Follow the User?!

Data Donation Studies for Collecting Digital Trace Data

Session 2: Data Donation Studies (Participant Perspective)

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← Part of the SPP DFG Project Integrating Data Donations in Survey Infrastructure

Agenda

- 1. What are data donation studies?
- 2. Participant perspective, including
 - 2.1 Task 1: Inspect your DDPs
 - 2.2 Task 2: Try donating your data



Image by Hope House Press via Unsplash

1) What are data donation studies? (Valerie)



Source: Image by Markus Winkler via Unsplash

Changes in legal contexts

- EU secures right to own data in Art. 15 of the General Data Protection Regulation (GDPR)
 - "The data subject shall have [...] access to the personal data" (§ Art. 15, 1)
 - "The controller shall provide a copy of the personal data" (§ Art. 15, 3)
- According to § Art. 20, users must receive their data "in a structured, commonly used and machine-readable format" (§ Art. 20, 1)

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- According to § Art. 20, users must receive their data "in a structured, commonly used and machine-readable format" (§ Art. 20, 1)
- **Solution:** Platforms offer data download packages (DDPs), which users can request and download to inspect data.
- **Consequence**: Researchers uses DDPs as part of user-centric data donation studies.

Please raise your hand $\stackrel{\ref{lease}}{=}$: Who has ever tried to request their data from an online platform?

What are data donation studies?

Definition \mathbb{Q} : Data donation studies are a user-centric method for collecting digital traces:

- Users have the right to request, access, and download data that platforms collect about them.
- They can make their *data packages (DDPs)* available to science via *data donation tools (DDTs)*, often in the context of surveys.
- Researchers use CSS methods to filter, anonymize, and aggregate this data locally on participants' devices.
- Participants can inspect/delete their data before any data is transferred.

Which types of data do DDPs contain?

For platforms like Facebook, Instagram, or YouTube, for example... (Hase et al., 2024)

- *User profiles* (e.g., privacy settings)
- Activities (e.g., friends, likes, searches, exposure, analog movements)
- Content and context (e.g., ads watched, algorithmically inferred interests)

How is data from DDPs different?

Compared to APIs (Haim & Hase, 2023; Ohme et al., 2024)...

- Control & informed consent of users
- Longitudinal data without "rate limits"
- Partly additional measurements (e.g., exposure data; non-public data)

How is data from DDPs different?

Compared to **tracking** (Haim & Hase, 2023; Ohme et al., 2024)...

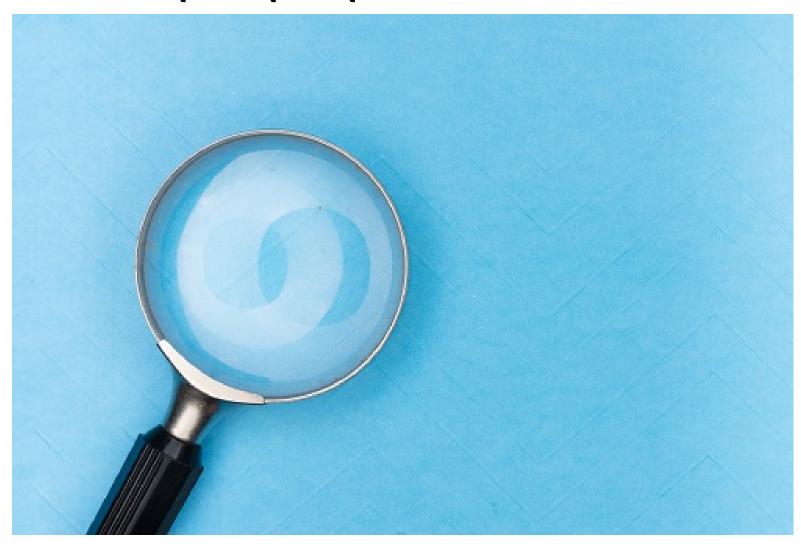
- Retrospective & often more longitudinal
- Partly additional measurements (e.g., algorithmic inferences)
- Anchored in current provisions in law (for issues with tracking, see Edelson & McCoy, 2021)
- but similarly burdensome for participants!

Summary: What are data donation studies? 🞏



- **Summary**: User-centric method for collecting digital traces: Users download their data packages (DDPs) from platforms and make them available to science via data donation tools (DDTs).
- Further literature:
 - Boeschoten et al. (2022)
 - Carrière et al. (2024)

2) Participant perspective (Frieder)



Source: Image by Markus Winkler via Unsplash

Data donation studies - participant perspective











- 1 Request
 Users request their data from a platform
- Download
 Users download their data once it becomes available

Data donation
Users donate their data to research via data donation tools

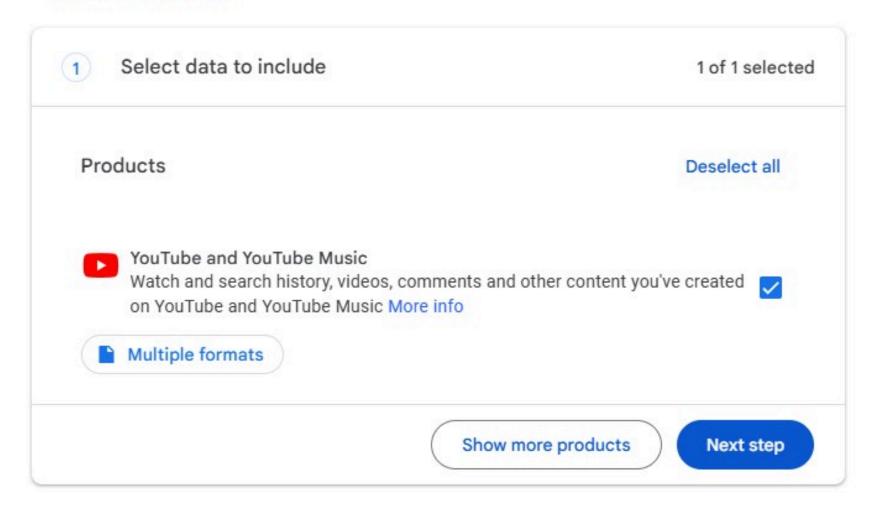








CREATE A NEW EXPORT



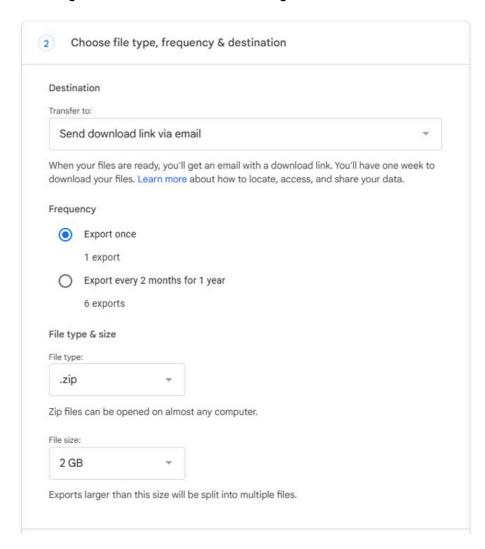


Figure. Data donation study - participant perspective

How easy (or hard) did you find it to request your data? Did you encounter any obstacles? ©

Different degrees in standardization for data requests (Hase et al., 2024)...

- Verification procedure
- Specification of data (metrics, observation period)
- Notification on provision of DDP
- Duration of DDP availability

Step II: Download







- 1 Request
 Users request their data from a platform
- Download
 Users download their data once it becomes available

Step II: Download

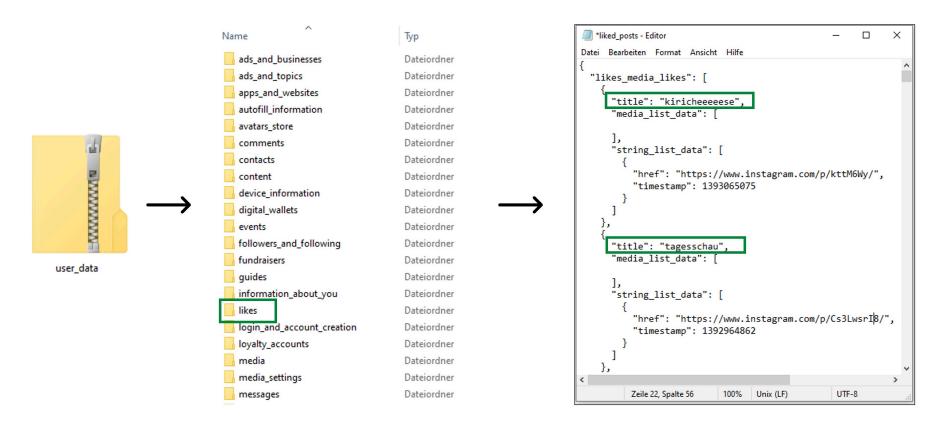


Figure. Data donation study - participant perspective



Which variables can you identify? How could you use these for research in your field?

Feel free to work in groups of 2-3 people.

Step II: Download

Different degrees in standardization for DDP content (Hase et al., 2024)...

- Documentation
 - DDP structure?
 - Measurements?
- Completeness & scope
 - Missing data?
 - Limited time frames?
 - Language sensitive?











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- Download
 Users download their data once it becomes available

Data donation
Users donate their data to research via data donation tools

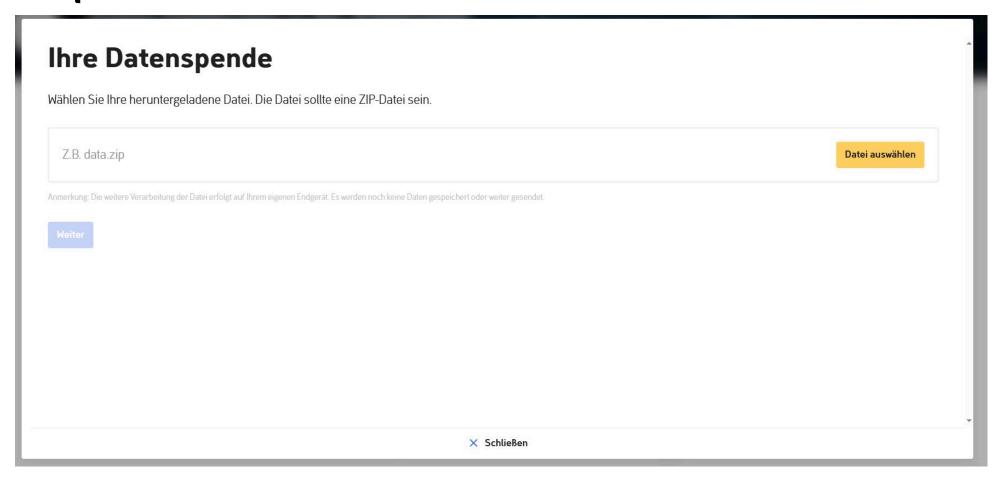


Figure. Data donation study - participant perspective

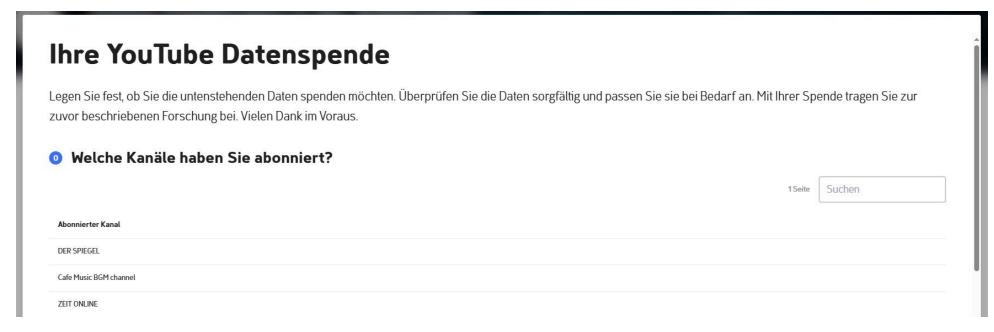


Figure. Data donation study - participant perspective





Upload and inspect your data. Did you encounter any difficulties in sharing your data?

https://next.eyra.co/assignment/344/participate? participant=XXX

Feel free to work in groups of 2-3 people.

Bias in Data Donation Studies

Similar to tracking studies, data donation characterized by (Hase et al., 2024; Hase & Haim, 2024; Keusch et al., 2024):

- Errors in representation (e.g., coverage error, non-response error)
- Measurement errors (e.g., missing data, specification error)
- ✓ Not necessarily less biased than survey data but subject to different bias?
- we will talk about this in Session 4.

Summary: Participant perspective 🐸

- **Summary**: Key steps from the participant perspective ...
 - 1. Data request
 - 2. Data download
 - 3. Data donation
- Further literature:
 - Boeschoten et al. (2022)
 - Carrière et al. (2024)

Questions?



References

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 Data Donation Studies COMPTEXT Frieder Rodewald, Valerie Hase