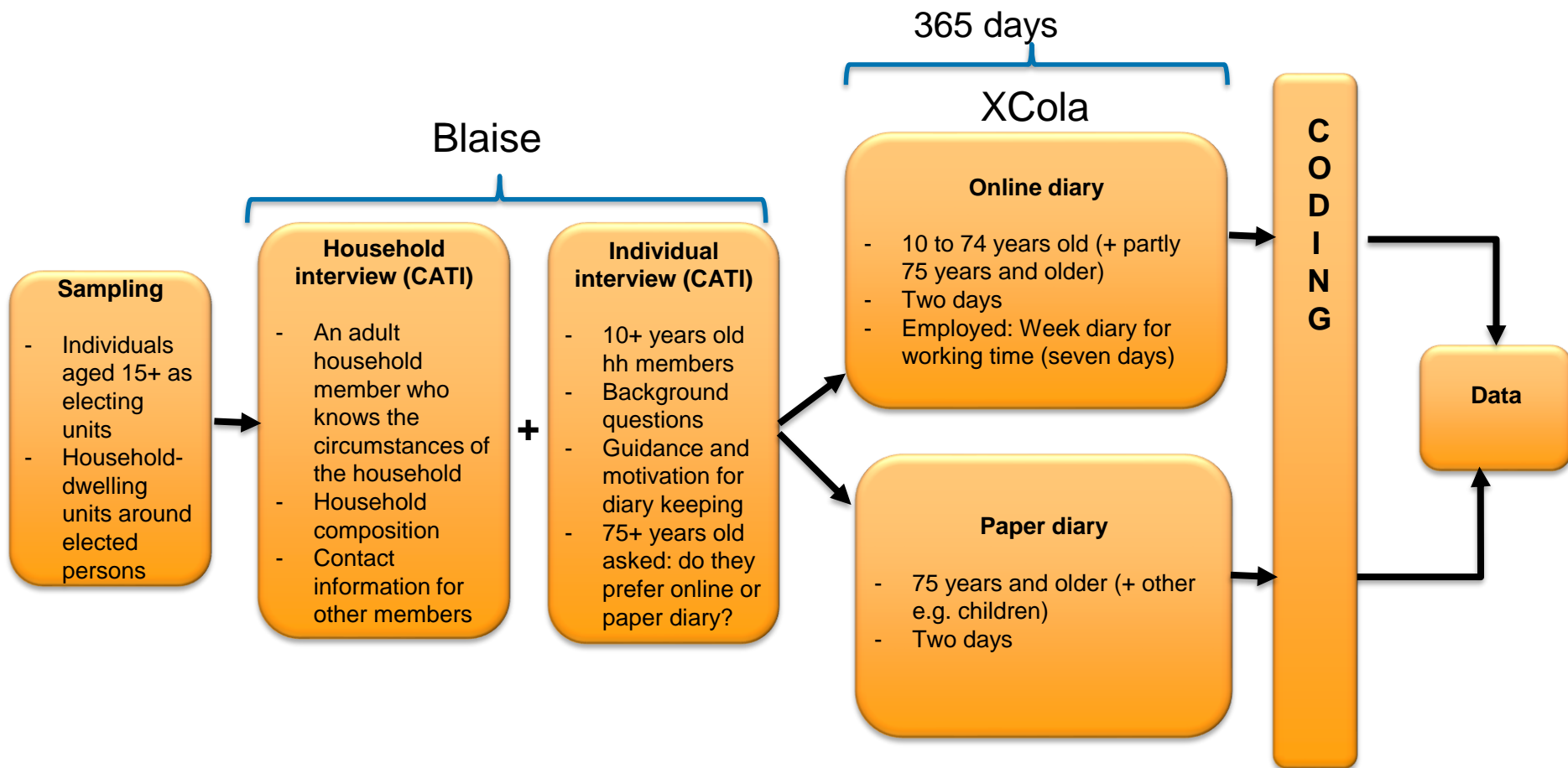# XCola Online Diary

Hannu Pääkkönen, Senior Researcher, PhD

Session 5: update on ongoing efforts to modernize time-use data collections (Finland) 22 May 2019

Finnish Time Use Survey 2020: Data Collection Process

365 days

Blaise

XCola

Sampling

- Individuals aged 15+ as electing units
- Household-dwelling units around elected persons

Household interview (CATI)

- An adult household member who knows the circumstances of the household
- Household composition
- Contact information for other members

+

Individual interview (CATI)

- 10+ years old hh members
- Background questions
- Guidance and motivation for diary keeping
- 75+ years old asked: do they prefer online or paper diary?

Online diary

- 10 to 74 years old (+ partly 75 years and older)
- Two days
- Employed: Week diary for working time (seven days)

Paper diary

- 75 years and older (+ other e.g. children)
- Two days

CODING

Data

30 March 2020 to 29 March 2021

Statistics Finland

XCola (XML based Collection Application)

- A scalable web application used for business surveys
- Developed at Statistics Finland
- Main functions:
  - A flexible web survey platform
  - Offers basic form functionality (validations, paradata etc.) with ability to fully customize the UI of the survey
  - HTML, CSS, JavaScript
  - XCola is only a web form engine tool so to setting up a survey there is need for external login system and data transfer system
  - XCola output is a user data file in XML format that can be transferred in to the SQL-database.
  - User data contains user inputs and paradata.
  - TUS: Online diary, CATI interviews with Blaise software
  - No separate mobile app

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How respondents will be approached?

- Advance letters to selected households by mail
- Household interviews, individual interviews by telephone
- Guidance and motivation for diary keeping
- E-mail addresses / phone numbers of the members of the household
- Direct personified link via e-mail or SMS message
- If employed => week diary available
- If living alone: no with other household member check boxes
- Reminder SMS message: direct link included

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How data are inserted?

- "Full diary": respondents fill in the diary in their own words
- Activities will be coded afterwards
- First respondent chooses starting and ending times for an episode
- 10-minute intervals
- *"What were you doing?"*
- *" I used a computer or smart device for doing this"* (check box)
- *"What else were you doing?"*
- *"I used a computer or smart device for doing this?"* (check box)
- *"With whom?"* (check box)
- *"How did you experience the time?"* (smileys, 5-point scale)
- Location will be determined in the coding phase

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XCola Online Diary: Prototype

How data are retrieved?

- The whole data can be transferred in to the database on demand
- Data transfer could be automated, if needed
- Possible to examine the questionnaires in real time via XCola Management System

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Preliminary in-house user tests in March–April 2019

- 21 persons from Statistics Finland

- 3 children (10+ years)

- One weekday, one weekend day

- Guidance via Skype calls on previous Fridays

- All filled in the diaries

- Webropol link for feedback (11 answers)

- 12 respondents in follow-up usability tests after they had completed the diaries

- 6 respondents only feedback questionnaires (no interviews)

- Nearly all used several types of devices (computer, smart phone, tablet) => No mobile app!

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Feedback from the respondents

- **Pros**
- All liked the layout
- Easy to use
- All understood easily how the online diary functions
- Respondents were more motivated than on average!

- **Cons**
- Sometimes activities were grouped together: e.g. three activities during 30 minutes
- Save command was not always found
- Usability: could be made better
- With whom: respondents were not always sure if they understood the definition correctly

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Advantages of XCola

- Responsive UI with Statistics Finland's visual look
- Easy to integrate to data collection process
- Uniform tools with other Statistics Finland's data collections
- In-house development
- Flexible expandability to other data collections

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Advantages of online diary

- Easier to take with than a paper diary (mobile phone!)
- Filling in the diary does not draw attention from other people
- Most of the respondents filled in the diary several times during the day
- Data in electronic format

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Disadvantages/challenges

- Small screen: instructions
- Different devices: problems

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Cost estimate compared to the previous mode of data collection

- In-house development: savings
- Interviews are necessary: costs
- Coding costs
- No savings in total costs?

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Thank you!

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