities, or performance in the class.

I wish to **OPT OUT** of any materials I provide being used for the following purpose:

- Do NOT use my gameplay footage as in-class examples in this class (INF2300H1F Fall 2019)

- Do NOT use my gameplay footage as in-class examples in future classes

- Do NOT share my gameplay footage with other students for course deliverables in this class (INF2300H1F Fall 2019)

- Do NOT share my gameplay footage with with other students for course deliverables in future classes

- All of the above. Do NOT use my videos for any purpose other than grading.

Signed,

Full Name	Signature	Date
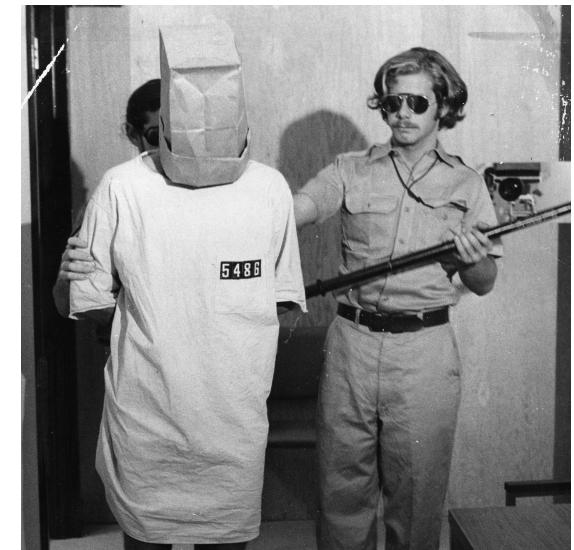
Do no harm

MEDICAL EXPERIMENTS ON PRISONERS
DACHAU, GERMANY
1942-43

UNTREATED SYPHILIS IN AFRICAN-AMERICANS
TUSKEGEE, AL, USA
1932 - 1972

STANFORD PRISON EXPERIMENT
STANFORD, CA, USA
1971

Ways to do harm in a playtest?

Ways to fail to prevent harm from being done?

Informed Consent

Disclosure:

The participant must be told what they are agreeing to participate in.

Capacity:

The participant must be capable of understanding and agreeing to the conditions of the study.

Voluntariness:

The participant must freely consent to participate and do so throughout the study without undue influence or coercion from the researcher.

Disclosure

The participant must be told what they are agreeing to participate in.

- Be truthful

- Disclose the **identity** of the researcher(s), the study sponsor, and offer a third-party contact for ethics concerns.

- Describe the **procedure** of the study, its duration of the study, what is expected of participants, and what their options are at every step

- Disclose any associated **potential risks** (e.g., discomfort, emotional distress, fatigue, etc.) and explain why they are necessary

- Describe how **data** will be gathered, anonymized, stored, and used

- Allow participants to keep or **reference** a copy of this information

Capacity

The participant must be capable of understanding and agreeing to the conditions of the study.

- Provide study information in a **language** the participant can understand, and in at least two different modalities (e.g., verbal and written)

- Use **plain vocabulary** that is direct, age-appropriate and free of jargon

- Give participant ample **time** to absorb information and **ask questions**

- Participants whose capacity or judgment is **impaired** should not be expected to give consent

- **Children** must be accompanied by a parent or guardian and consent must be obtained from both the child and the parent

Voluntariness

The participant must freely consent to participate and do so throughout the study without undue influence or coercion from the researcher.

- The potential participant is under **no obligation** to participate

- Participant's consent is **documented** in writing before research begins

- Consent is **re-obtained** on an ongoing basis

- A participant may take a break, skip an activity, or **discontinue participation** at any time without penalty or justification

- When a participant withdraws, they may opt to have their **data excluded** from the study

- Participant **compensation** is not affected by withdrawal of consent

Compensation

Participants should be compensated for their participation:

- Makes participation a **revenue-neutral** experience
- Demonstrates **respect** for participants' time and offers an incentive to participate

Compensation is **not conditional** on the usefulness of collected data, duration of participation, completion, or performance

Compensation is **not offered** per hour or per task

Compensation is **not unreasonably high** so that it compels a participant to act against their interests or attracts participants in economic distress

Compensation does not constitute **employment**

Compensation thoughts?

"Compensation" thoughts?

Privacy and data security

- Disclose how data will be used and who will see it

- Have and follow data security and data retention policy (e.g., 5 years)

- Blur faces if possible (though not typically done in UR)

- Disassociate data from participant identities (e.g., using a key sheet)

Identifiable info	Key sheet		Coded ID
Alice	Alice	P043	P043
Bob	Bob	P055	P055
Carlos	Carlos	P065	P065
Diane	Diane	P099	P099

Respect for participants

Participants are doing us a favour.

We need their input, and we should treat them with respect.

This extends to:

- Disclosure
- Guidance
- Comfort
- Reassurance
- Reasonable effort
- Courtesy

Rapport

Rapport

Rapport is the type of relationship established between research team members and participants. This is a broad phenomenon that is impacted by every interaction from preselection to debriefing.

Researchers must be deliberate about their rapport in order to:

- Obtain high-quality research

  - Encourage comfortable, naturalistic behaviour

  - Foster cooperation and forgiveness of glitches or inconveniences

- Discourage information leaks

Leak challenges

Participating in a playtest is very **exciting**. We ask participants to inhibit that excitement and **not disclose** details about the game.

They are more likely to do so if they feel respected, heard, and cared for.

Poor rapport increases the likelihood of vengeance leaks and decreases the reasons for participants to care about the game's fate.

Most company leaks are the work of disgruntled employees.

Doctors with poor rapport subject to more malpractice suits.

Research challenges

- **Demand characteristics:** participant acts differently in a study

- **Subject expectancy:** participant gleans purpose of study

- **Observer expectancy:** researcher telegraphs purpose of study

- **Hawthorne effect:** awareness of being observed

- **Social desirability:** desire to please researcher or give "good" answers

- **Acquiescence:** participants tend to agree with researcher statements

- **Satisficing:** participants do the absolute bare minimum

- **Screw-you effect:** annoyed participants deliberately give broken data

Principles of Good Rapport

1. **Forthcoming and transparent**
   - I am transparent about the purpose and procedure of the study.
2. **Impartial and non-judgmental**
   - I won't judge you for anything you say or do here.
   - I am impartial about the product.
3. **Friendly, warm, and respectful (but not too warm!)**
   - You're doing us a favour and I'm grateful for your time and effort.
   - I respect you as a social equal.
4. **Interested and focused**
   - I'm interested in what you have to say.
   - I care about your comfort, questions, and concerns.
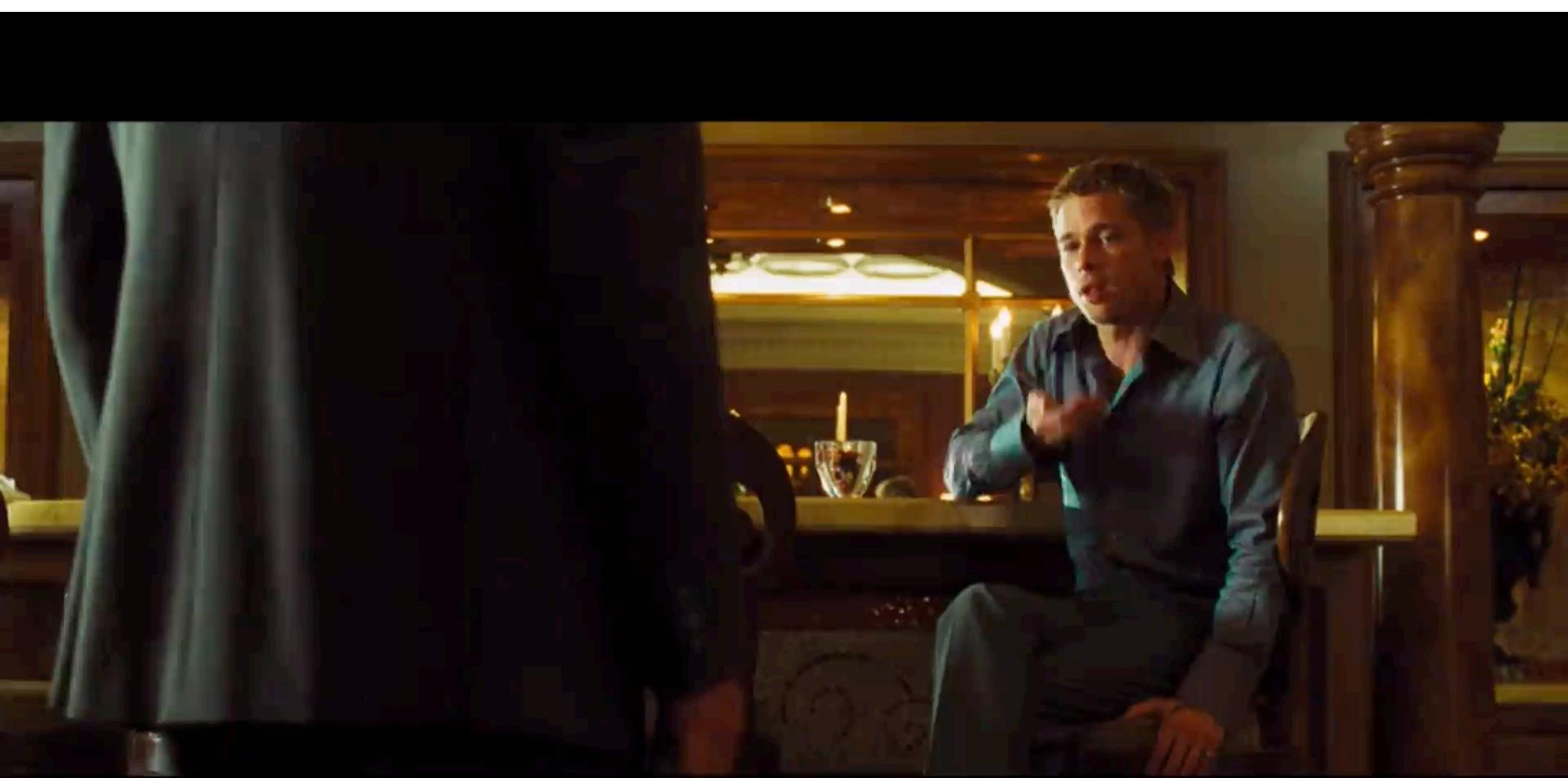
BOB TILFORD

Touchpoint: Sign-up

Does your recruitment material pass judgment on participants' status or skill?

Is playtesting only targeted towards "**gamers**" or "**fans**"?

Set expectations in a welcoming, impartial, informative manner.

Disclose participation conditions and provide answers to FAQ.

BECOME A 2K GAMES PLAYTESTER

Want to help make the games you love even better? Your feedback can make a difference! Be the first to play our latest titles and walk away with great rewards as thanks for your time.

HOW DO I SIGN UP TO BE A 2K PLAYTESTER?

We're looking for feedback from all types of players – hardcore, casual, young, old, and everyone in between. If you play games and you're 18 years or older, we want to hear from you!

To register, **create** or **sign into** a 2K Account. You will then be prompted to complete a brief survey. Once you are signed up, you'll be eligible to try out unreleased 2K games, apps, software, and more!

SIGN UP NOW   SIGN IN

STILL HAVE QUESTIONS?

If you still have questions about being a 2K Games Playtester, **check out our FAQ**.

2K.COM/EN-US/PLAYTEST/

Touchpoint: Initial Experience

Imagine entering a game studio for the first time.

Participants have **no idea** what is going to happen to them.

They are looking for **any clues** as to what's ahead and they may draw the **wrong conclusions** without appropriate guidance.

- Greet them warmly as soon as you can, and thank them for coming

- Follow cultural norms, avoid being overly familiar or formal

- Explain next steps and let them know that you'll be their guide through the experience (Entice - Enter - Engage - Exit - Extend)

- Ask if they have any questions

Touchpoint: Environment and Branding

Do your participants have to walk through a lobby full of posters for your brand's major releases, **awards**, and concept art?

Are you wearing a **studio logo** or game-branded T-shirt?

Participants may feel **intimidated** to be at such an awesome place or they may be **excited** by the cool things you made that they like.

Both will **skew** their data.

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Touchpoint: Non-Disclosure Agreement

Participants must be **informed** and aware of their **obligations**.

Non-Disclosure Agreements are dense, legally enforceable documents.

Tell participants the **core details** out loud without being too scary.

They need to understand that this is **serious** without feeling mistrusted or muzzled.

Your demeanour will help **motivate** them to keep the game's secrets.

SOFTWARE BETA TESTER NONDISCLOSURE AGREEMENT

This is an agreement, effective _____, 20___, between _____ ("Company") and _____ ("Tester"), in which Tester agrees to test software known as _____ (the "Software") and keep Company aware of the test results.

1. Company's Obligations
Company shall provide Tester with a copy of Software and any necessary documentation and instruct Tester on how to use it and what test data is desired by Company.

Upon satisfactory completion of the testing:

[Choose one]

☐ – Company shall furnish Tester with one free copy of the production version of Software, contingent upon Company's decision to proceed with production of Software.

☐ – Company shall _____.

2. Tester's Obligations
Tester shall test Software under normally expected operating conditions in Tester's environment during the test period. Tester shall gather and report test data as agreed upon with Company. Tester shall allow Company access to Software during normal working hours for inspection, modifications, and maintenance.

3. Software a Trade Secret
The software is proprietary and a valuable trade secret of the Company. It is entrusted to Tester only for the purpose set forth in this Agreement. Tester shall maintain Software in the strictest confidence. Tester will not, without Company's prior written consent:

(a) disclose any information about Software, its design and performance specifications, its code, and the existence of the beta test and its results to anyone other than Tester's employees who are performing the testing and who shall be subject to non-disclosure restrictions at least as protective as those set forth in this Agreement;

(b) copy any portion of Software or documentation, except to the extent necessary to perform beta testing; or

(c) reverse engineer, decompile or disassemble Software or any portion of it.

4. Security Precautions

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NDA Speech Demo

Touchpoint: Welcoming and Briefing

Key points to hit when briefing participants:

- Thank participants for coming
- Go over schedule, breaks, bathroom locations, water
- Their performance is not being evaluated
- They should play naturally
- Researchers are impartial to game feedback
- Ask for their honest opinions
- Ask them not to discuss the test with each other
- There may be bugs or glitches
- Evaluate the game in its current state

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Touchpoint: Testing Space Setup

Participants should feel **comfortable** and **safe** in the lab

Respect participants' personal space, avoid observing too closely

Minimize research staff or spectators in testing room

Avoid flashy branding or high-end technology

Touchpoint: Debrief

Give participants their **compensation** and thank them again by name.

Avoid offering **company swag** or social media **photo ops**.

Tone Guide

I **respect** you as a social equal.

You're doing us a favour and I'm **grateful** for your time and effort.

I **care** about your comfort, questions, and concerns.

I'm **interested** in what you have to say.

I **won't judge** you for anything you say or do here.

I am **impartial** about the product.

I am **transparent** about the purpose and procedure of the study.

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Participant Recruitment

1. Populate a volunteer database

Find interested players at game conventions, campus events, schools, etc.

Post a call for participation and **sign-up link** to your studio website.

Keep initial **sign-up questions brief**, asking about:

- contact info (phone and e-mail)
- demographics (age, gender, preferred language, location)
- game platforms and genres
- general time availability (days of the week, day segments)

Explain that selection from this database is **random** and there's no guarantee if and when they will be contacted.

This data will help with random pre-selection for a given study.

What is your favourite game of all time?

We know it can be hard to choose, but you have to pick one!

Because of any physical, cognitive or emotional condition, do you/your child often experience any difficulties in playing video games?

Not at this time (or I prefer not to say) ⌄

Why do we ask this?

Game developers are often interested in making their games more accessible to persons with impairments, and we therefore seek individuals with whom to collaborate on improving these games. You are not required to disclose an impairment, however we request that you make us aware of any physical access requirements you may have, if you're invited to playtest.

If you are comfortable doing so, you can provide additional information on games or interactions that present difficulties

What is your favourite game of all time?

We know it can be hard to choose, but you have to pick one!

Because of any physical, cognitive or emotional condition, do you/your child often experience any difficulties in playing video games?

Yes ⌄

Why do we ask this?

Game developers are often interested in making their games more accessible to persons with impairments, and we therefore seek individuals with whom to collaborate on improving these games. You are not required to disclose an impairment, however we request that you make us aware of any physical access requirements you may have, if you're invited to playtest.

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PLAYER RESEARCH (2019)

2. Gather study requirements

In consultation with research team, determine:

- Study times and durations

- Number of participants needed

- Test platform

- Test goals and research questions

- Participant inclusion criteria based on test goals and research questions

3. Send initial invites over e-mail

Randomly sample **~5x** your intended participant number that meet broad inclusion criteria, e.g., familiar with PS4 controller, 18-35, play RPGs.

In an initial invite e-mail:

- Mention **logistics** of the test (location, duration, dates)
- Specify **compensation**, if any
- Indicate that this is a preliminary e-mail and they're **not confirmed yet**
- Describe **steps** to confirmation (e.g., participant will receive a screening call from a researcher)
- Ask if participant is **available** and **interested** in participating
- Link to more **targeted survey** about their profile

4. Phone screen

The phone screen call is used to:

- **Verify** inclusion criteria and details given in preselection survey

- Make a **judgment** about participant's suitability for the test

- Make participant **accountable** to a person once confirmed

The researcher must be careful not to indicate the **test purpose** or **desirable criteria** to avoid participants misrepresenting or lying.

If a participant is not a good fit, they must be **rejected with positivity** without seeming like they gave "wrong answers".

If they are a fit for the playtest, reiterate logistics and compensation and send a **confirmation e-mail**.

Phone screen sample script

"You'll come down to our studio near [location], take a look at what we're working on, and tell us what you think about it."

"Keep in mind this is not a job or a job interview, and you don't need any game testing qualifications, we're just looking for your opinion as a player."

"Next I'd like to ask you a few questions about gaming to see if you fit the profile we are looking for for this playtest."

"Keep in mind that each one of our playtests targets a different profile of player, so there are no right or wrong answers, and if you are not a perfect fit for this test, you'll still be in our database for future tests."

Overbooking

Participants may cancel before the start of the playtest.

Have a few participants on a **waitlist** that you can call in case a confirmed participant cancels before a playtest.

Participants may also fail to show up on the day with or without contact.

Book several participants as **backups** in the phone screen. Backup participants:

- are recruited specifically to be backups but fit inclusion criteria
- arrive at the same time as confirmed participants
- if there is a no-show, the backup is added for the full duration
- if everyone shows up, they are compensated, but don't get to play

Inclusion criteria

Inclusion criteria are player characteristics suitable to a particular test, e.g.,

- **Genre familiarity:**
  Must have played 20+ hours in 3 of these 8 recent racing game titles

- **Platform / controller familiarity:**
  Must own an Xbox or be familiar with Xbox controller

- **Franchise familiarity:**
  Must have completed at least one of the prequels

- **Gaming dosage:**
  Must play 5-20 hours of video games per week

- **Intent to purchase:**
  Mentions "God of War" when asked about upcoming purchases

Exclusion criteria

Exclusion criteria make a potential participant ineligible, e.g.,

- Direct ties to the **gaming industry**

- Professional **gamer** or **streamer**

- **Pairs** (roommates, partners, siblings, friends)

- **Distance** to studio

- ESRB or **content** restrictions

- Has tested the **same game before**

- Has participated **recently** or **repeatedly**

- **Blacklisted** during previous playtest

How to get blacklisted

- Arrive **inebriated** or exhausted (e.g., from 8 hours of driving)

- Appear in emotional or financial **distress**

- **Harass**, distract, or make uncomfortable participants or staff

- **Damage** or steal equipment

- Take photos, record gameplay, or copy **data**

- Try to enter **restricted** studio areas

- Do the **bare minimum** to receive compensation

- **No-show, no contact**

Think-Aloud Protocol

Think-Aloud Introduction

The **Think-Aloud** protocol is a qualitative research method in which the participant is asked to verbalize their thoughts as they interact with an interface.

The Think-Aloud is the most common usability testing protocol.

It provides access to **behavioural** data but also to the **cognitive processes** that led to the behaviour and to some **attitudinal** data.

Think-alouds can be **scripted** or **unscripted**.

They can test usability, clarity, game systems, menu structure, narrative…

NNGROUP.COM/ARTICLES/THINKING-ALOUD-DEMO-VIDEO/

Think-Aloud Protocol

The think-aloud is conducted with **one** participant and **one** researcher.

The researcher:

- **Introduces** the task and the protocol

- Runs a **practice** exercise to get the participant talking first

- **Listens** without interrupting during the task

- **Prompts** the participant to keep talking if they forget

- **Does not answer** questions or give hints about the task

- Conducts a short follow-up **interview** to get the participant's final thoughts and overall impressions

Think-Aloud Prompts

The participant is instructed to mention things they like or don't like, things they notice for the first time, confusing things, expectations and predictions, and whether anything unexpected happened:

- What do I expect will happen if I perform this action?

- What happened? Why did it happen? Is it what I expected?

- This is confusing.

- This is easy/hard.

- I like/dislike this.

- What do I need to complete this task?

Benefits

Cheap: faster than other methods, need fewer participants

Robust: resistant to methodology errors or researcher inexperience
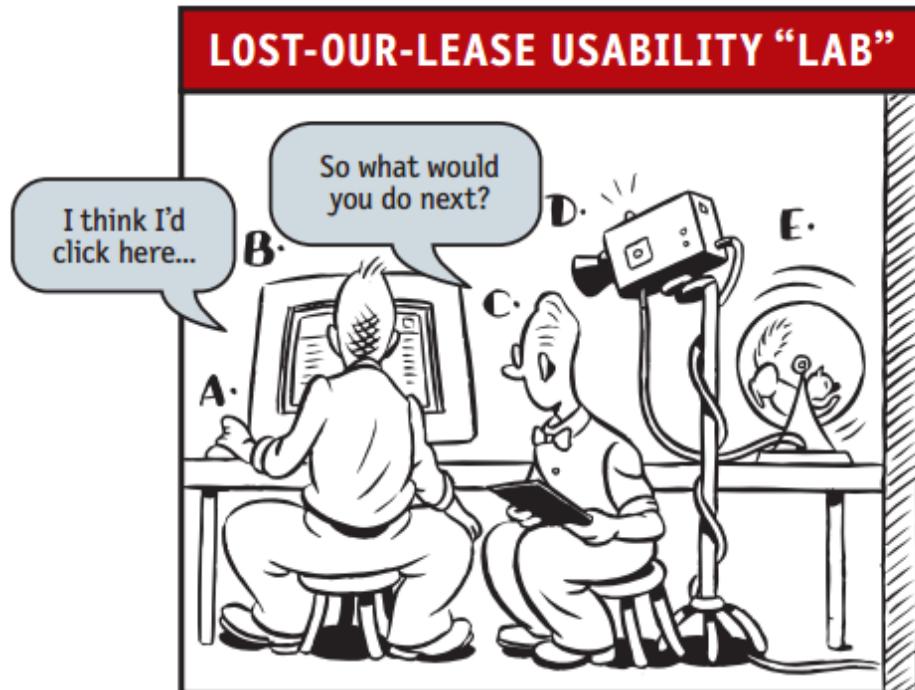
Flexible: can be performed at any stage of development, doesn't require a working game or a functional prototype

Convincing: participant explanations have narrative power when presented to designers and developers

Easy to learn: researchers can be trained to perform think-alouds quickly and easily

Think-Alouds Are Cheap

Lost-Our-Lease usability testing can be performed with **1-5 users** and can be analyzed in as little as **24 hours**.

Sample testing sequence (75 min)

Time	Step
5 min	Welcome & background questions
5 min	Practice exercise
5 min	Interface tour: first impressions
45 min	Tasks: they think aloud, you take notes
10 min	Probing: ask follow-up questions
5 min	Wrap-up: thanks and compensation

STEVE KRUG

FRIENDS

One to three is sufficient

Think-Alouds Are Convincing

Think-aloud footage with participants verbalizing their challenges, wrong conclusions, and confusion, is **invaluable** in illustrating issues to designers.
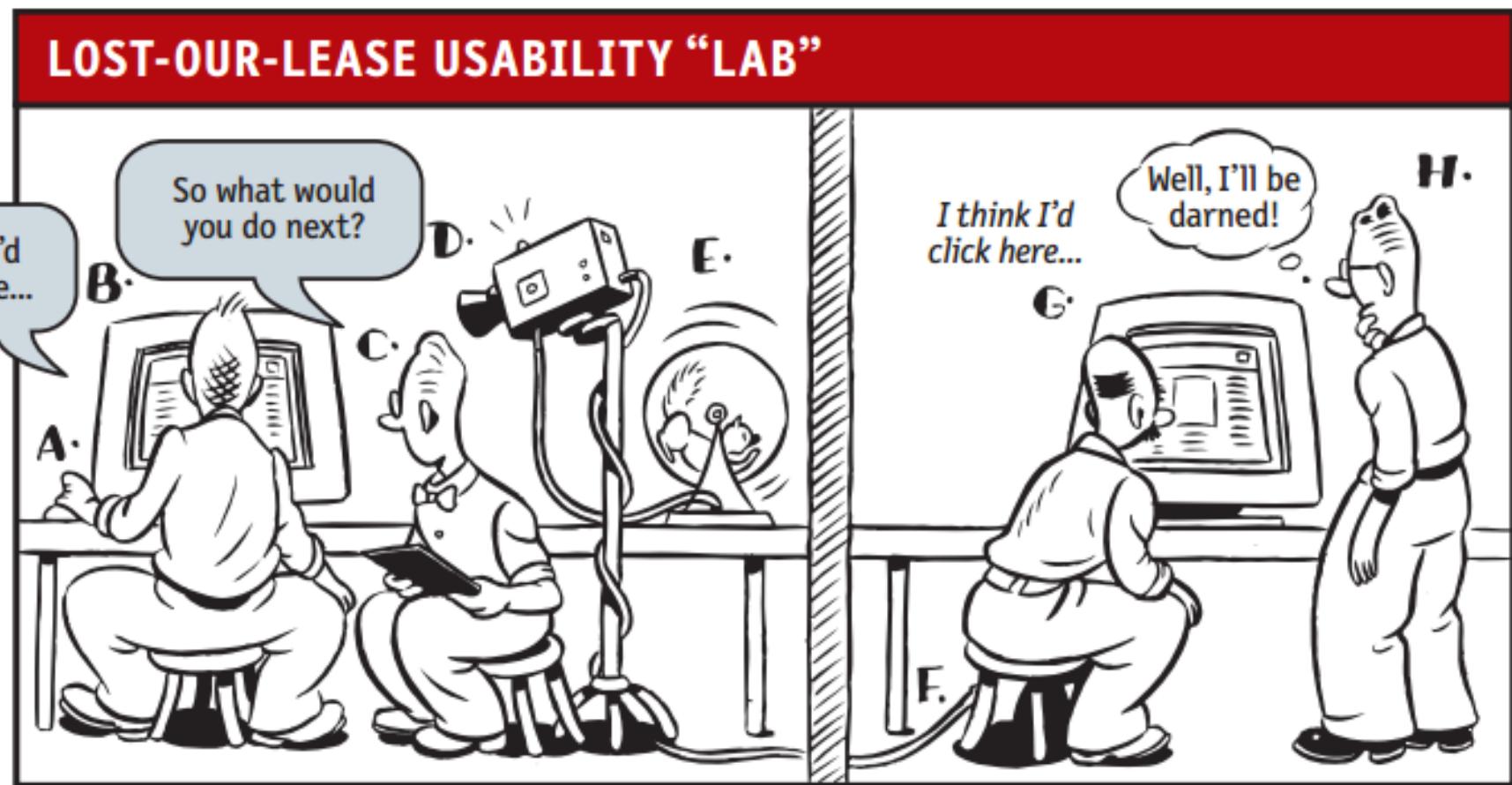
The impact of relevant video clips is high, but designers can be invited to observe a think-aloud session **live** to maximize authenticity.

If non-researchers (designers, developers, managers) are observing, they:

- Must be in a **different room** watching a one-way video feed

- Must **not affect** or communicate with the participant in any way

As a general rule, the production team is **not trained** to interact with participants and there should be **rules** preventing them from doing so.

Think-Alouds Are Convincing

STEVE KRUG

Think-Aloud Challenges

Thinking aloud is **unnatural** and may make participants self-conscious.

> **Fade** into the background and give them lots of space (ideally by observing from another room).

Participants may try to **formulate smart-sounding thoughts**, diminishing the immediacy of their feedback.

> **Avoid agreement** or acknowledgment as they talk to mitigate this.

Participants may become **absorbed** in the task and forget to talk.

> **Remind** them with a brief, neutral prompt,
> e.g.,: "Please keep talking"

Limitations

Thinking aloud is **cognitively demanding**, so participants may be biased to perform less demanding tasks in order to be able to sustain talking.

It also **diminishes performance** and response time, so think-alouds are poorly suited to capturing time-based performance data.

It is more **fatiguing**, limiting session duration to ~60 minutes for adults.

Finally, think-aloud data **takes a long time to process** thoroughly: sessions need to be re-watched, transcribed, and analyzed.

Post-Hoc Think-Aloud

A variation on the think-aloud protocol asks the participant to perform tasks as normal without verbalizing.

Then, video of the session is presented to the user so they can narrate or retroactively explain their thought process.

This may offer more details on the challenges users faced, but it is further removed from the moment and may not be accurate.

It also takes longer and is more taxing to the participant.

Awesome	Confusing	Frustrating