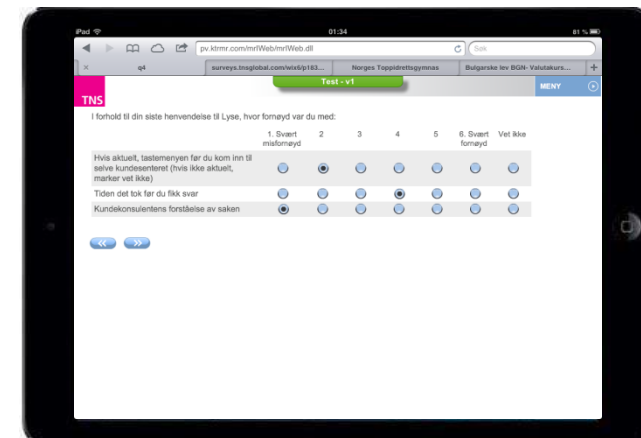
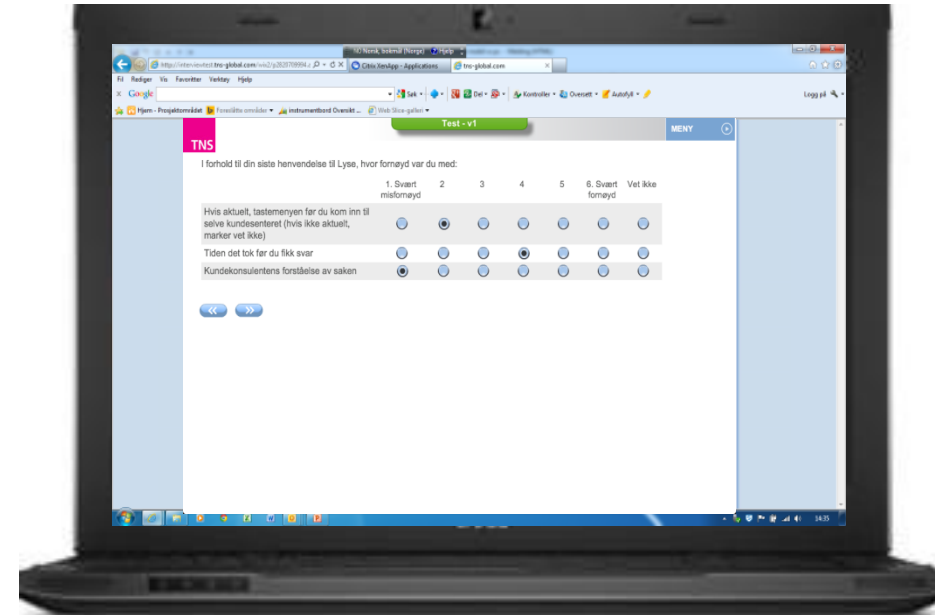


The Impact of Mobile Web Design on Survey Results

QDET2 Miami 2016

Trine Dale and Heidi Walsoe
11. November 2016

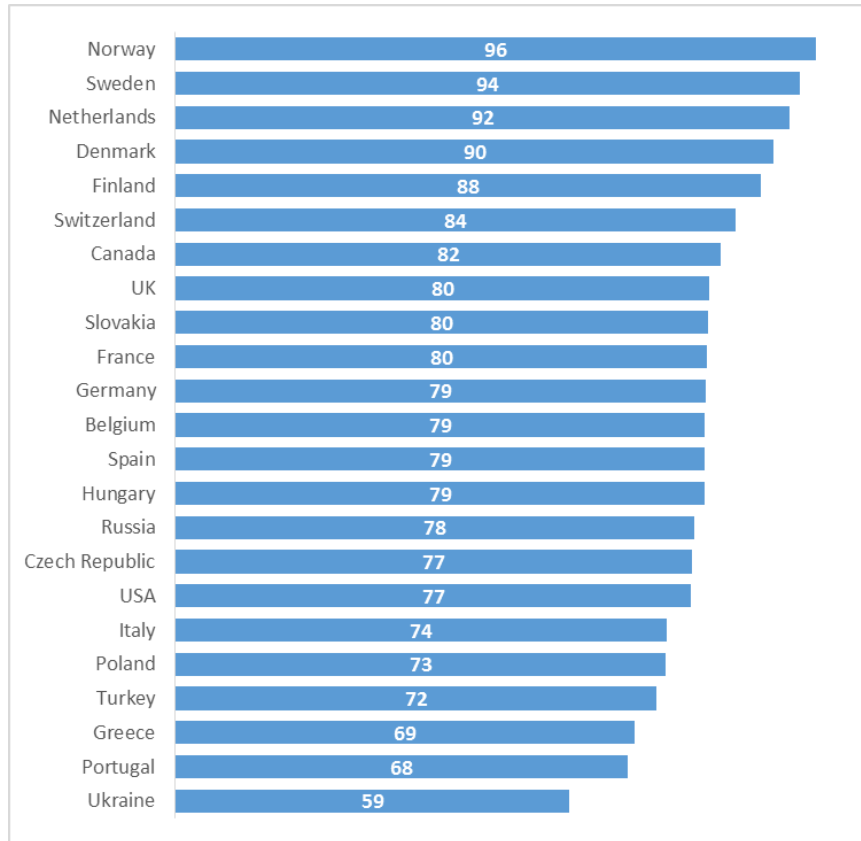


KANTAR TNS

Background

Norway is in Front on Internet Penetration and Use

Internet Penetration Europe & North America 2016



Sources: Connected Life 2015/2016/Consumer & Media 2015 for Norway

Access and Reach in Norway 2015



Sources: Interbus 2015/Consumer & Media 2015

Research Summary (I)

- Research on how smartphones and tablets affect data quality still in infancy (Link 2016)
- Research concludes that use of mobile devices to respond to surveys is growing (Callegaro 2019; Millar and Dillman 2012); de Bruijne and Wijnant 2014; Lugtig et al 2016)
- Use of mobile devices pose challenges on many levels (Couper 2016; de Bruijne and Wijnant 2013; Mavletova 2013; Mavletova and Cooper 2013; Wells et al 2013; Callegaro 2010; Bosnjak et al 2013)
- Problems partly caused by no common survey strategy for mobile devices (Callegaro 2010; Buskirk and Andres 2012)
- Mobile respondents are different from web respondents (Lugtig et al 2016)
- Agreement that mobile respondents must be taken into account when designing surveys (Couper 2010; Callegaro 2010)

Research Summary (II)

- Forcing respondents to use certain devices does not work (Vision Critical 2014 in Poynter et al 2014)
- Breakoff rates often linked to question quality, content and survey length (Peytchev 2009; Tourangeau et al 2013)
- Research not conclusive on use of non-substantial response alternatives, but most researchers recommend including them (Dillman et al 2014; Couper 2013)
- Most of the newest research shows that mobile adaption has positive effects on survey results. This supported by our own research and focus group reports.

Research Questions in Experiment

1. A mobile friendly design will perform better than a traditional web design, both in terms of response rates and in terms of the actual results.
2. The questionnaire where response is not required will have fewer breakoffs than the questionnaire with required response.
3. The questionnaires including a DK alternative will have fewer breakoffs than the questionnaire with no DK alternative, especially when response is required.

Methodology

The Experiment

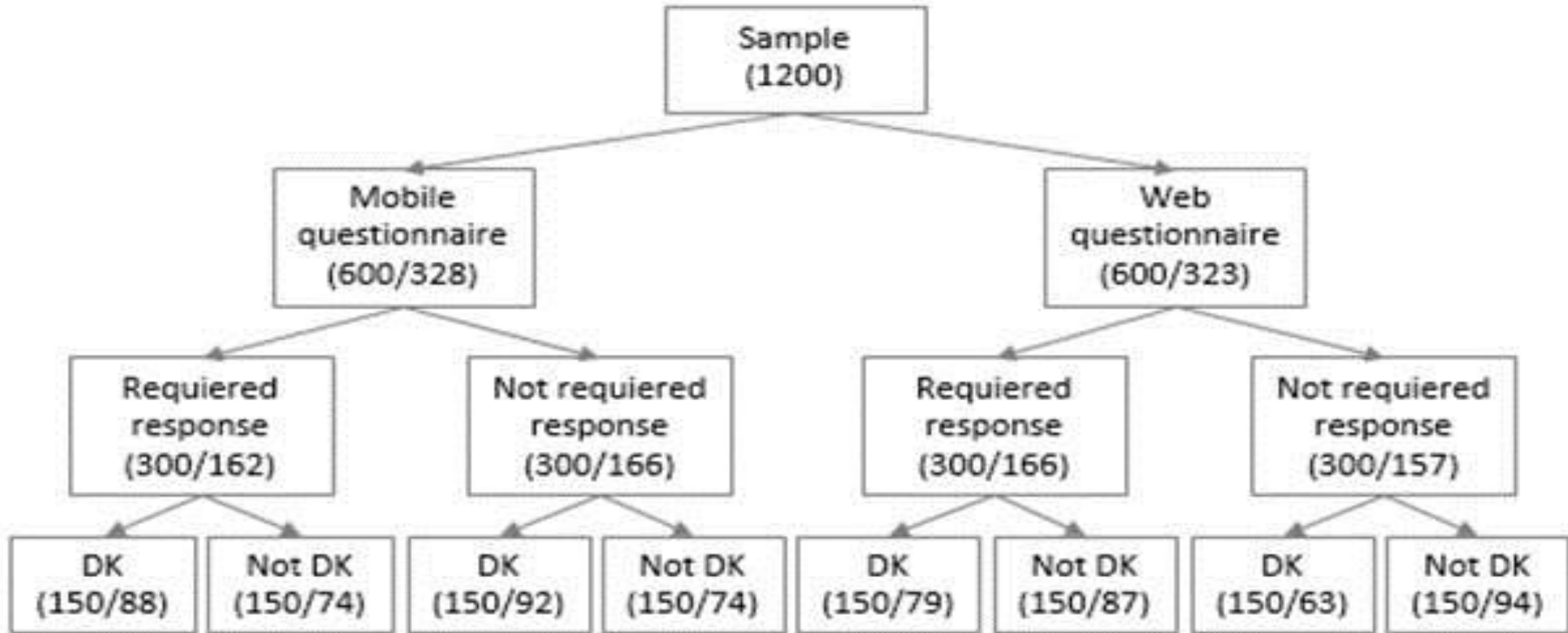
- Survey on Summer Holiday activities
- Target population: Norwegian Population 18+
- Sample base: GallupPanelet
- Invite by email, one reminder
- Field period: 7 days
- survey length: 5 minutes (23 questions)
- Random sampling, stratified by age, gender and geography
 - Gross sample: 1200
 - Net sample: 651
 - Responserate: 54%



26362:2009

Quality standard for
operations and
maintenance

Experiment Set-up: Sample Design and Questionnaire Distribution. (Gross/Net Samples)

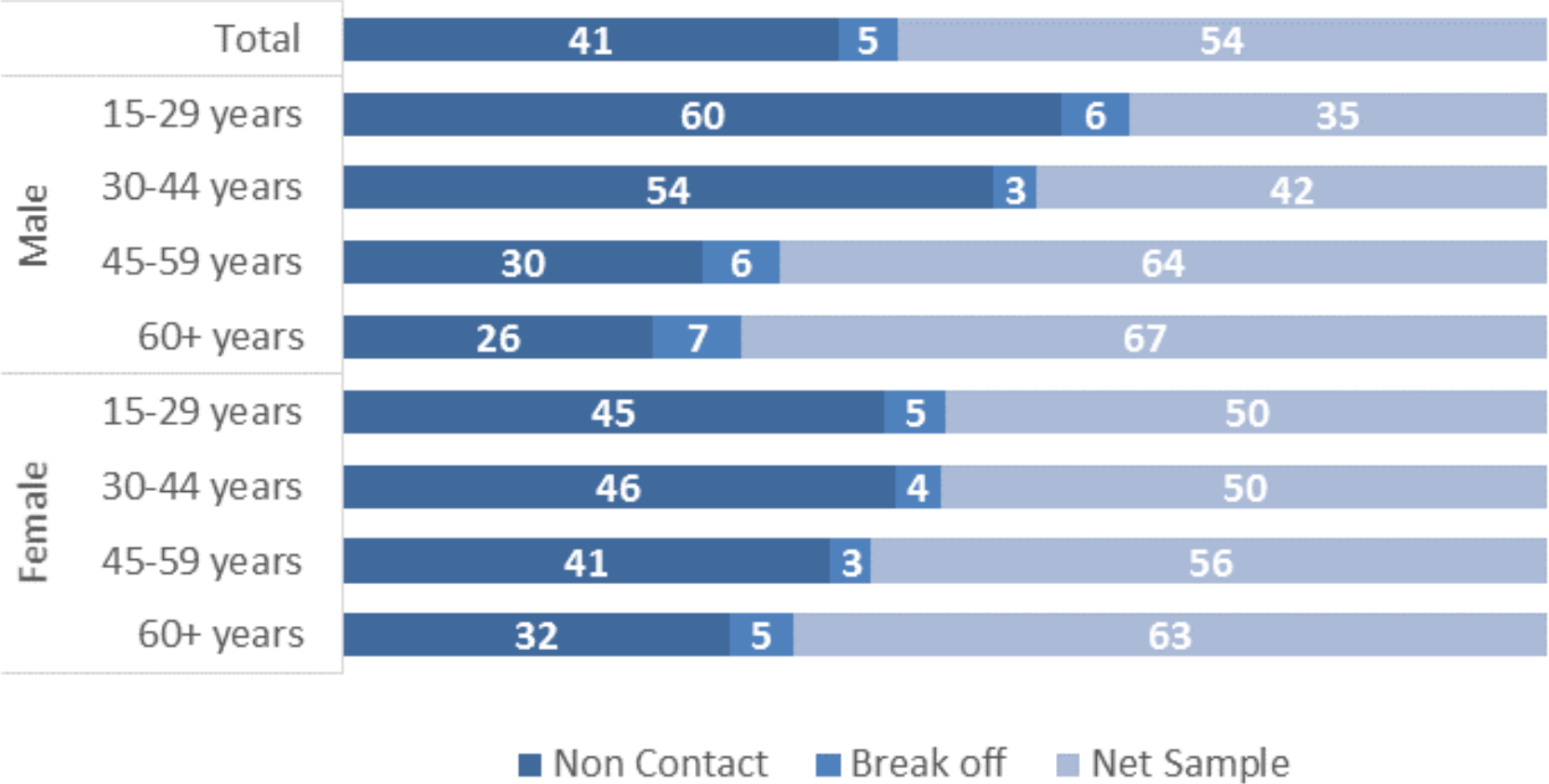


Design Limitations to Experiment

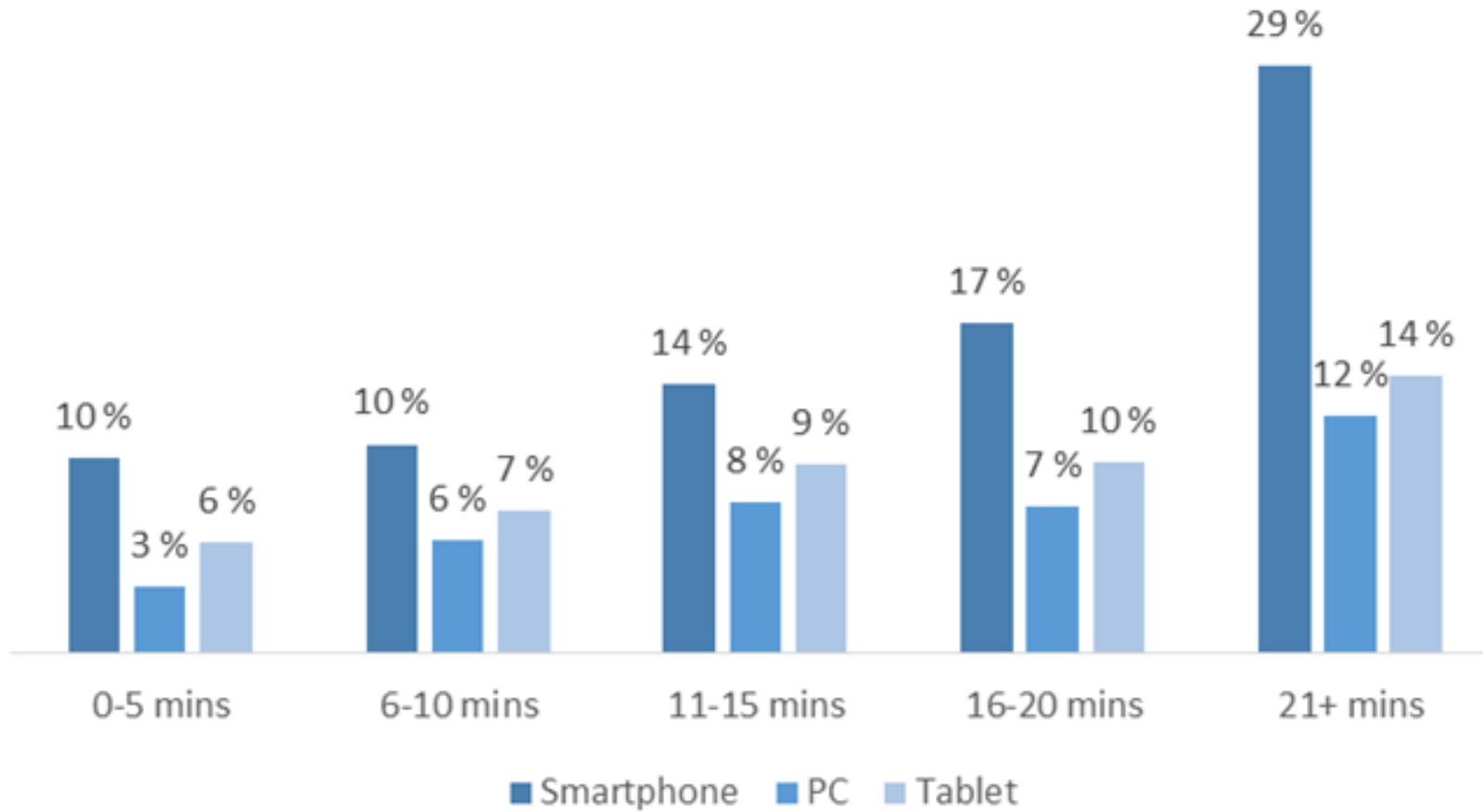
- Used TNS business solution called Conversion Model
- Implemented forced vs voluntary response + non-substantial response alternatives only on last 1/3 of survey (8 questions)
 - Probably impacted on results and value of testing H2 and H3
- High interest survey topic, short, well designed survey:
 - Respondents not likely to drop out after completing 2/3 of survey
- Due to limitations: Main focus on H1 – mobile vs web design

Results

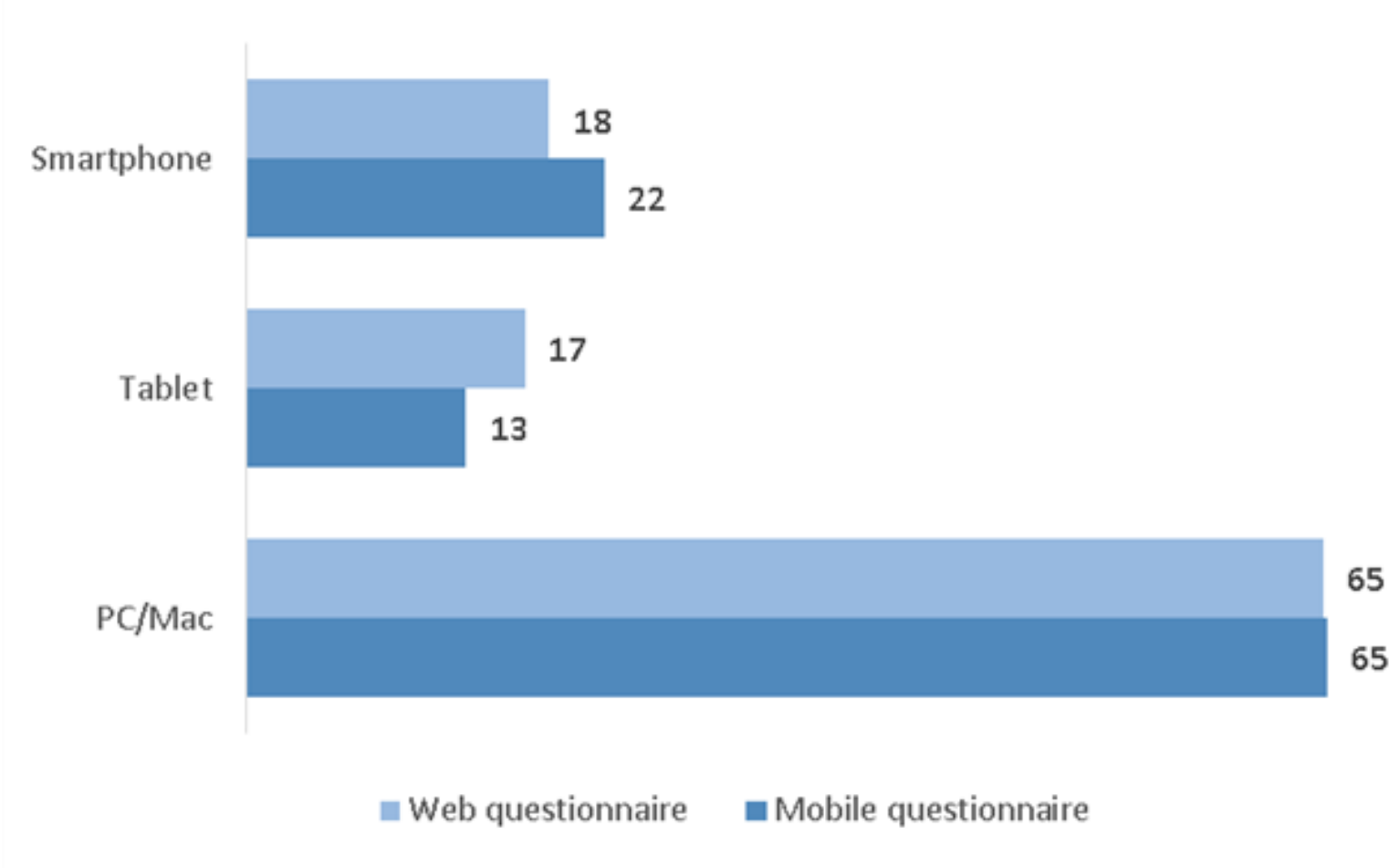
Response Rate by Age and Gender. Percent



Breakoff Rate by Survey Length and Response Unit for Panel – Jan-Aug 2016



Survey Response by Device





Analysis of Grid Questions

Considering everything meaningful to you regarding different holiday types, how do you rate each holiday type?

Traditional Grid. 10-Point Scale with End Labels

Mail 12.53 63%
pv.ktrmr.com

Når du tenker på alt som betyr noe når det gjelder ulike typer ferier, hvordan vurderer du følgende ferietyper?
Ett kryss per ferietype

	Svært dårlig	2	3	4	5	6	7	8	9	
Storbyferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Hytteferie på fjellet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Bilferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Opplevelsesferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Bobilferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

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Test - v1

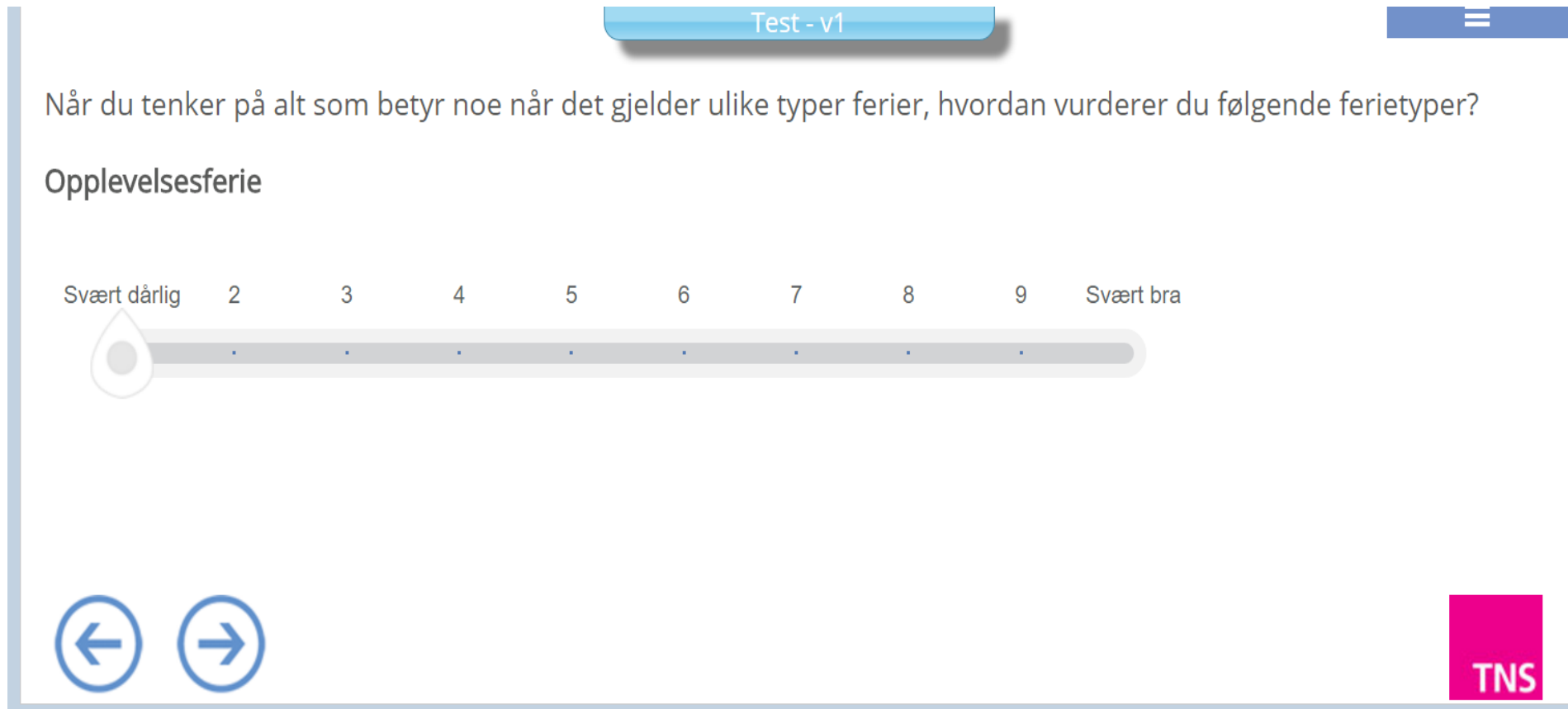
Når du tenker på alt som betyr noe når det gjelder ulike typer ferier, hvordan vurderer du følgende ferietyper?
Ett kryss per ferietype

	Svært dårlig	2	3	4	5	6	7	8	9	Svært bra
Opplevelsesferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storbyferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bobilferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hytteferie på fjellet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bilferie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

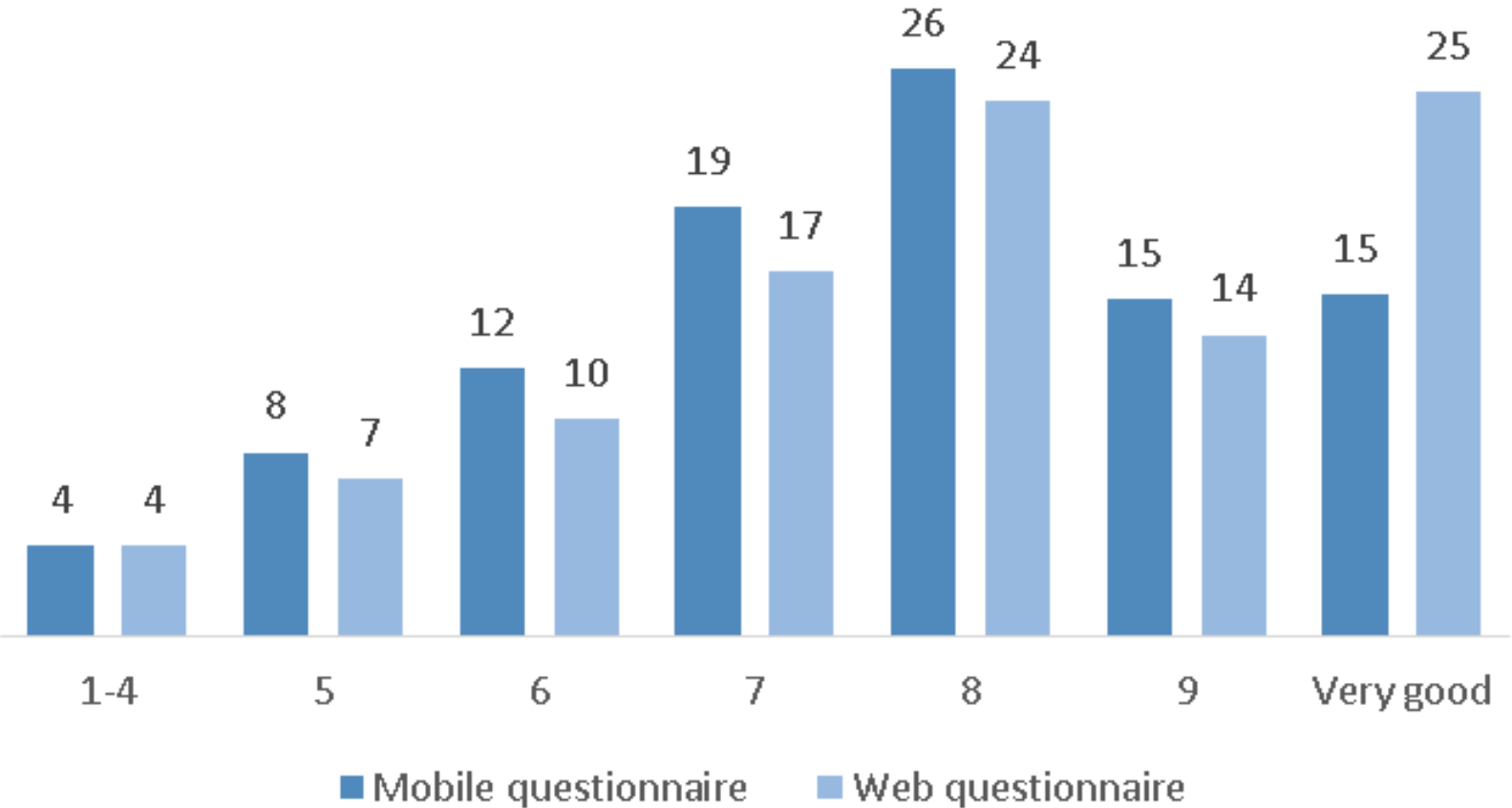
⬅ ➡

TNS

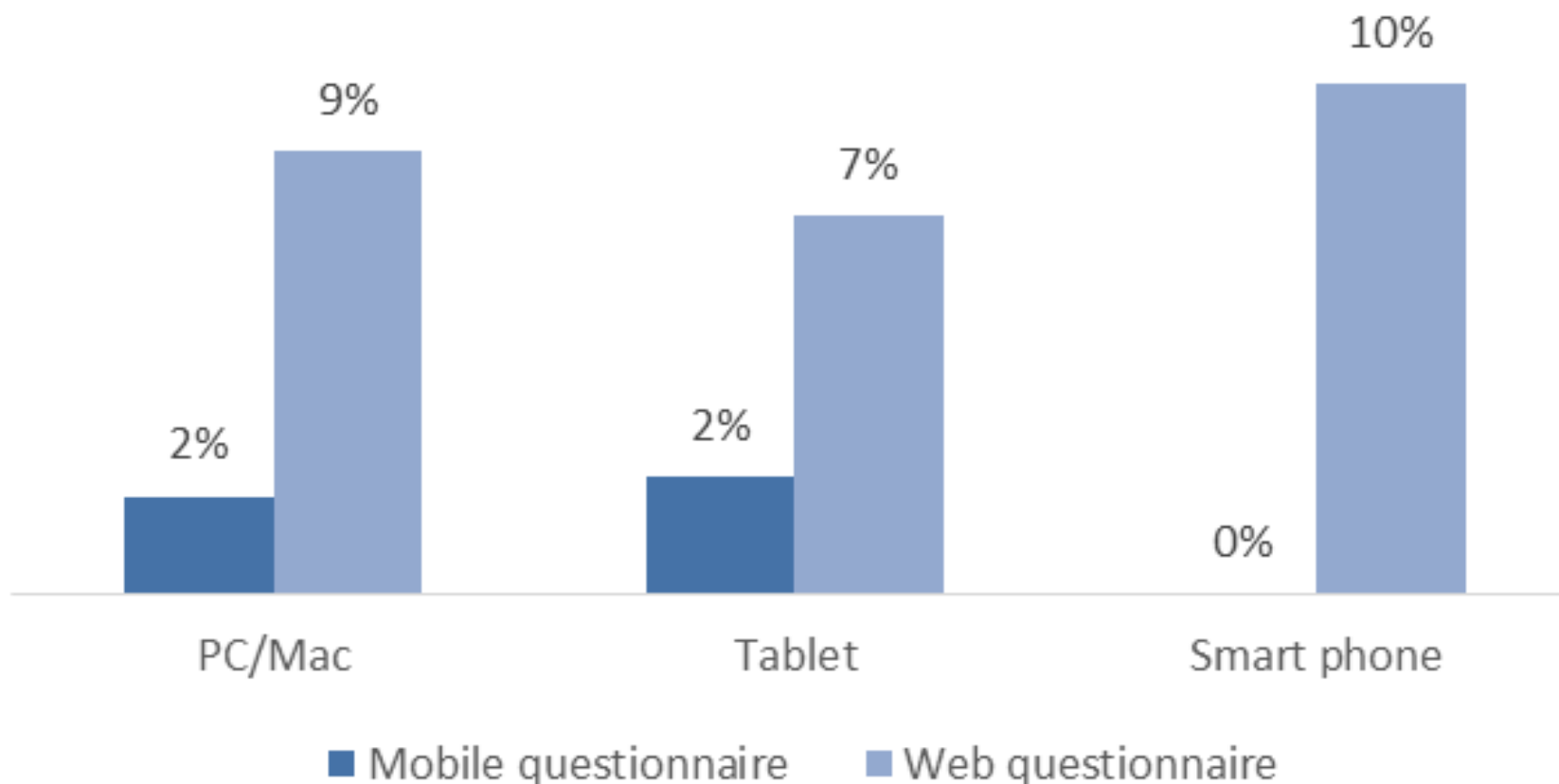
Item-by-Item Design with Slider Bar. 10- Point Scale with End Labels.



Total Number of Answers per Scale Point by Questionnaire Design. 10-Point Scale. Percent

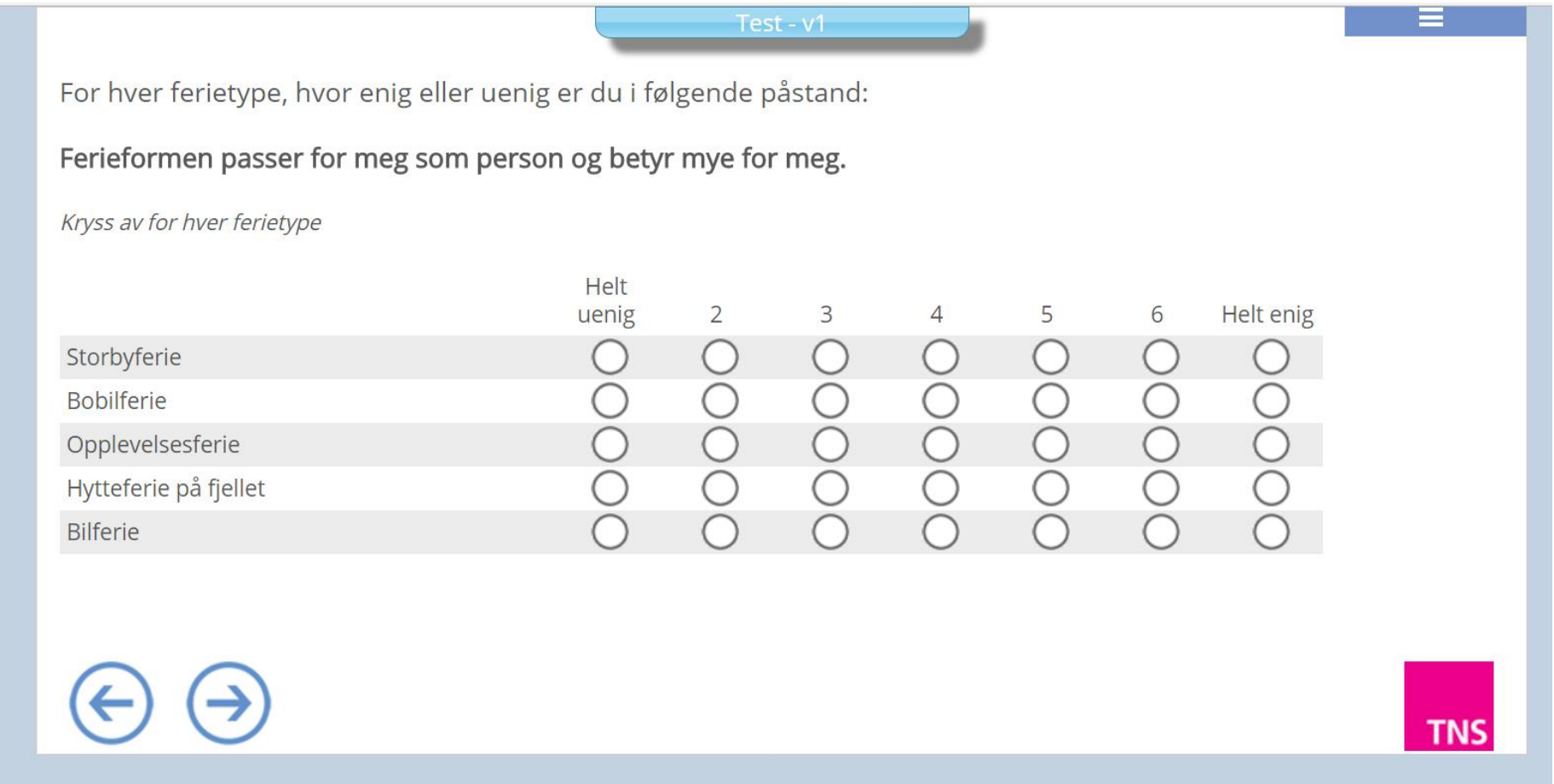


Straightliners: Respondents Who Rate Four or More Holiday Types and Use the Same Scale Point for All Answers



For each holiday type, how much do you agree or disagree with the following statement:
The holiday type suites me as a person and is meaningful to me.

Traditional Grid on iPhone 6. 7-Point Scale with End Labels



Dynamic Grid. 7 point scale. Labelled Endpoints. Iphone 6 & PC

Tilbake til Mail 10.31 43 %

pv.ktrmr.com

Test - v1

For hver ferietype, hvor enig eller uenig er du i følgende påstand:

Ferieformen passer for meg som person og betyr mye for meg.

Charterreise/
strandferie

Helt uenig
2
3
4
5
6
Helt enig

< >   


Test - v1

For hver ferietype, hvor enig eller uenig er du i følgende påstand:

Ferieformen passer for meg som person og betyr mye for meg.

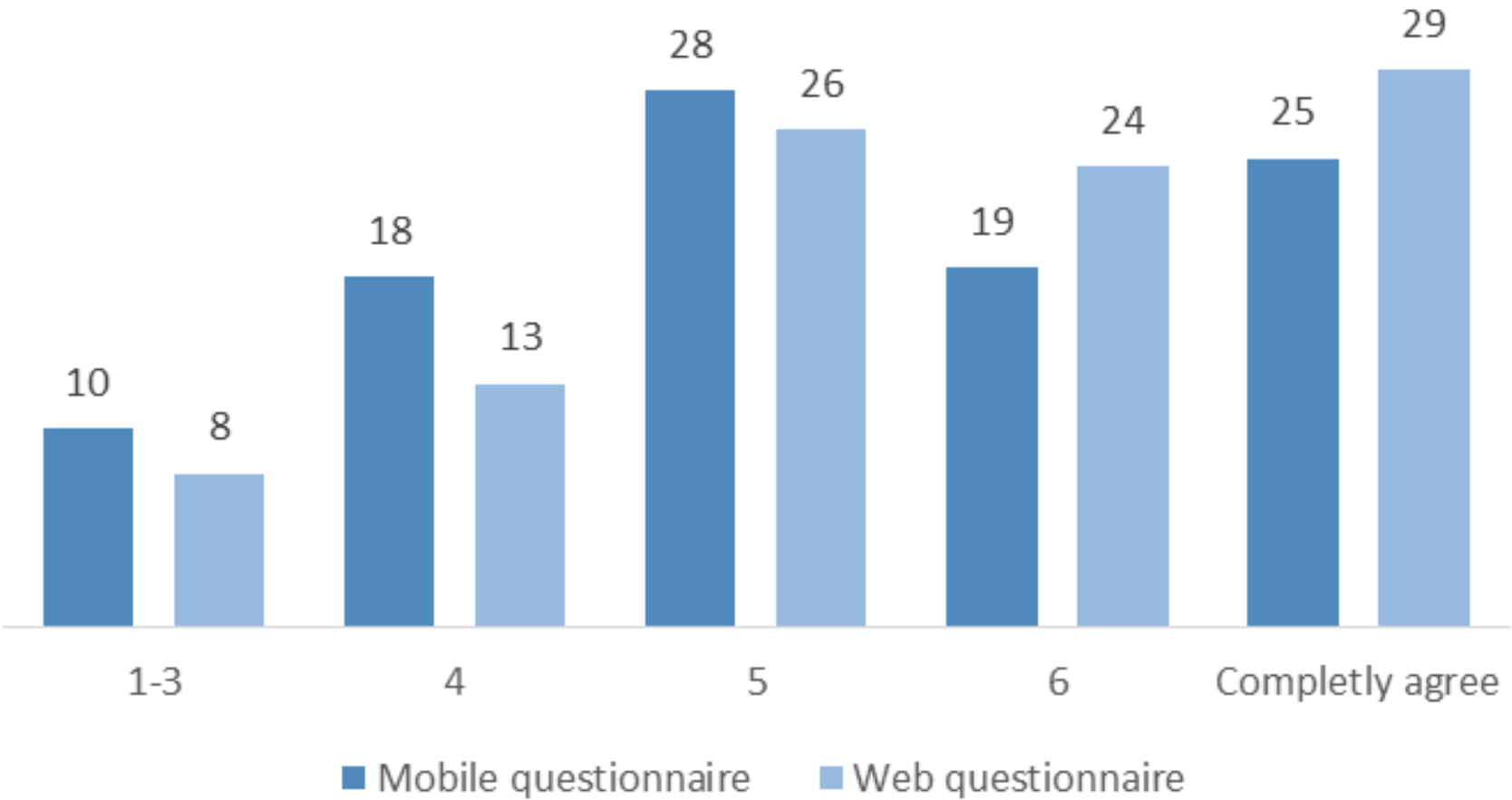
Storbyferie

Helt uenig	2	3	4	5	6	Helt enig
------------	---	---	---	---	---	-----------

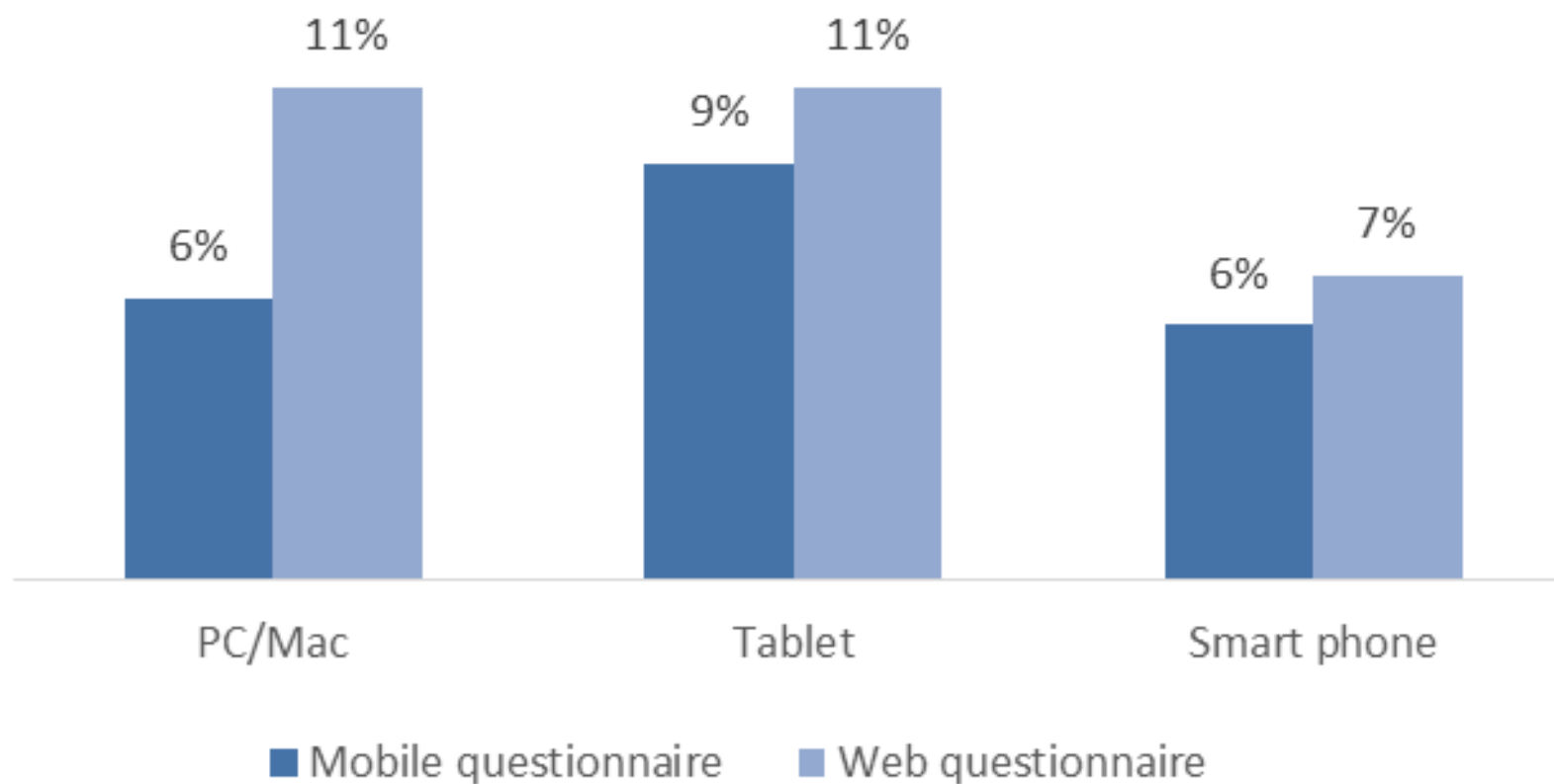
 

TNS

Total Number of Answers per Scale Point by Questionnaire Type. 7 Point Scale. Percent



Straightliners – Respondents Who Have Rated Different Statements About Holiday Types and Have Used the Same Scale Point for All Answers

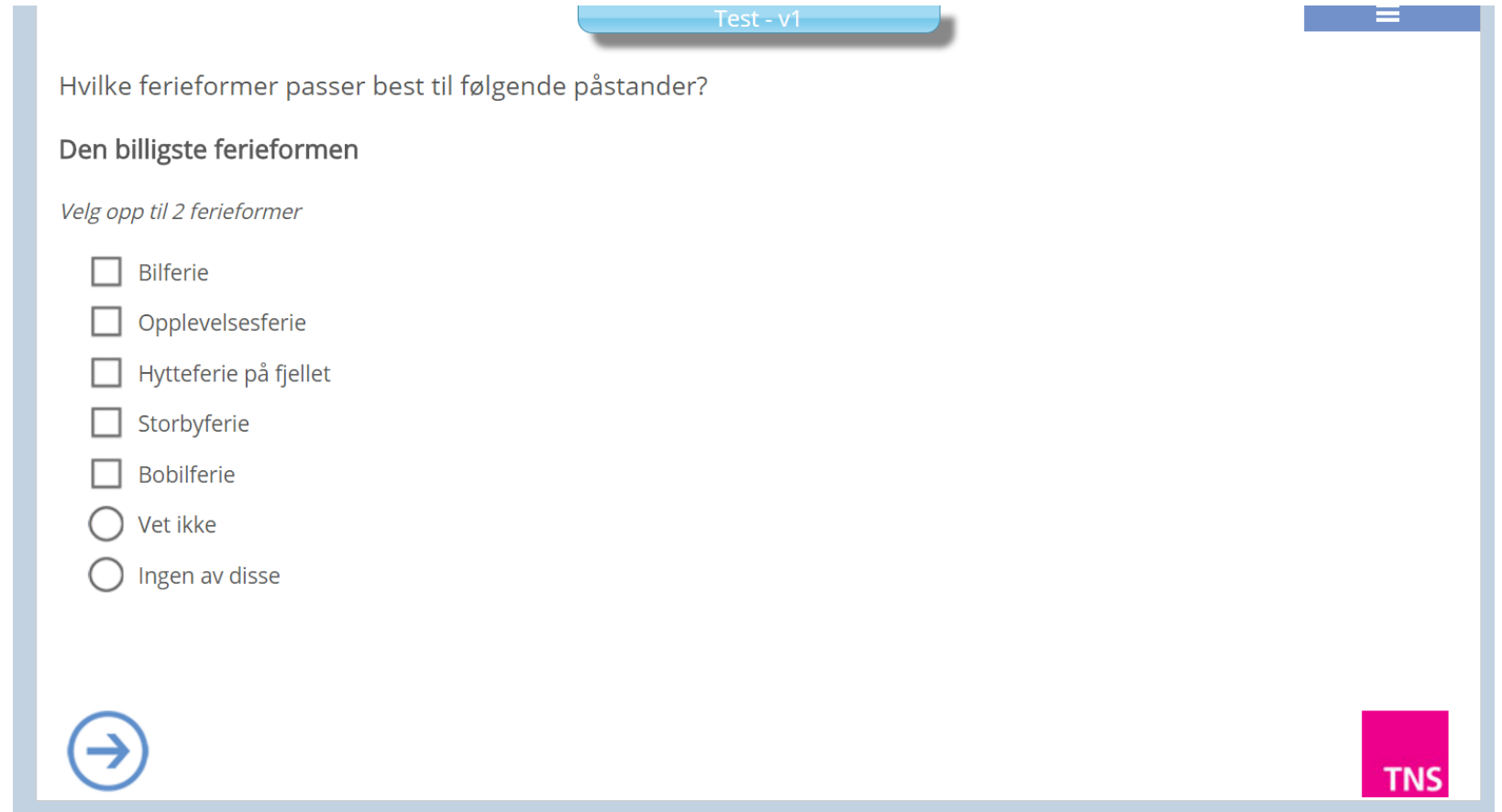


Which holiday types are best suited to the following holiday types? “Statement”
Choose up to 2 holiday types

Looped Item-by-Item Grid with Check Boxes



Mobile app mockup showing a survey interface. The status bar at the top displays "N Telenor", signal strength, time "17.28", and battery level "87 %". The browser address bar shows "pv.ktrmr.com". The survey text reads: "Hvilke ferieformer passer best til følgende påstander?". Below this is the title "Den billigste ferieformen" and the instruction "Velg opp til 2 ferieformer". A list of holiday types with checkboxes is provided: "Storbyferie", "Opplevelsesferie", "Hjemmeferie", "Charterreise/strandferie", "Hytteferie på fjellet", "Vet ikke", and "Ingen av disse". At the bottom, there is a pink "TNS" logo, a grey arrow pointing right, and a navigation bar with icons for back, forward, share, bookmark, and tabs.



Desktop app mockup showing a survey interface. The header bar is blue with a white hamburger menu icon and a blue button labeled "Test - v1". The survey text reads: "Hvilke ferieformer passer best til følgende påstander?". Below this is the title "Den billigste ferieformen" and the instruction "Velg opp til 2 ferieformer". A list of holiday types with checkboxes is provided: "Bilferie", "Opplevelsesferie", "Hytteferie på fjellet", "Storbyferie", "Bobilferie", "Vet ikke", and "Ingen av disse". At the bottom left, there is a blue circular button with a white right-pointing arrow. At the bottom right, there is a pink "TNS" logo.

Dynamic Grid with Statements and Answer List

Tilbake til Mail 10.31 43 %

pv.ktrmr.com

Test - v1

Hvilke ferieformer passer best til følgende påstander?
Velg opp til 2 ferieformer

Den billigste ferieformen

Charterreise/strandferie

Storbyferie

Opplevelsesferie

Hytteferie på fjellet

Hjemmeferie

☐ Vet ikke

☐ Ingen av disse

Test - v1

Hvilke ferieformer passer best til følgende påstander?
Velg opp til 2 ferieformer

Den billigste ferieformen

Storbyferie

Bobilferie

Opplevelsesferie

Hytteferie på fjellet

Bilferie

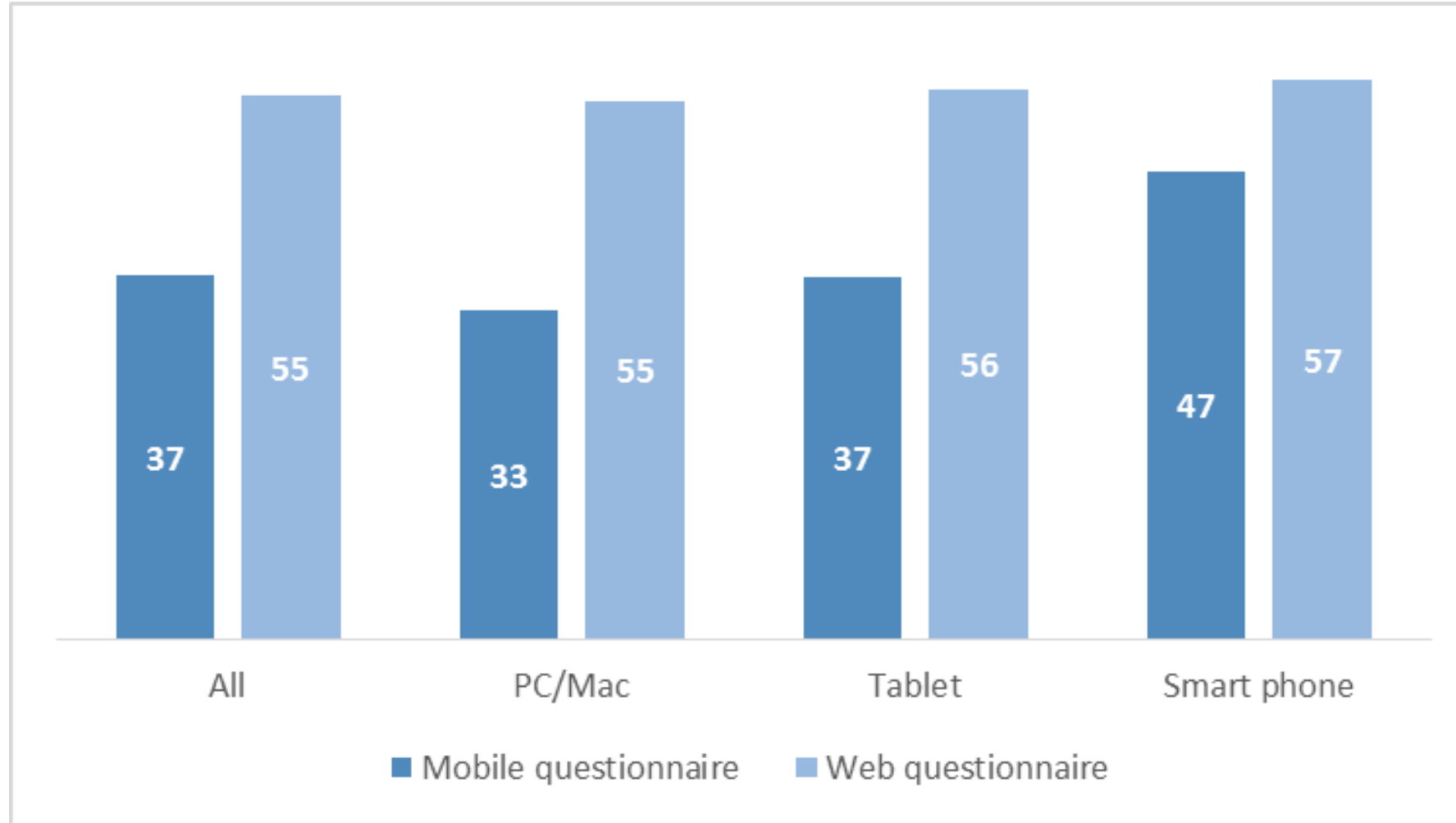
☐ Vet ikke

☐ Ingen av disse

← →

TNS

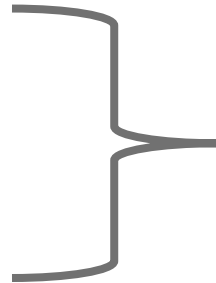
Number of Holiday Types per Statement by Questionnaire Design and Device. Max 2 answers per Statement. Percent



Forced vs Voluntary Response
Non-Substantial Response Alternatives

Forced vs Voluntary Response

- Experiment does not support our hypothesis, that forced response will lead to more breakoff
- Possible explanations:
 - Design
 - High interest topic
 - Survey length
 - Questions relevant and easy to answer
 - Generally low breakoff in survey and panel (6 %)
- Item nonresponse mostly cause by poor design or complex tasks
 - Few commented on problems with survey
- Outcome may be different in longer, more complex surveys/different sample sources
 - More research needed



Low response burden

Including vs Not Including Non Substantial Response Alternatives

- Hypothesis that offering non-substantial response alternatives will lead to fewer break offs, especially when response forced, is not supported
- Possible explanations:
 - Only 1,5% used non-substantial response alternatives in the survey
 - All explanatory factors mentioned in last slide apply here as well
- General comments based on experiences with surveys in GallupPanellet:
 - N-S alternatives offered as standard
 - In well designed, short surveys (10 mins or less), DK rate 2% or less
 - Higher DK rates generally due to poor design
 - When “problem questions” redesigned: DK rate declines
- Results may be different in longer, more complex surveys
 - More research needed

Discussion and Further Work

Concluding Remarks (I)

- Paradata from GallupPanel across surveys show:
 - Increasing number of respondents vary which device they use
 - Most mobile respondents are younger than 45
 - Women are more stable mobile respondents across age and time
 - Over 50% of women under 20 always use smartphone
 - Breakoff rates vary with survey length and device

Concluding Remarks (II)

- Experiment results vary by Q type and hypothesis
- Main findings:
 - Significant quality differences between mobile and web design in grids across devices
 - Even if grids small, results in favour of mobile design
 - Strong evidence that item-by-item design works better on all devices, also PC/Mac
 - Split results with item-by-item in both designs
- Even with this simple survey, mobile design does impact on survey results

Suggestion Further Research

- Mobile adapted Qs, especially grids, vary in visual as well as content design,
 - May affect results.
 - Further research needed that take design of Qs into account, preferably test different designs
- Would like to see more studies on forced vs voluntary response
 - Longer, more complex surveys; low interest topic
 - Planned experiment on 3 Nordic Kantar panels
- More research on NS response alternatives on different types of studies

- To engage respondents below the age of 50, we need surveys that are
 - Short and smart
 - Designed for mobile, and
 - Device agnostic

Thank you!