



Géographie-cités  
UMR 8504



**SciencesPo**  
CENTRE FOR RESEARCH ON  
SOCIAL INEQUALITIES

# Unveiling social desirability scales by comparing individuals' responses to an online survey with their streaming history data

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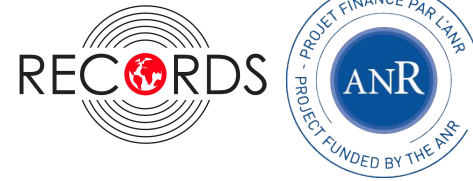


FORS Research and methods seminar

28/05/2024



# Acknowledgements



The work presented here has been partly funded by the French national research agency (ANR) under the grant ANR-19-CE38-0013 'RECORDS'. It is a collaborative project involving three research units of CNRS Humanities and Social Sciences — Géographie-cités, Centre Marc Bloch and the Center for Research on Social Inequalities — Orange/SENSE and the streaming platform Deezer.

The work presented in following slides is the result of a pluridisciplinary collaboration with (by alphabetical order) Amélie Beaumont, Jean-Samuel Beuscart, Samuel Coavoux, Philippe Coulangeon, Robin Cura, Brenda Le Bigot, Manuel Moussallam, Yann Renisio and Camille Roth.

Other active participants to the RECORDS project include Myriam Boualami, Pierre Gallinari-Safar, Noé Latreille, Darick Lean, Marion Maisonobe, Kristina Matrosova, Alvin Opler, Anne-Cécile Ott, Anne-Sylvie Pharabod, Jérémie Poiroux, Bruno Massoni Sguerra and Dougal Shakespeare.

# Context

## Objectives of the RECORDS project



1. Re-thinking categories in sociology of cultural consumption

Switching from declarative data collected at the level of music genres (“I like rock and jazz”) to mixed, declarative+observational data (digital traces) of effective consumption, collected at the level of tracks/albums/artists (“which rock and which jazz? how much? how long?”)

2. Measuring the diversity consumed on streaming platforms

Evaluate the relevance of statistical models linking social properties and music preferences that have been built on declarative data only

3. Measuring the effects of algorithmic recommendation

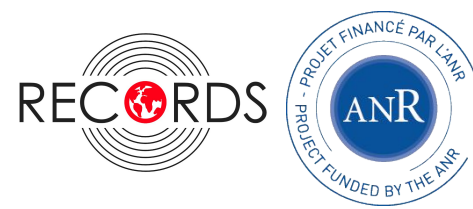
What are the measurable effects of a recommendation system among its users, after several years of use/exposure?

4. Investigate the relationship between declared music preferences and music streaming practices

Measure over- and under-representations and potential influence of legitimacy in displaying tastes

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in this talk

3. Measuring the effects of algorithmic recommendation (C. Roth)

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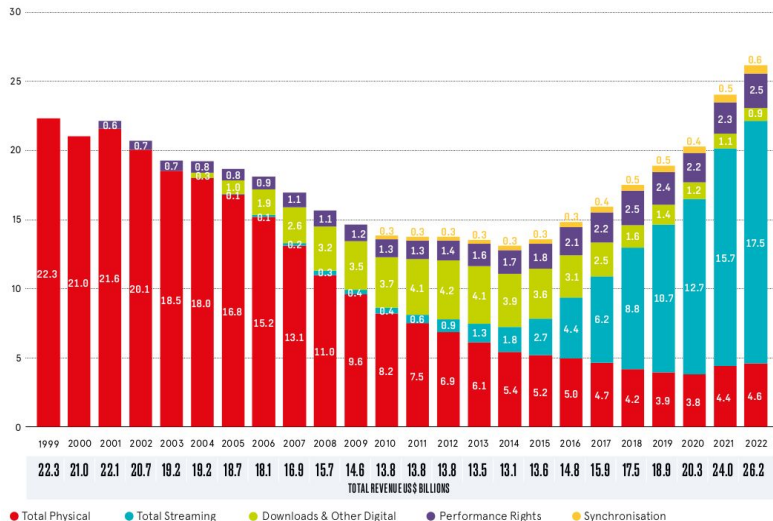
Measure over- and under-representations and potential influence of legitimacy in displaying tastes

# Context

## The increasing importance of streaming in the global recorded music market

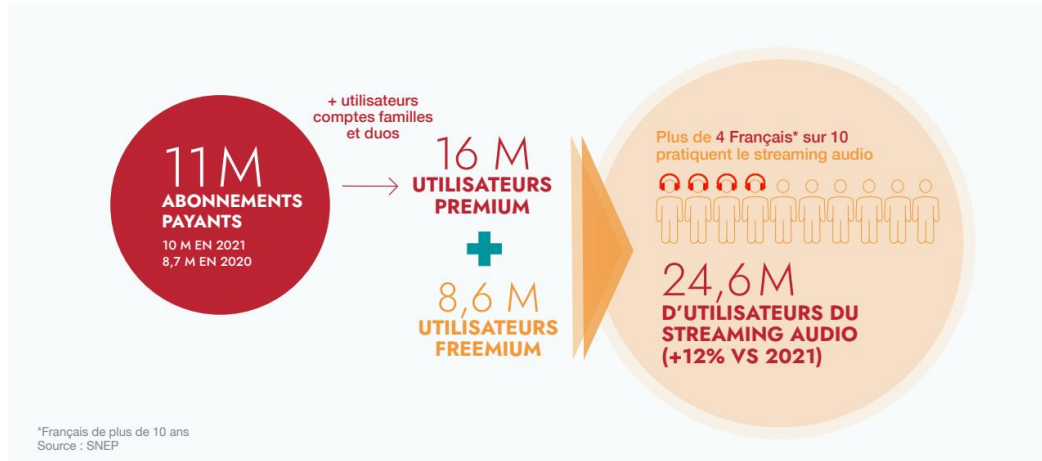
### World

GLOBAL RECORDED MUSIC INDUSTRY REVENUES 1999 - 2022 (US\$ BILLIONS)



About 600M premium accounts users

### France



16M active users worldwide  
about half in France

3 to 5 million premium account users in France



Sources: IFPI, Global music reports 2022, 2023  
+ SNEP decoding (IFPI data)

# **First study //**

## **Use cases of a mixed methods research design that integrates digital traces, survey data, and nested sampling**

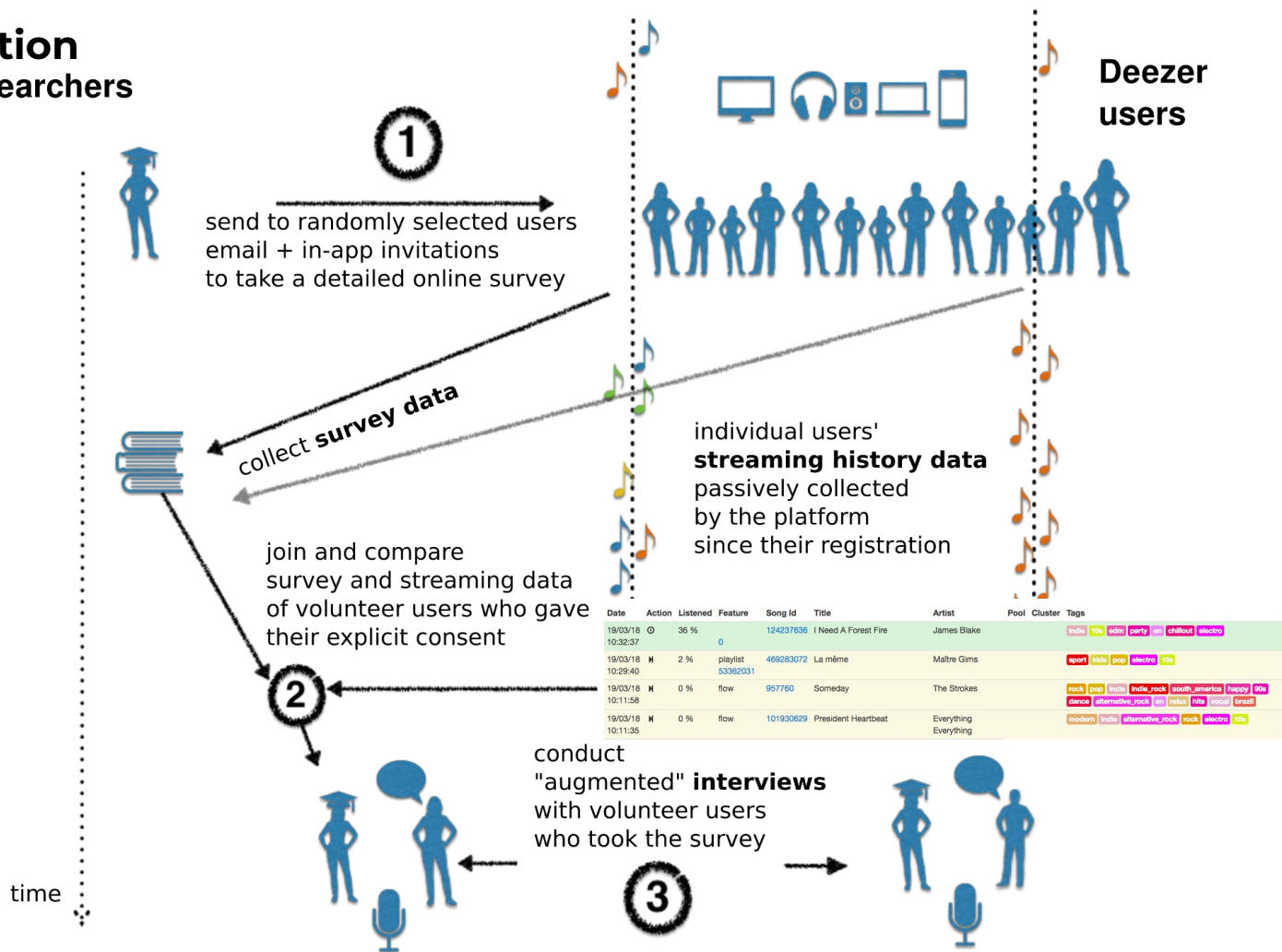
> Yann Renisio, Amélie Beaumont, Jean-Samuel Beuscart, Samuel Coavoux, Philippe Coulangeon, et al.. (2024)  
Integrating digital traces into mixed methods designs: An application to the study of online music listening using  
survey, interview and stream history data collected from the same people *Under review* ([hal-04448365](#))

# RECORDS data collection

- mixed
- iterative
- nested

Researchers

Deezer users



# RECORDS data collection

- mixed
- **iterative**
- nested

+ Translation of the survey in DE, NL  
+ Diffusion in 5 European countries GB, DE, BE, CH, NL  
+ Large-scale automated experiments ; personalize questions in the survey

4th iteration  
2024

+ EN translation of the survey  
+ PCS2020 module  
+ weighted sampling  
+ in-app push-notifications

3rd iteration  
Spring 2023  
**465k**  
(16k -- 3.5%)

2nd iteration  
Winter 2021  
**30k**  
(1,120 -- 4%)

Online survey (CAWI)  
design and diffusion

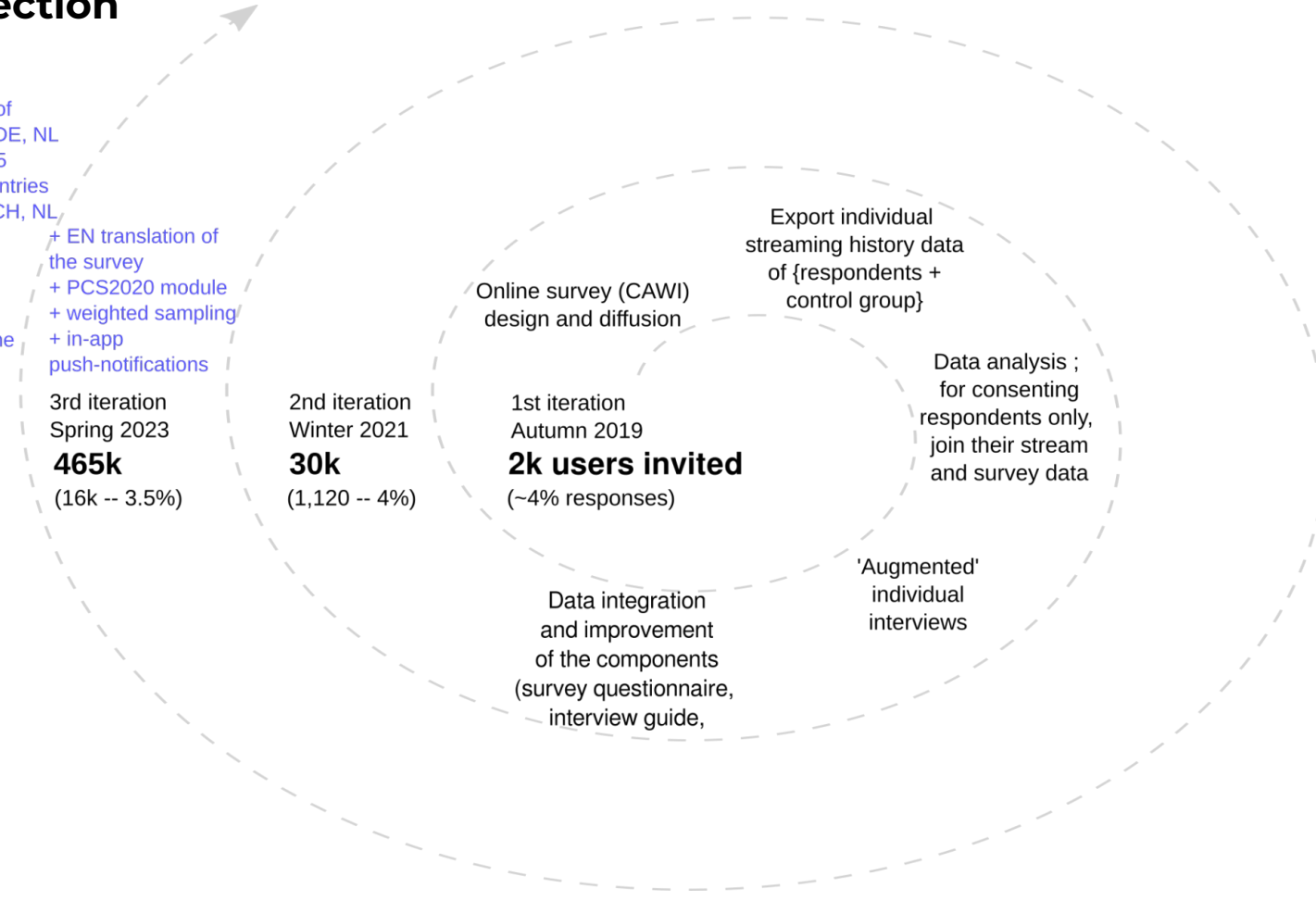
1st iteration  
Autumn 2019  
**2k users invited**  
(~4% responses)

Data integration and improvement of the components (survey questionnaire, interview guide,

Export individual streaming history data of {respondents + control group}

'Augmented' individual interviews

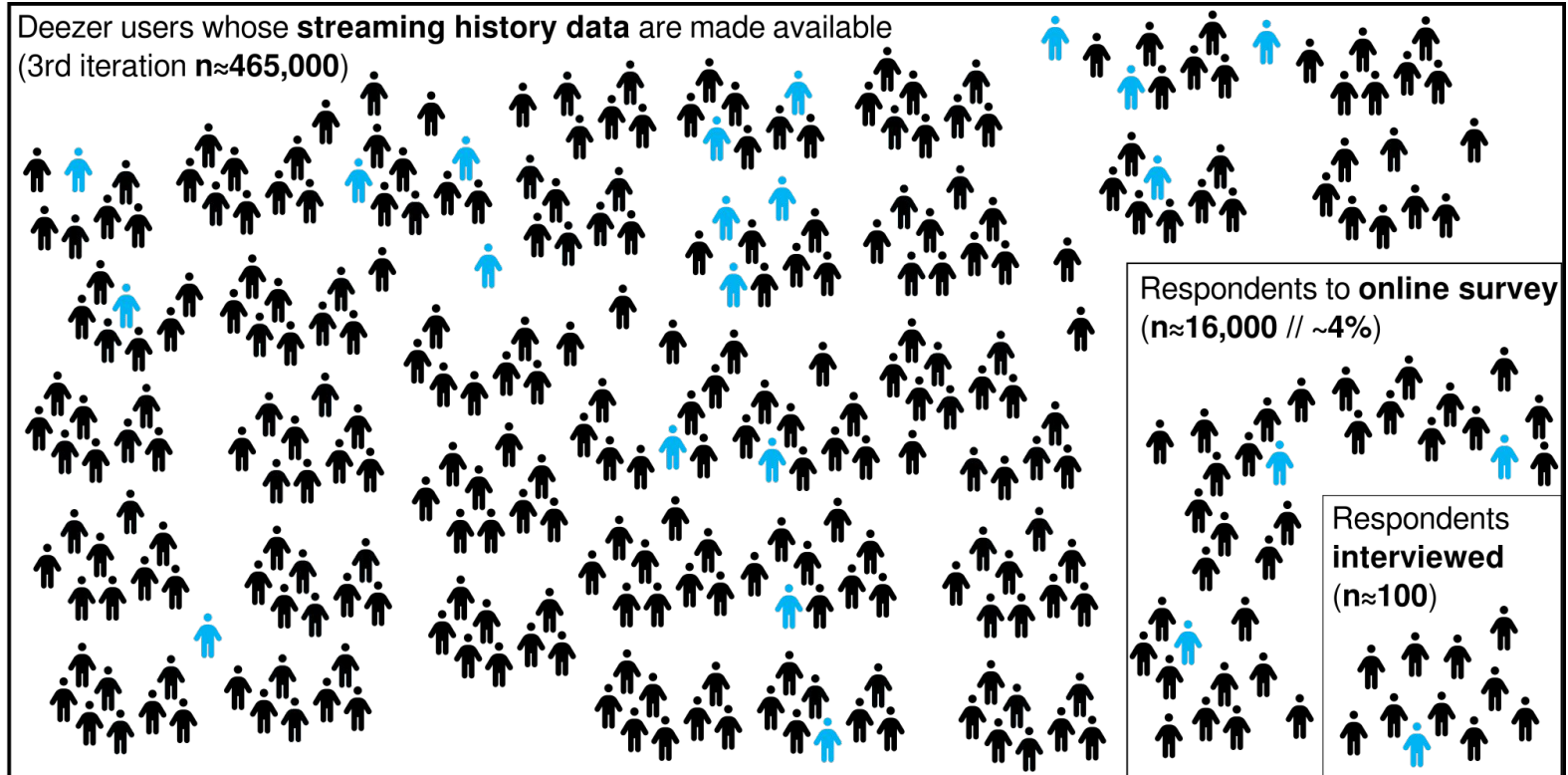
Data analysis ; for consenting respondents only, join their stream and survey data





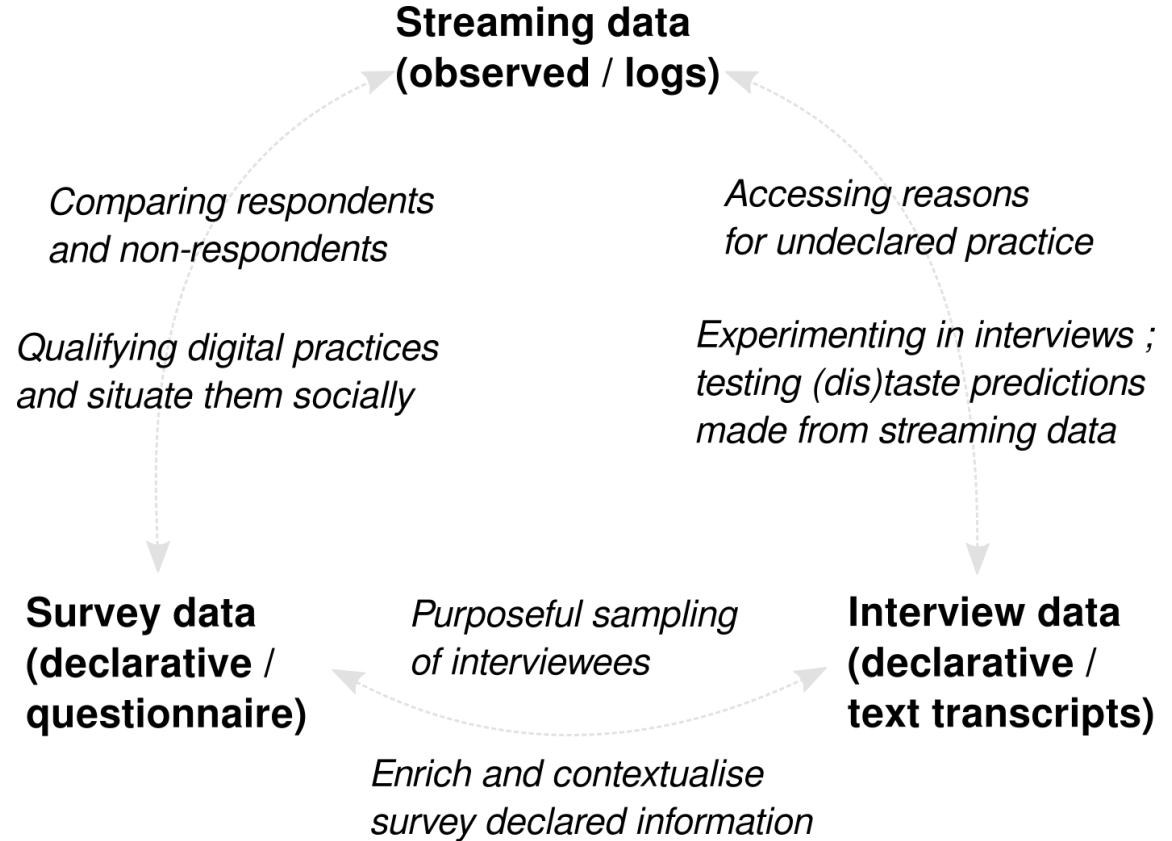
# RECORDS data collection

- mixed
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- **nested**

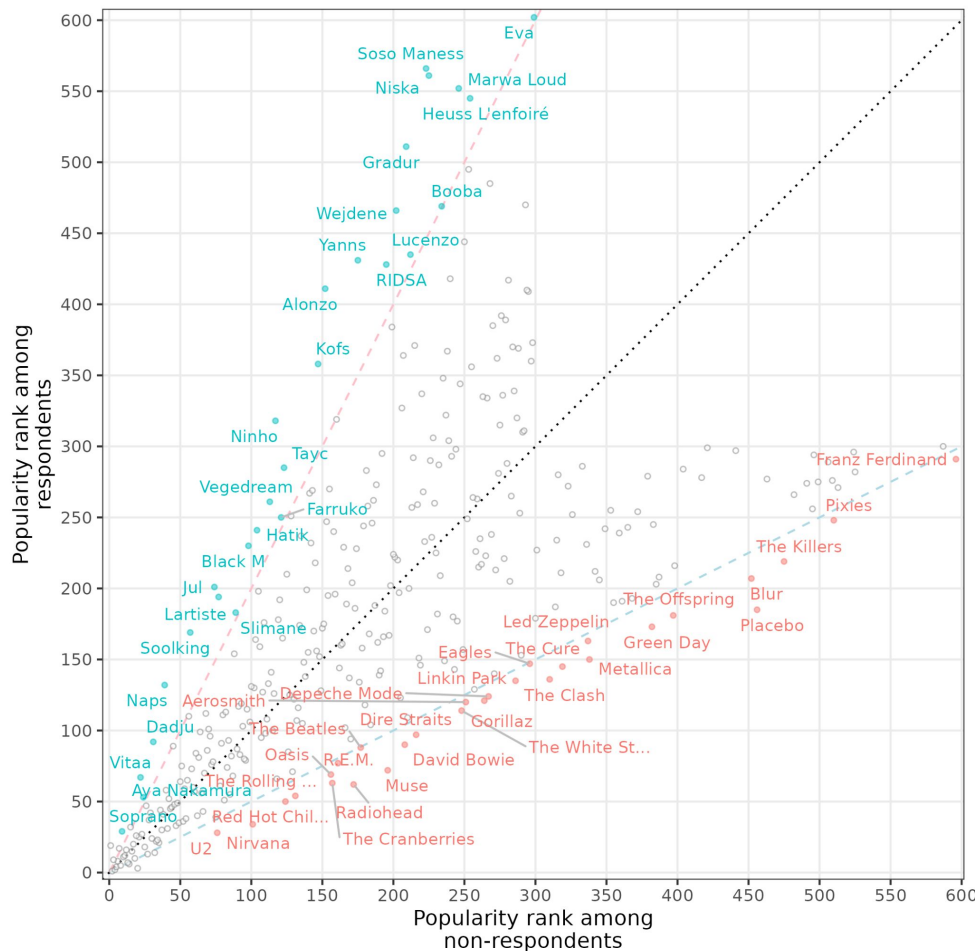


 Control group ( $n \approx 16,000$ ) : made of users randomly sampled among all those who were solicited to take the survey

# Use cases of the pairwise combination of data sources



# Illustration (1/2)



**Streaming data  
(observed / logs)**

*Comparing respondents  
and non-respondents*

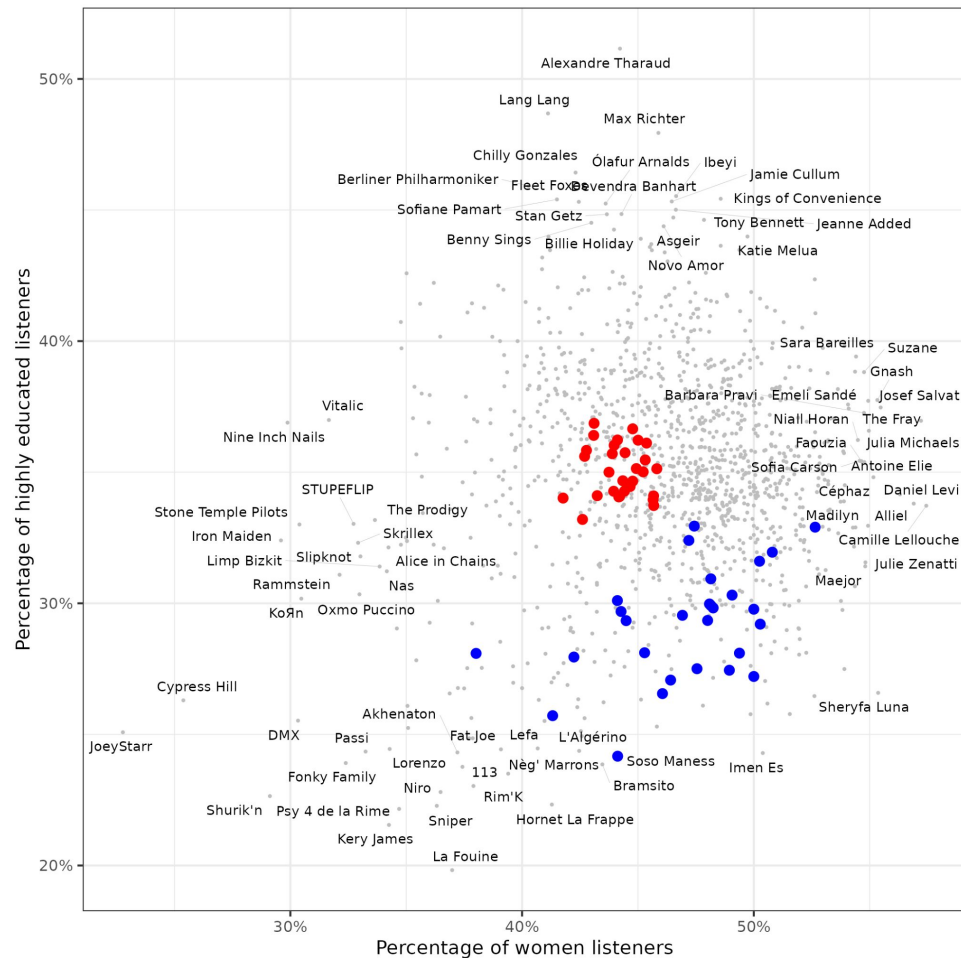
*Qualifying digital practices  
and situate them socially*

**Survey data  
(declarative /  
questionnaire)**

*Purposeful sampling  
of interviewees*

> Renisio et al.. (2024) Integrating digital traces into mixed methods designs: An application to the study of online music listening using survey, interview and stream history data collected from the same people. Under review ([ha1-04448365](https://doi.org/10.1016/j.chaos.2024.114483))

## Illustration (2/2)



**Streaming data  
(observed / logs)**

*Comparing respondents  
and non-respondents*

*Qualifying digital practices  
and situate them socially*

**Survey data  
(declarative /  
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# **Second study //**

# **Unveiling social desirability scales**

> Thomas Louail and Yann Renisio, Unveiling social desirability scales by comparing individuals' responses to an online survey with their streaming history data.*In preparation.*

# Motivation (1/2)

## Build on the gap between practice and declaration of practice

- Digital traces are sometimes presented as able to replace survey data (on the long run), because considered a better proxy for actual practice than the declarations and self-reports collected in surveys often sought to capture  
(Parry et al. 2021)
- When the two sources are available and used together, it is often to 'improve'/enrich one with the other (Stier et al. 2019)
  - correct social desirability biases in survey data
  - reduce noise in observational digital traces
- Our approach: rather than 'triangulating', we want to use the measure of discrepancies to build new indicators to compare measurement categories
  - compare discrepancies for different categories of content
  - highlight social norms related to these categories
- Two well-known cases of social desirability biases:  
Body Mass Index; Voter abstention

## Motivation (2/2)

### Application to music listening and preferences

- The case of music consumption makes it possible to elaborate on the numerous studies that have highlighted the statistical affinity between the music preferences declared by respondents and their social positions, e.g. (Coulangeon 2003) for France ; (Peterson & Kern 1996) for the US ; (Chan & Goldthorpe 2007) for the UK
- In particular it has been long documented that:
  - *Classical music* is more often declared to be listened to by the upper classes;
  - *Rap*, on the contrary, is more often listened to by the working classes;
  - *Jazz* and *Metal* are somewhat intermediary between these two genres: C > J > M > R
- Would we retrieve this order if we compared the genres according to how much they are over-/under-declared when compared to how much they are streamed?

# Survey snapshots (1/3) : Asking users' explicit consent



Français

Veuillez répondre à cette question.

J'accepte que mes réponses à ce questionnaire soient exploitées par l'équipe du programme RECORDS piloté par le CNRS (<https://records.huma-num.fr>)

Oui

Non





# Survey snapshots (2/3) : Asking about listening habits and music genres



Français

Quels genres musicaux écoutez-vous ? (Plusieurs réponses possibles)

Musique Latino	Jazz	Rap français
Musique de Film	Blues	Reggae
<b>K-pop</b>	Musiques Arabes	<b>Dance &amp; EDM</b>
Musiques Asiatiques	Rock	Variété française
<b>Musiques Africaines</b>	Indé / Alternatif	Folk & Acoustique
Musique Classique	Electro	Hip Hop / Rap
Musique Brésilienne	<b>RnB</b>	Country
Soul / Funk	Métal	<b>Pop</b>

12:29

(Plusieurs réponses possibles)

Musique Latino	Jazz	Rap français
Musique de Film	Blues	Reggae
<b>K-pop</b>	Musiques Arabes	<b>Dance &amp; EDM</b>
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Musique Brésilienne	<b>RnB</b>	Country
Soul / Funk	Métal	<b>Pop</b>

← →

Produit par Qualtrics



# Survey snapshots (3/3) :

## Asking about listening habits and music genres



English - United Kingdom ▾

Are there any of these genres that you never listen to on Deezer?

Rap

Soul & Funk

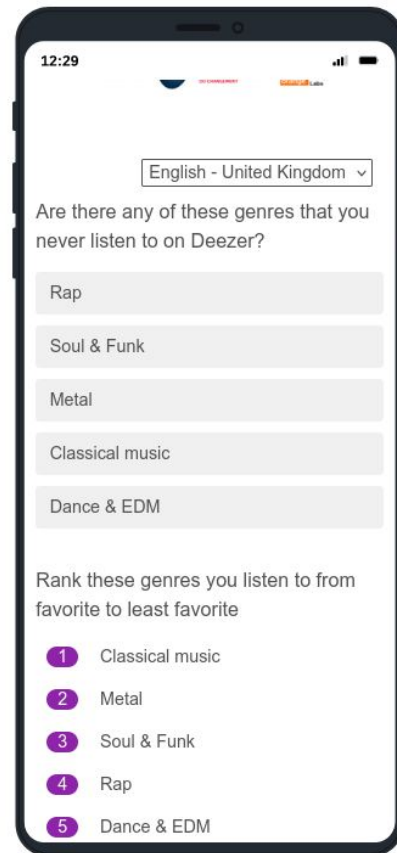
Metal

Classical music

Dance & EDM

Rank these genres you listen to from favorite to least favorite

- 1 Classical music
- 2 Metal
- 3 Soul & Funk
- 4 Rap
- 5 Dance & EDM

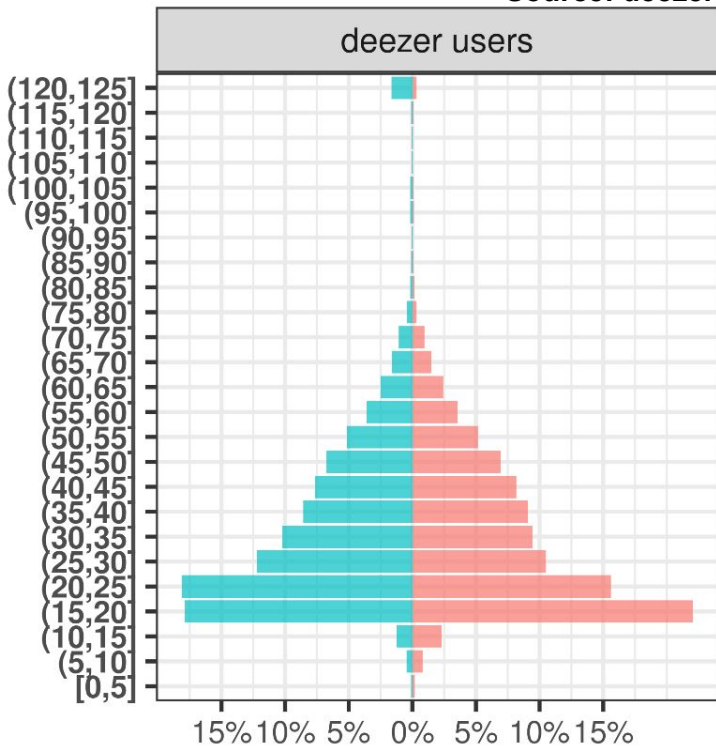


# **The population of survey respondents**

**Iteration n°2 // January 2021  
30k users of Deezer located in France  
email invitation to take the survey  
no incentive  
N=1.4k respondents (~4%)**

# Demographics of a (bad) sample

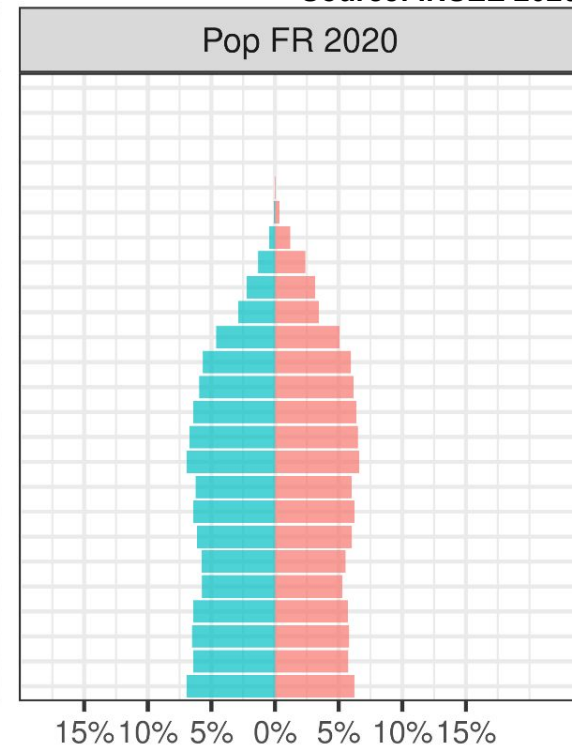
Source: deezer



Source: Enquête projet RECORDS

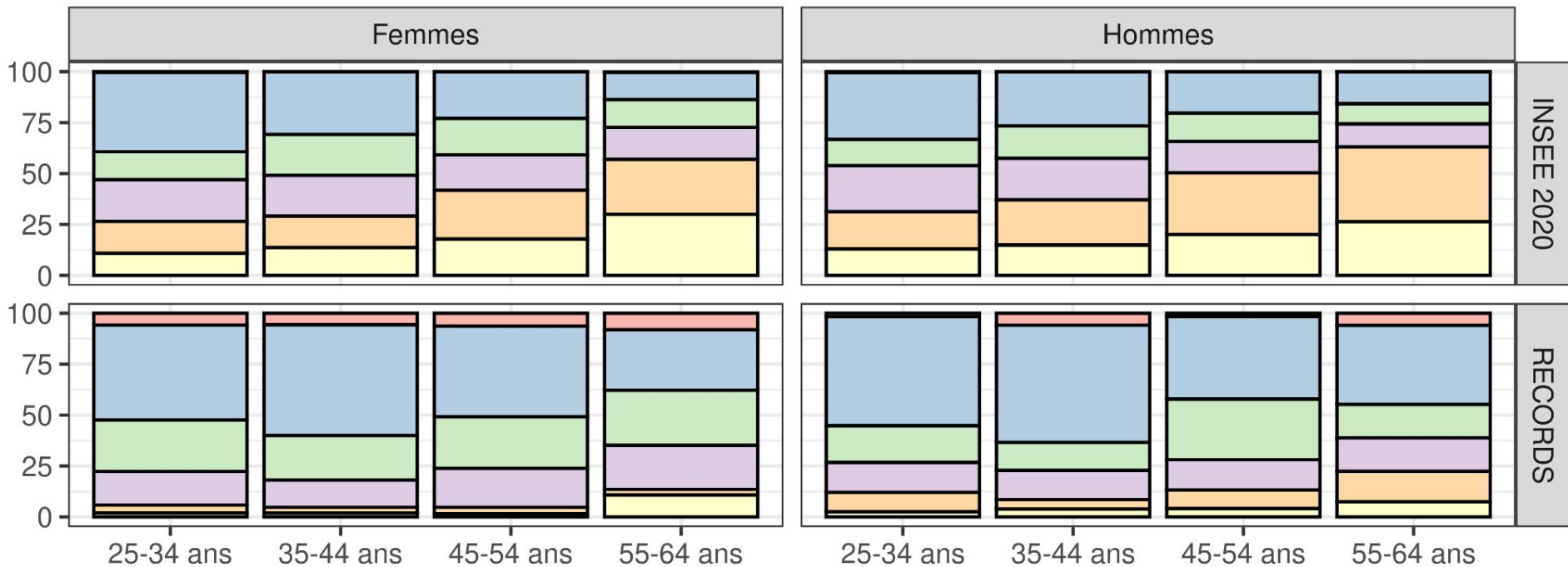


Source: INSEE 2020

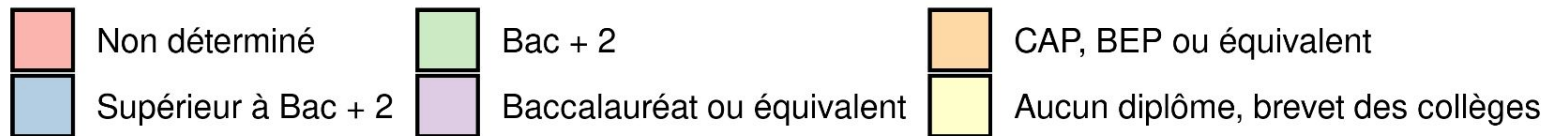


Femmes Homes

# Highest qualification level (highest diploma obtained)



Source: Enquête projet RECORDS  
Vague 2



# Methods

1. Assign musical genres to the millions of tracks and artists streamed by the survey respondents
2. Systematically compare the weight of these genres in the individuals' streams with the listening habits they reported in the survey, and rank
3. Rank musical genres based on the intra-individual deviations between reported listening habits and actual streams
4. Apply the same method to artist preferences

# Methods

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# Tracks, artists and genres (1/2)

People listen to songs/music pieces and artists, whose qualification by one or more genre labels (rock, jazz, rap, etc.) is debatable

> Genres are problematic and ill-defined categories

- \* no consensus on a definition (Robette & Roueff 2014)
- \* they aggregate very different products (Nault et al. 2021)
- \* their boundaries evolve over time (Levine, 1988)

=> more formally, there's no unique and well-defined function

$F: t \rightarrow g$

that would associate a finite number of genre labels  $g$  to each track (or artist)  $t$

BUT almost the entire scientific literature in sociology of music preferences is written at the level of music genres...

Highbrow: classical and jazz

Middlebrow: rock

Lowbrow: dance and rap

→ There exists a very large number of reasonable choices for the labeling function  $F$





# Tracks, artists and genres (2/2)

Over the past 12 months prior to the survey, for the 16k respondents to the 3rd iteration of the survey :

313k distinct artists streamed at least once

3M unique tracks

=> Manual labeling is out of reach

Different systematic approaches to labeling:

- from online collaborative databases (e.g. musicbrainz, wikidata)
- from the content of user playlists named after a music genre
- from the content of editorial playlists named after a music genre
- from the programming of French radio stations dedicated to a given music genre (France Musiques, Radio Classique, TSF Jazz, etc.)
- ...

In the following, to simplify we reduce a music genre to a set of artists whose tracks are often associated with this genre in playlists curated by professional editors (employed by the streaming platform)

Assumption: a strong result on possible deviations between genres, in how people declare and/or listen to them, should hold whatever the procedure chosen for assigning genre labels to musical items

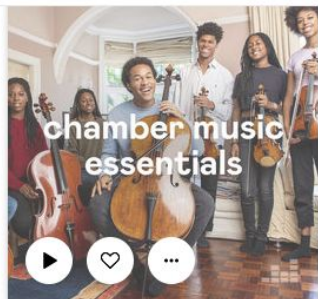


# An expert-based and statistical approach

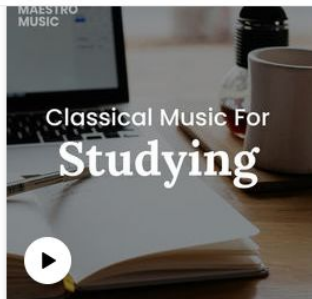
We rely upon the **editorial playlists** proposed by the platform that are named after a music genre



Emotional orchestral music  
33 titres



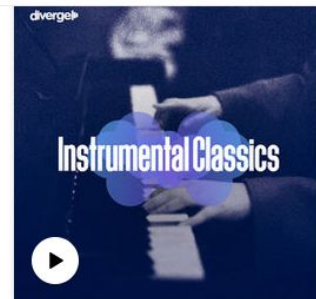
Chamber Music Essentials  
50 titres



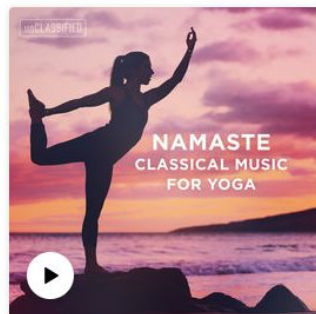
Classical Music For Studying  
451 titres



Le meilleur du classique - Best of classical music  
133 titres



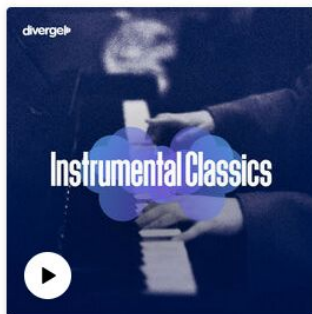
Classics - Classical Music - Music to Study By - Concentration - Música  
79 titres



Namaste: Classical Music for Yoga & Meditation  
74 titres



Film Music for Reading - Classical Music Reading  
134 titres



Classical Music - Music to Study By - Concentration  
69 titres



Focus: Classical  
47 titres



Classical Music: The 50 Greatest Tracks  
50 titres

# An expert-based and statistical approach

We rely upon the **editorial playlists** proposed by the platform that are named after a music genre

The screenshot shows the Deezer interface with a search for 'rap'. The left sidebar contains navigation options: Musique, Podcasts, Radios, Parcourir, Favoris, Coups de cœur, Playlists, Albums, Artistes, and Podcasts. A blue button labeled 'S'ABONNER' is visible. The main content area displays a grid of 15 editorial playlists, each with a cover image, title, and number of tracks:

- actu rap (50 titres)
- rapstars (50 titres)
- carré vip (50 titres)
- certifié (50 titres)
- rap marseille (40 titres)
- soirée afro (50 titres)
- les hits afro (50 titres)
- carré vip 10 (50 titres)
- rapstars 10 (50 titres)
- rap bangers (50 titres)
- rap motivation (50 titres)
- les hits de la rue (50 titres)
- les hits rnb (50 titres)
- chicha lounge (50 titres)
- 90s rap (50 titres)

At the bottom, a music player shows 'Calm Down - Rema' with playback controls and a volume icon.

# An expert-based and statistical approach

We rely upon the **editorial playlists** proposed by the platform that are named after a music genre



**Rap Motivation**  
Narjes - Deezer Rap France  
Le top du rap pour s'entraîner en musique.  
50 titres - 2 h 42 min - 117 178 fans - Mise à jour : il y a 7 heures

ÉCOUTER

Rechercher parmi les titres

TITRE	ARTISTE
TDB	Oboy
Blanche	Maes, Booba
À la fête	UZI
Méchant	Niska, Ninho
Daddy chocolat	Koba LaD, Gazo
Dyala	Maes, Jul
Pic et pic, alcool et drame	Jul
WS	Ninho
Fixette (Bonus)	Ziak
6.3	Naps, Ninho

ALBUM	AJOUTÉ	POP.
TDB	20/07/2021	02:34
Les derniers salopards	30/01/2020	03:13
À la fête	25/10/2021	03:24
Mr Sal	19/02/2020	03:11
Cartel : volume 1	20/07/2021	03:11
Les derniers salopards	11/11/2021	03:31




**Women of Rap**  
Ayoub - Deezer Rap Editor  
Hommage à ces femmes qui ont marqué l'histoire du hip-hop.  
44 titres - 2 h 04 min - 37 629 fans - Mise à jour : il y a 14 minutes

ÉCOUTER

Rechercher parmi les titres

TITRE	ARTISTE	ALBUM	AJOUTÉ	POP.
Plan B	Megan Thee Stallion	Plan B	22/04/2022	02:43
Mountains	Col Leraf, Fivio Foreign, Young	The Setter	08/04/2022	02:48
In The Party	Flo Milli	In The Party	02/03/2021	02:17
Streets	Doja Cat	Hot Pink	18/03/2021	03:46
Big Energy	Latto	Big Energy	14/04/2022	02:53
SKATE	BIA	SKATE	02/03/2021	02:43
Blick Blick	Col Leraf, Nicki Minaj	Blick Blick	18/03/2022	02:58



**Actu Rap**  
Narjes - Deezer Rap France  
Chaque semaine, les dernières nouveautés du rap français. Cover : Laylow & Isha.  
50 titres - 2 h 30 min - 463 179 fans - Mise à jour : il y a 11 heures

ÉCOUTER

Rechercher parmi les titres

TITRE	ARTISTE	ALBUM	AJOUTÉ	POP.
Chicha Ski Nautique	Walk in Paris, ISHA, Laylow	Walk Tape Vol. 01	Aujourd'hui	02:57
BEEP BIP	Larry	BEEP BIP	Aujourd'hui	03:14
Vamos	Naps, Gazo	La TN (Team Naps)	Aujourd'hui	04:01
4 juin 2022	Jul, Team Jul	4 juin 2022	Aujourd'hui	03:09
Booska 91	91 All Stars, Mig, Gambino La M...	Booska 91	Aujourd'hui	03:22
Champaane	Gueule d'Ange, Leto	Champaane	Aujourd'hui	02:20
jeanjass	Doudoune en été	Doudoune en été	Aujourd'hui	02:50
rad cartier, Lazuli, Lala &c	EXTENSION DU TERRITOIRE [1.0]	EXTENSION DU TERRITOIRE [1.0]	Aujourd'hui	03:06
Beendo Z, La Fève	Élu	Élu	Aujourd'hui	02:59
ThuleGo	Calle	Calle	Aujourd'hui	03:03

# Consistency of the lists of artists per genre

- 80% of artists are tagged, representing ~91% of respondents' streams in the last 12 months
- The most frequently featured artists in these editorial playlists named after a genre are easily identifiable as popular artists of that genre →

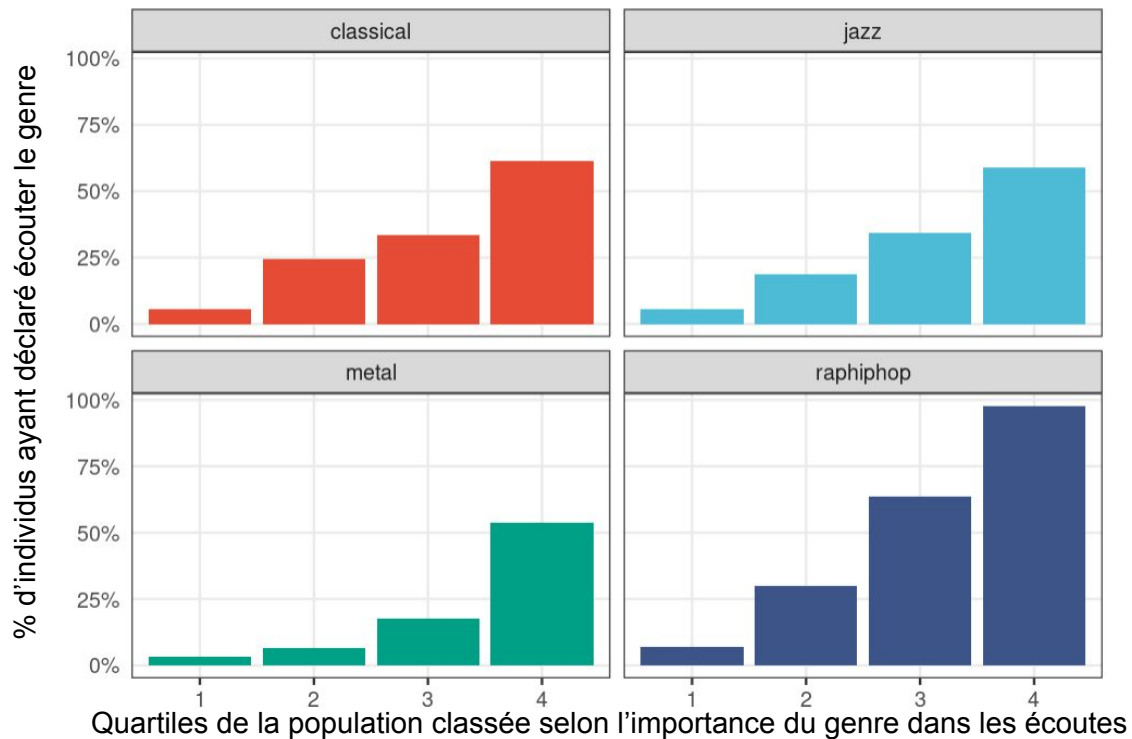
rank	classical	jazz	metal	raphiphop
1	Lang Lang	Ella Fitzgerald	Metallica	Drake
2	Berliner Philharmoniker	Miles Davis	Iron Maiden	Eminem
3	Daniel Barenboim	Louis Armstrong	Megadeth	Kanye West
4	London Symphony Orchestra	Nina Simone	Slipknot	Travis Scott
5	Max Richter	John Coltrane	Judas Priest	Post Malone
6	Ludovico Einaudi	Stan Getz	Black Sabbath	Dr. Dre
7	Wiener Philharmoniker	Herbie Hancock	Slayer	Snoop Dogg
8	KHATIA BUNIATISHVILI	Diana Krall	Pantera	Future
9	Martha Argerich	Billie Holiday	Sepultura	50 Cent
10	Alexandre Tharaud	Frank Sinatra	KoЯn	Lil Wayne
11	Yann Tiersen	Chet Baker	Motörhead	Migos
12	Yo-Yo Ma	Norah Jones	Disturbed	Kendrick Lamar
13	John Williams	Bill Evans	Ozzy Osbourne	Jay-Z
14	Joep Beving	Duke Ellington	System of a Down	Nas
15	Riccardo Muti	Nat King Cole	Accept	DJ Khaled
16	Alice Sara Ott	Sarah Vaughan	Helloween	J. Cole
17	Anne-Sophie Mutter	Gregory Porter	Arch Enemy	2Pac
18	Dustin O'Halloran	Ray Charles	Anthrax	Booba
19	Hans Zimmer	Tony Bennett	Nightwish	XXXTentacion
20	Hélène Grimaud	Sonny Rollins	Scorpions	Chris Brown

# Methods

1. Assign musical genres to the millions of tracks and artists streamed by the survey respondents
2. Systematically compare the weight of these genres in the individuals' streams with the listening habits they reported in the survey
3. Rank musical genres based on the intra-individual deviations between reported listening habits and actual streams
4. Apply the same method to artist preferences

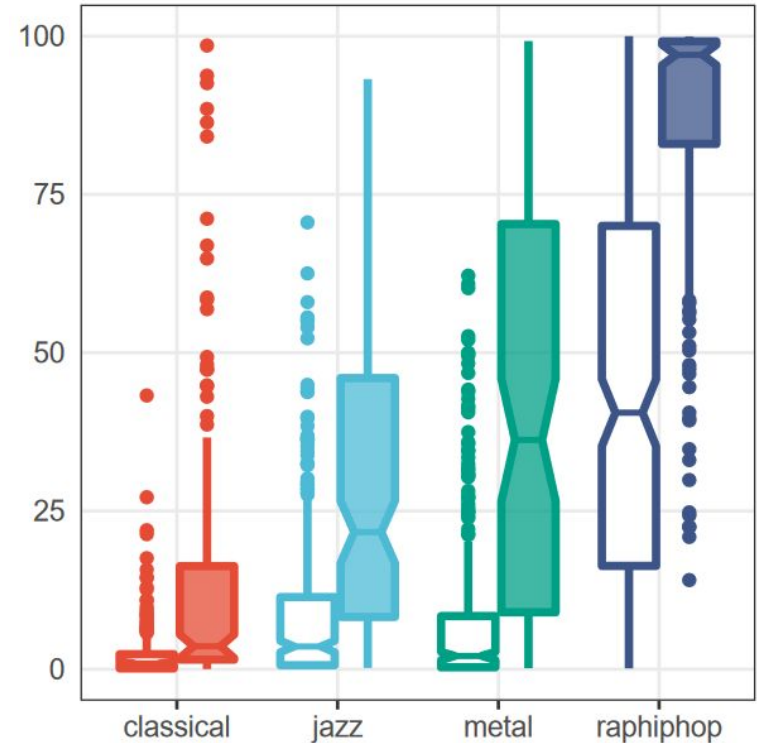
# The more respondents stream a given music genre, the more they declare to listen to that genre

- This holds whatever the music genre considered



# And individuals who claim to listen to a genre listen to it more than those who claim not to listen to it

- It is true regardless of the music genre





# Measuring intra-individual discrepancies

We define in a non-ambiguous way an inconsistent statement:

If individual  $i$  declares listening to genre  $G$  and not genre  $G'$ , there is inconsistency if this individual listens to more  $G'$  than  $G$

Additionally, the intensity of this difference is obtained by the ratio of the times he/she spent streaming the two genres:  $t(G)/t(G')$

For example, an individual who claims not to listen to classical music and to listen to rap will be considered inconsistent if he listens to more classical music than rap.

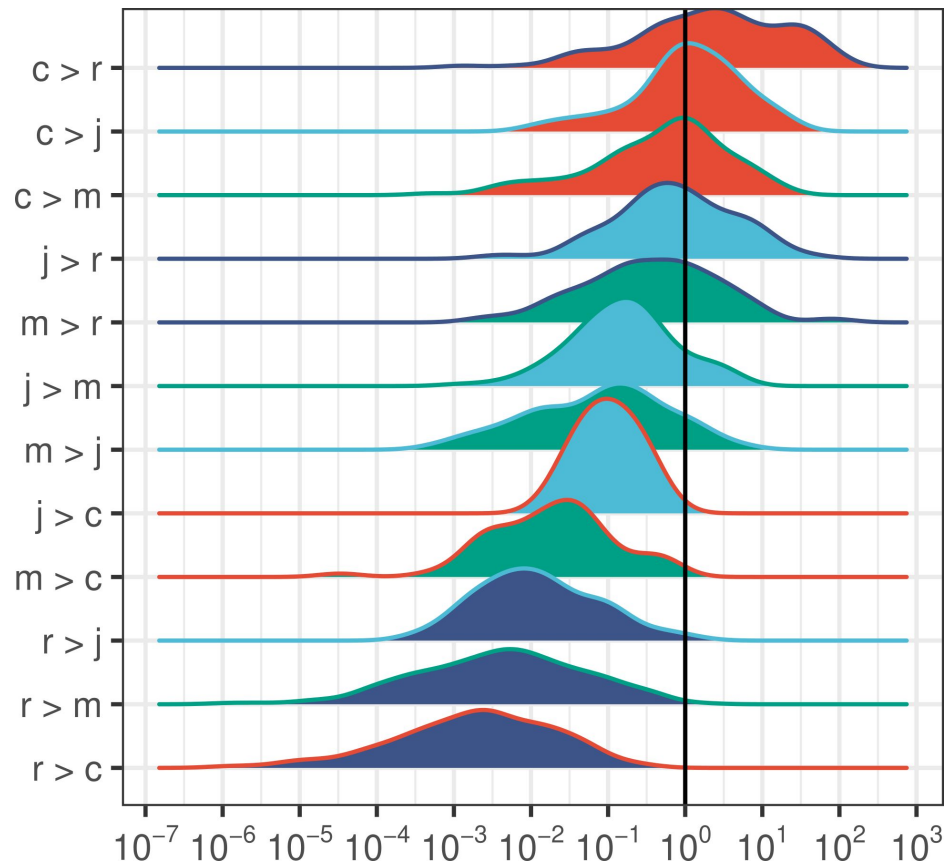
If he has listened to 3 hours of classical music and 1 hour of rap, the intensity of this difference will be  $3/1$

# The unequal social desirability of musical genres

However, we observe rather the opposite: the majority of respondents who declare listening to classical music and not rap, listen to less classical music than rap

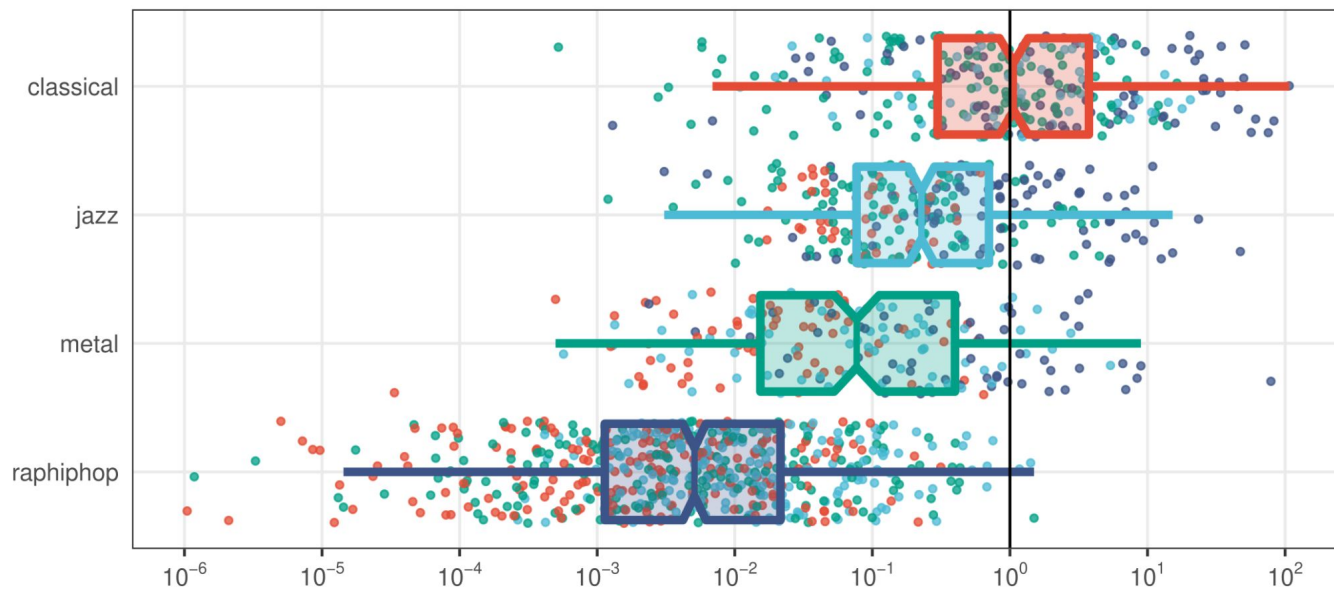
Conversely, almost all individuals declaring to listen to rap and not classical music have a streaming practice that align with their declaration

A gradation can thus be observed between the pairs of genres.



# The unequal social desirability of musical genres

By aggregating these results, we retrieve a ranking of genres often discussed in the literature, but based solely on the discrepancies between survey responses and digital traces (rather than on the social properties of respondents).



# Methods

1. Assign musical genres to the millions of tracks and artists streamed by the survey respondents
2. Systematically compare the weight of these genres in the individuals' streams with the listening habits they reported in the survey
3. Rank musical genres based on the intra-individual deviations between reported listening habits and actual streams
4. Apply the same method to artist preferences

# Excerpt of the online survey

B4. Quels genres musicaux écoutez-vous ? (Plusieurs réponses)

- Rap français
- Pop
- Rock
- Electro
- Jazz
- RnB
- Soul / Funk
- Hip Hop / Rap

- Variété française
- Musique Classique
- Reggae
- Métal
- Indé / Altern
- Musique de
- Folk & Acou
- Musique Lat

B5-variété. Que pensez-vous des artistes de variété française suivants ?

	je déteste	je n'aime pas	je ne connais pas	pas d'avis	j'aime	j'aime beaucoup
Georges Brassens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Jean-Jacques Goldman	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Michel Sardou	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renaud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Calogero	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Céline Dion	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Johnny Hallyday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

B5-rock. Que pensez-vous des artistes de Rock suivants ?

	je déteste	je n'aime pas	je ne connais pas	pas d'avis	j'aime	j'aime beaucoup
U2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Metallica	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Imagine Dragons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Oasis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
The Beatles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Led Zeppelin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Luke Carlson	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiohead	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Queen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
AC/DC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Twenty One Pilots	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
The Clash	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PJ Harvey	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Téléphone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

# Artist overstatements and social desirability

To extend this principle on better defined 'objects', we tested the same hypothesis on artists. For each respondent, and for each pair of artists in the survey questionnaire, we hypothesized that if the respondent (implicitly) declared preferring A to B, he/she should listen to A more than B.









We then aggregate the results by artist to calculate an artist's overstatement rate.

In parallel, for each artist in the questionnaire, we extract from [rateyourmusic.com](http://rateyourmusic.com) the ratings given by the website's contributors to the artist's albums, and calculate the average rating (weighted by the number of reviews) as a proxy for recognition.

!! Number of reviews varies greatly from one artist to another

Que pensez-vous des artistes de variété française suivants ?

	je n'aime pas	pas d'avis	j'aime
Céline Dion	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Indochine	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serge Gainsbourg	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Julien Doré	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Alain Bashung	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Georges Brassens	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Henri Salvador	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Jacques Brel	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Christophe Maé	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Album		Showing all (25)	Reviews	Ratings	Average
Title / Release Date					
	Dans ma paranoïa 2014		48		2.09
	Lacrizeomic 2014		21		2.45
	Je trouve pas le sommeil 2014		22		2.61
	Jul 2015		11		2.98
	Je tourne en rond 2015		26		2.42
	My World 2015		62		2.44
	Album gratuit 2016		14		2.95
	Émotions 2016		35		2.50

# Hypothesis

The more an artist has good reviews, the more likely she/he will be declared as more appreciated than another artist, yet listened to more.





# Still needs to be done

- Reproduce analyses using other genre labeling functions
- Does the propensity to conform to the norm vary significantly between social groups (gender, generation, socio-professional category, etc.)?
- Use different rating databases given to albums and (aggregated to artists) by both specialized media and internet users
- Reproduce calculations on RECORDS' 3rd iteration data
  - more volume (16k respondents)
  - better encoding of the socioeconomic status and educational attainment
  - filter listeners who declare listening to a music genre exclusively outside of Deezer (often heard: “people do not stream classical music, they listen to it on CDs with hifi material”)
  - additional questions relative to genre appreciation and ordering
- Reproduce the analysis for users/respondents from different countries where Deezer is a big player in the market (Germany, UK and other EU countries)

# Summary and outlook

- First exploration confirm the **value of working on the discrepancies between survey responses and digital traces to characterize social desirability scales**
- Research protocol requires collaboration with an internet platform willing to survey its users
  - + when these users give their consent, willing to provide access to their individual digital traces
- Compared to other approaches — API ; data donation ; have users install apps that log their phone usage and web browsing – cf. F. Keusch (2024) Quality of Digital Behavioral Data. *FORS-SSP Methods & Research Meeting*
  - behavioral data recorded in natural conditions
  - very long time periods (several years for users who registered to the service long ago)
- The approach could be replicated to measure other kinds of digital consumption in streaming (e.g. movies and TV shows), and more generally any ordinary practice interfaced by digital platforms (eg. online shopping, book medical appointments, online dating, news consumption)
- Work needed to identify a proper level of aggregation of the personal data prior to their release, to guarantee privacy/anonymity of respondents
- Potential collaboration with FORS on the upcoming 4th iteration of the data collection
  - improve survey and data quality
  - experiments in survey methodology

# Thank you!



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