Using Paradata to Evaluate the Effect of Changes in the Small Screen Layout



Agenda

- Importance of mobile friendly surveys
- Presenting grid table questions on small screens
- Adjusting the small screen layout in the Quality of Life survey
- Using paradata to evaluate layout adjustment
- Conclusion
- Next steps



Small Screen Layout – why is it important?

- Majority of web responses are on mobile or tablet
- As high as 72% mobile responses in the Quality of life Survey 2022
- 96% of Norwegian population aged above 9 have access to a smartphone at home and 92% have access to a PC at home
- Mobile-first approach for new surveys and adapt long running surveys to be mobile-friendly

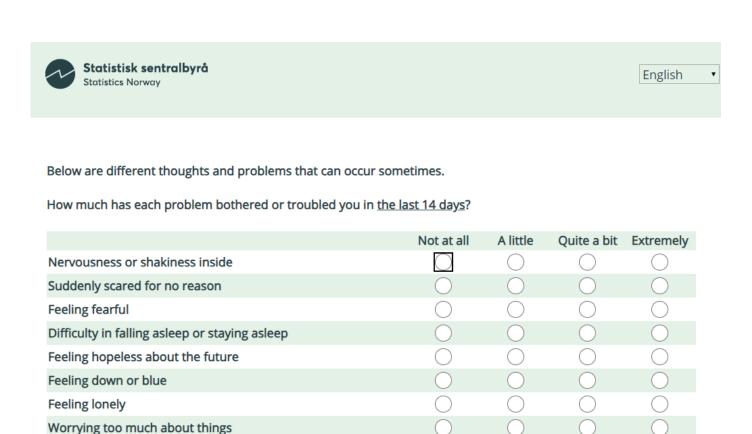


Presenting grid table questions on small screens

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Next

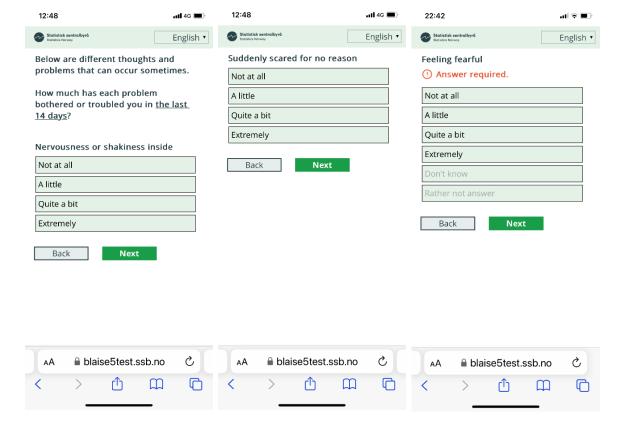
- Tables require scrolling
- Radio buttons too small on mobile
- Adjusted to Item-byitem on small screens with large buttons
- What is the best layout design?





Quality of Life Survey 2022

2022



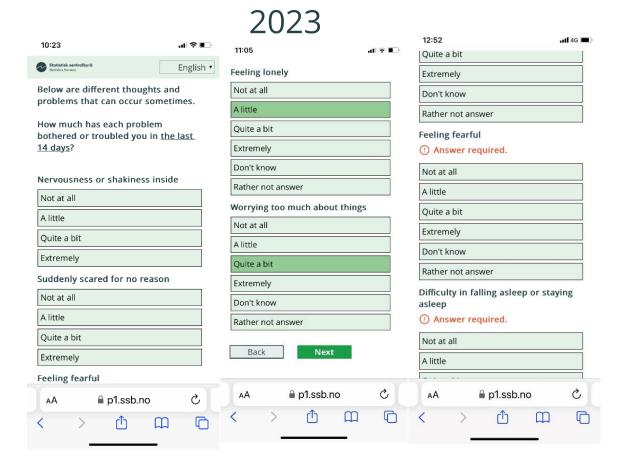
- Web survey with many grid tables
- Pagination design (one item per page)
- Respondents might forget the introductory group question text



Pagination versus Scrolling

12:48 22:42 English ▼ Statistisk sentralbyrå English 🔻 English ▼ Feeling fearful Suddenly scared for no reason Below are different thoughts and problems that can occur sometimes. (!) Answer required. Not at all How much has each problem Not at all A little bothered or troubled you in the last A little 14 days? Quite a bit Quite a bit Extremely Nervousness or shakiness inside Extremely Not at all Back Next A little Rather not answer Quite a bit Back Next Extremely Back Next S

2022





- Audit trail Data:
 - Small screen on Mobile
 - Previous Page
 - Response time
 - (Route) Error messages
 - Breakoff rate



- Audit trail Data:
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- Using paradata we find respondents on mobile that sees the small screen layout
- Filter out respondents using both PC and small screen



- Audit trail Data
 - Small screen on Mobile
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- Respondents might click
 previous page because they feel
 the need to see the introduction
 text again
- Differentiate between questions
- Change their response



- Audit trail Data
 - Small screen on Mobile
 - Previous Page
 - Response time
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- Response burden
- Experience issues
- Time to navigate the survey



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- Are respondents more likely to miss a question in the scrolling layout?
- Response is required,
 respondents receive route error
- Inadequate question formulation



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- Do respondents break off differently in compared layouts?
- May indicate high response burden



Results

From 2022 (pagination) to 2023 (scrolling) we saw:

- Average number of previous page clicks per respondent decreased
- Average number of route errors experience per respondent decreased
- Response time remained the same
- Lower share of respondents' experience route error at least once
- Lower breakoff rate

23
age P-value
*
*
Not significant
N
*
*

* p<0.001



Conclusions

- We saw the same pattern on questions where the layout remained the same between the years
- Cannot isolate if improvements on paradata indicators are due to the layout
- We need to do more research...



Next steps

- Randomized experiments
- Use the same paradata indicators
 - And develop more indicators
- Future research:
 - Other mobile alternatives for grid questions
 - Auto Forward / Auto Enter
 - Differentiate presentation of multiple-choice questions and single choice questions



Questions

