XCola Online Diary

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Finnish Time Use Survey 2020: Data Collection Process

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

**Blaise**
- 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?

**XCola**
- **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**

30 March 2020 to 29 March 2021
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
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
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
XCola Online Diary: Prototype
How data are retrieved?

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

- Small screen: instructions
- Different devices: problems
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?
Thank you!

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