

Enhancements to the National Rail Passenger Survey

Findings from pilot work
during Spring 2016

June 2016

Contents

➤	Background	3
➤	Overview of findings	11
➤	Impact of enhancements on response rate	13
➤	Impact of enhancements on who takes part	19
➤	Impact of enhancements on satisfaction results	21
➤	Impact of enhancements on 'missing' questions	25
➤	New questions: trust and how people feel	30
➤	Evaluating respondent experience of the survey further	39
➤	Summary	58

Background to this research

Background & objectives

Following industry consultation, Transport Focus has used the Spring 2016 wave of NRPS to pilot potential changes to the survey's method:

- Shortened version of the questionnaire, with some enhancements to layout / aesthetics, and a small number of potential new questions
- Two data collection options: passengers have the choice to take part on paper or online

This report covers the findings from this pilot, based on two strands of research:



Quantitative evaluation of the changes, assessing the impact that they would have on response rate and completion, respondent profile, and the way they answer the questions



Qualitative exploration of the respondent experience when completing the paper and electronic versions of the questionnaire

This leads to recommendations on:

- Whether and how to implement the method changes from 2017
- Other improvements which might be made, to enhance the respondent experience and or / increase volume and quality of response

Overview of the pilot outcomes

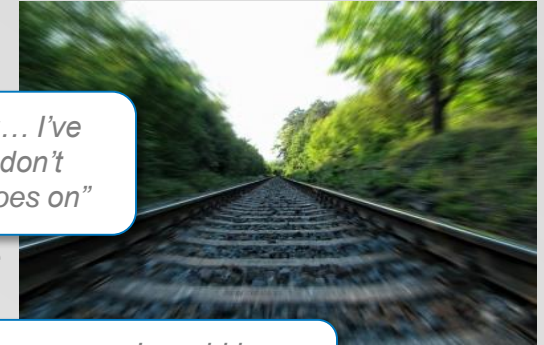
Overview of the pilot outcomes



- The NRPS is important to passengers as well as Transport Focus and the rail industry
- On the whole the survey is straight forward to complete
- ...and questions are largely both relevant and comprehensive
- Offering options to complete on paper/online is a good move
- Shortening the questionnaire is logical step; having variants to accommodate missing questions works easily
- Offering missing questions as optional appears to have little benefit
- New 'softer' questions add nuance – perhaps relevant annually?

"It's nice to actually be asked your view... I've used them for many many years, you don't normally get to have your say in what goes on"

Online, smartphone



"I thought E-mail would be convenient for me in my case...I would have been a little less inclined (postal), I didn't want to carry the paper home"

Online, desktop

"Whilst the guy who spoke to me said I could do it online if I wanted to, I'm an old fashioned guy and I like paper that I can pick up and put down and I don't have to re-boot the machine if I lose a page"

Paper

"She started telling me about the survey and everything, and I said well I haven't really got a lot of time, so she said ok well I can send you a thing over the internet... she asked me for my email address and ... I think the survey came... within the same day"

Online, smartphone

"Generally speaking it was really easy to fill in. The questions where I didn't have a huge amount to say were ones around the security of the station just because it's never been an issue...but the rest of it all seemed pretty relevant and easy to use"

Paper

Impact of the method
and questionnaire
changes on:

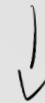
Response rate

Response rates: pilot survey vs. control



	Main survey control sample* (12 page paper q're)	Pilot survey		
		Total	Paper (8 page q're)	Online
No. recruited	8,830	12,000	9,193	2,807
Total recruits per shift	58.9	64.9	49.7	15.2
No. responded (pre-cleaning)	2,509	3,227	2,603	624
Total responses per shift	16.7	17.4	14.1	3.4
Response rate	28.4%	26.9%	28.3%	22.2%

Total main survey (including FW
conducted on trains) = 30%



- Offering a choice of completion methods* appears to result in increased recruitment and therefore, despite overall lower response rate, a higher number of completed interviews
- If online response rate can be increased, this benefit could be realised further
- Based on comparison of main survey control and paper pilot samples, the shorter questionnaire does not appear to have encouraged greater rate of response

**this impact is likely to come from the choice of completion methods rather than the shorter questionnaire: passengers are unaware of the questionnaire length at point of recruitment, and previous pilot work on a 4-page questionnaire indicated this had little impact on recruitment rate*

Comparable response rates: BPS / TPS

	total	paper	online
BPS	33%	34%	25%
TPS	23%	23%	23%

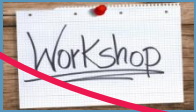
Why agree to take part in the first place?



Importance of concept/duty to other passengers

"I thought I get the train quite a lot, and I care about letting them know about my experience, if I could help the public transport industry then I should"

Online, desktop



Belief that feedback = improvements

"I think it's important that we give feedback, things can only be improved by people giving constructive feedback as opposed to being critical all the time"

Online, desktop



Fieldworker personality: Professionalism, combined with 'ordinariness' (though smartness = credibility)

"He did it in a professional and courteous way...he seemed like a nice polite man"

Online, desktop

"When I'm approached, there's always a split second of heart-sinking, but ... he was quite charming, so I just thought 'yeah, alright, why not, I've got the time'... he had a good manner"

Paper



Receiving survey quickly after recruitment

"I was actually pleasantly surprised at how quickly it came..."

Online, desktop



Perceived ease of participation

"A big thing was that the envelope was already there, so I knew I wasn't going to have to go and pick up a stamp anywhere or post it into the station, I could just post it in a post box when I passed one"

Paper



An environment conducive to completing a survey

- Several paper respondents did the survey then and there on the train; and several online respondents would have liked to.
- Online respondents often felt the online option allowed them to complete when convenient, and having it in inbox would mean they'd remember it

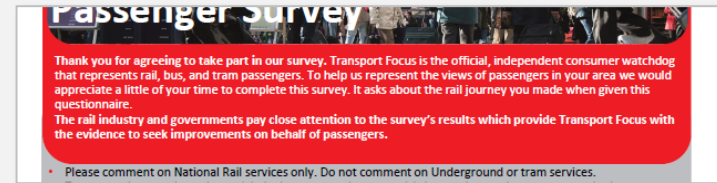
Are we making enough of the NRPS concept?



- Many depth respondents skimmed/ignored introduction at start of the survey

- Many reported hearing only a little about the survey purpose from fieldworker – but this was felt to be appropriate given the time constraints

- Focusing on TF during intro is not particularly beneficial



"The guy ... said it was a 'passenger survey'... I knew it was something to do with giving our views rather than them advertising something... 'passenger survey' was enough to grab my attention"

Paper

"Only that it was to try and improve the service; because she knew I hadn't got much time she didn't really waste a lot of time talking about the background – but fine, that was enough to pique interest"

Paper

...But respondents are interested and motivated by the survey purpose (and are also interested in seeing results)

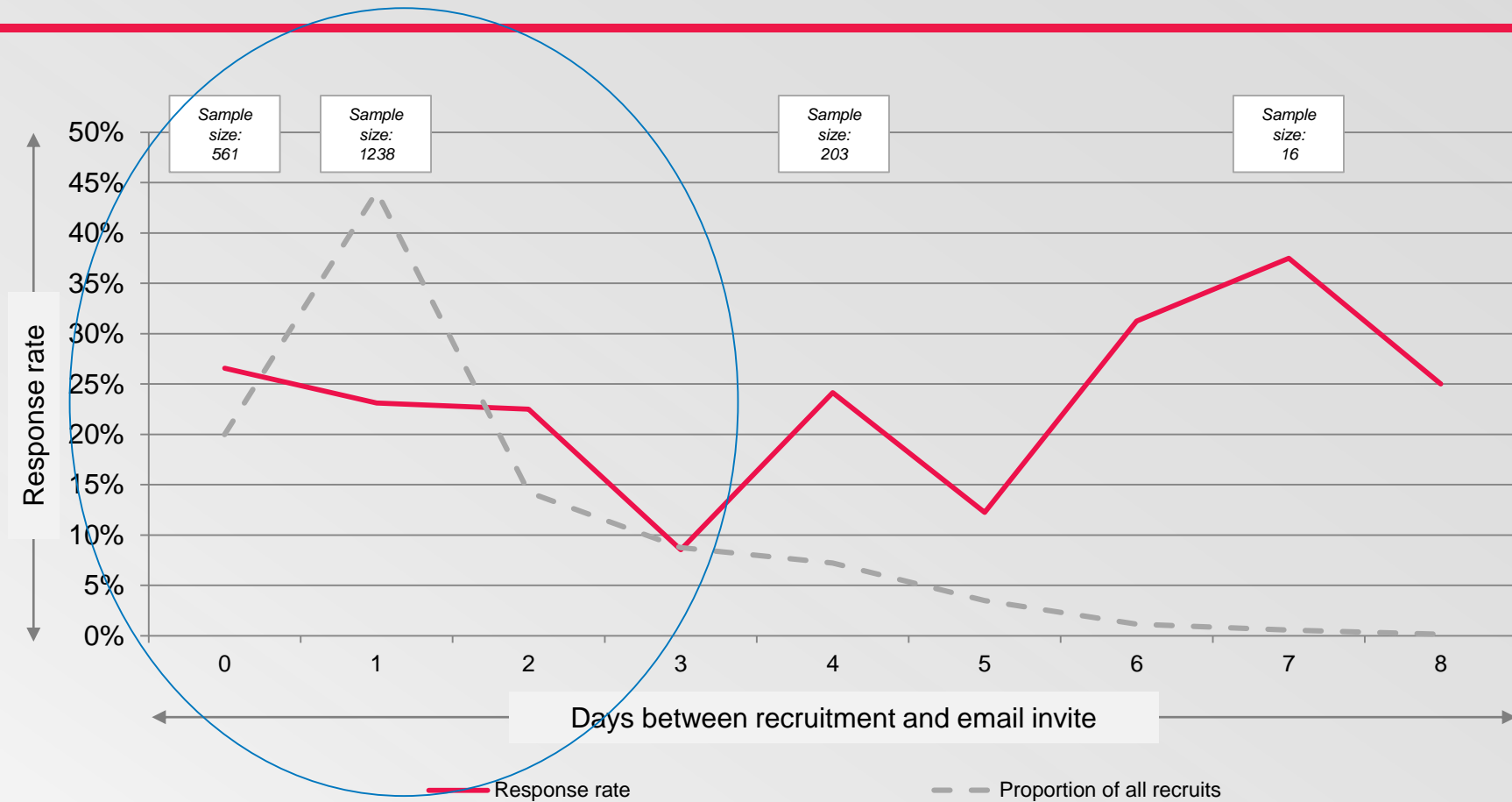
"Perhaps worth telling people that the results will be made public. I think if people think it's some secret deal between the train companies, it's frustrating"

Paper

Keep fieldworker intro and questionnaire 'blurb' short, but with focus / emboldening on key words and phrases / concepts:

- Passenger views / passenger survey / passenger feedback
- Independent
- Transparent / public (but avoiding any inadvertent implication of non-confidentiality)
- To inform service improvements

Response rate time between email invite and recruitment (days)



- Relatively few respondents were invited to take part in the online survey 3 or more days after initial recruitment; as a result response rate analysis after this point is somewhat unreliable
- Taking into account only those respondents who were invited within 3 days of recruitment, response rate is clearly stronger the sooner the survey invite is received
- **As with BPS, the aim must be to send out survey invites within a day of recruitment, ideally on the same day**

Impact of the method
and questionnaire
changes on:

Who takes part

Profile of survey respondents



	Main survey control sample (12 page paper q're)	Pilot survey		
		Total	Paper (8 page q're)	Online
Commuter	39	36	35	43
Business	15	15	15	16
Leisure	46	49	51	40
16-34	23	23	20	38
35-54	36	38	37	38
55+	39	37	41	20
No answer / prefer not to say	1	2	2	3
Male	43	43	42	48
Female	55	52	53	48
No answer / prefer not to say	2	5	5	4
Weekday	84	84	84	85
Weekend	16	16	16	15

- Despite slightly higher incidence of leisure journeys in this pilot (vs. control), **introducing an online element has potential to increase representation of commuters and (probably overlapping with this) younger males – IF online contribution can be increased**
- NB in a live survey, data would be weighted by journey purpose so ultimately survey profile would not alter. Rather, level of weighting required should be lessened

Impact of the method
and questionnaire
changes on:

**(Satisfaction)
results**

Key results in the pilot vs. control surveys



Main survey
control sample

Pilot

Headline satisfaction ratings

Overall journey satisfaction	84	82
Overall station satisfaction	82	83
Overall train satisfaction	80	79
Value for money rating	48	50

Summarised station ratings

Station environment	71	73
Station facilities	68	56
Transport / connections	62	64
Customer service	79	81

Summarised train and journey ratings

Journey measures	79	79
On-board environment	70	67
On-board facilities	50	53
Customer service	56	58

Very slightly lower journey satisfaction overall in pilot – but no clear pattern, suggestion little impact on results if this method was implemented fully

- Influence of more negative online respondents (see next page)?
- Attention drawn to more specific aspects of on-board experience (crowding, wi-fi, power sockets) – which we know is more influential on overall satisfaction than station experience?

VFM and station satisfaction actually slightly higher in pilot

- Slightly higher proportion of leisure journeys? (commuters could be increased with stronger online contribution, but either way would be controlled for in a live survey by weighting)
- New focus on additional station facilities (toilets and w-fi) less impactful than equivalent new questions re on-board experience, due to lower overall importance

Online vs. paper responses in the pilot survey



Paper

Online

Headline satisfaction ratings

Overall journey satisfaction	83	78
Overall station satisfaction	83	81
Overall train satisfaction	80	74
Value for money rating	52	43

Summarised station ratings

Station environment	73	73
Station facilities	58	50
Transport / connections	65	60
Customer service	81	79

Summarised train and journey ratings

Journey measures	80	75
On-board environment	68	61
On-board facilities	51	44
Customer service	59	55

People responding on paper are fairly consistently more positive than those responding online

Partly a function of online respondents' age and travel behaviour (more likely to be commuters):


- However, analysis* suggests that, while the pattern isn't strong, on balance there is a little more negativity among online respondents, even when controlling for age and journey purpose
- This echoes recent findings for BPS and TPS which also suggested that online respondents are generally a little less positive overall

Positivity does not appear to be linked to any time delay in response:

- Demonstrated in BPS, and the pattern of more negativity exists here in NRPS, where the time delay has been reduced dramatically compared to BPS
- Online/paper differences would be partly mitigated by journey purpose weighting, but if online respondents make more contribution in the future we might expect this to bring about a slight suppression of satisfaction results.

*Not shown in this summary report; available if required

So, we have applied journey purpose and weekday weights to assess impact on a more level playing field:

	Main survey control sample (12 page paper q're)	Pilot		Weighted sample profile
Commuter	39	36	All weighted to... 	46
Business	15	15		15
Leisure	46	49		40

Proportion of commuters in the sample increased in both pilot and control samples

Effective sample size reduces to 96% of un-weighted base in the control, 98% in the pilot

Headline satisfaction ratings

	Main survey control sample	Pilot
Overall journey satisfaction	83	80
Overall station satisfaction	82	82
Overall train satisfaction	79	77
Value for money rating	47	47

- All headline results are suppressed a little in both samples as a result of up-weighting commuters / down-weighting leisure travellers
- Where differences existed in the un-weighted results for station and VFM rating (where pilot results were more positive, these are flattened)
- But other measures still seeing more negative results in the pilot
- Overall the trend for slightly more negative response in the pilot remains, even after weighting (though again, pattern is not 100% consistent, with higher scores in the pilot for some station measures)

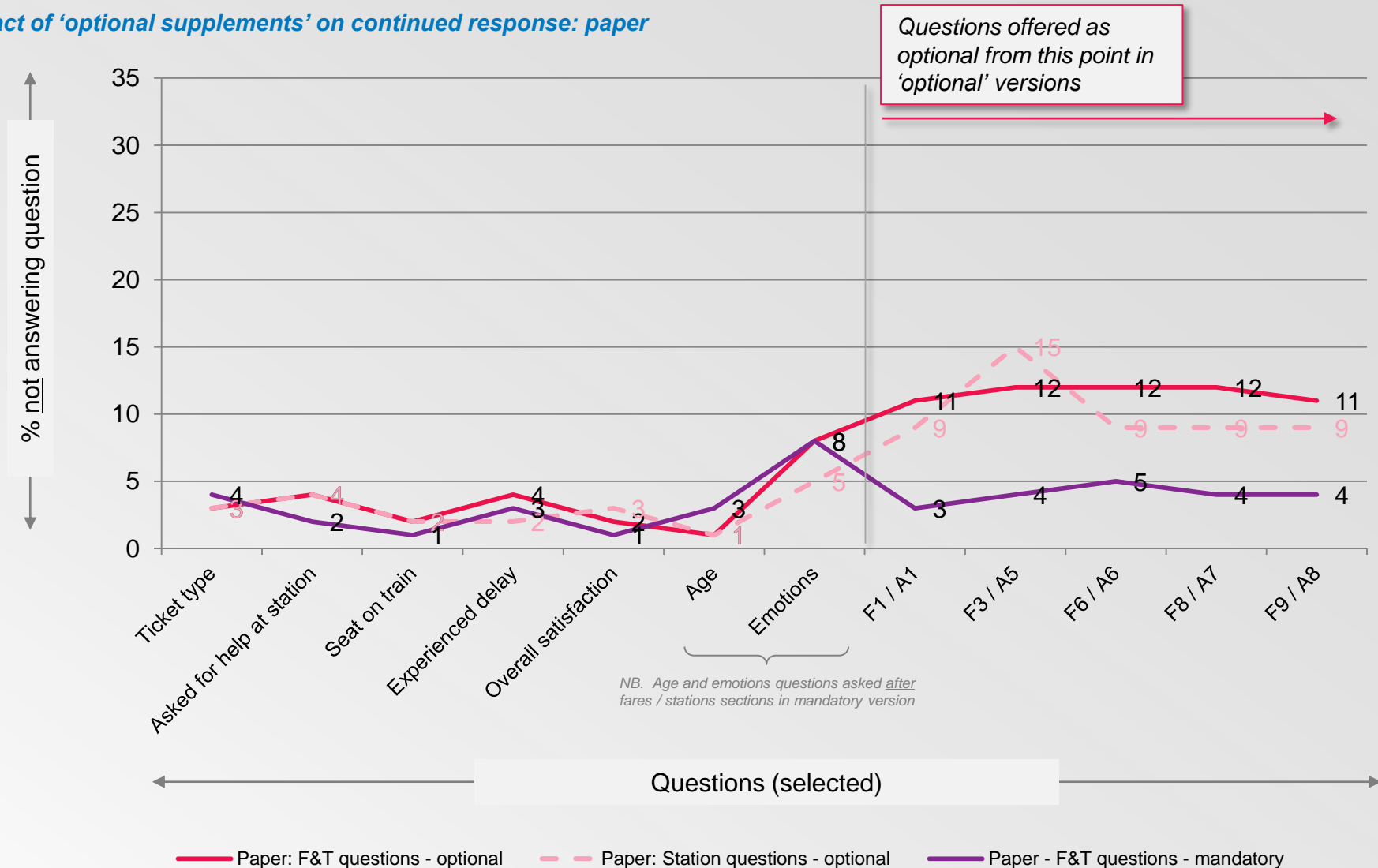
Impact of the method
and questionnaire
changes on:

**‘Missing’
questions**

Around 6-8% drop out from the paper survey when given the 'choice'



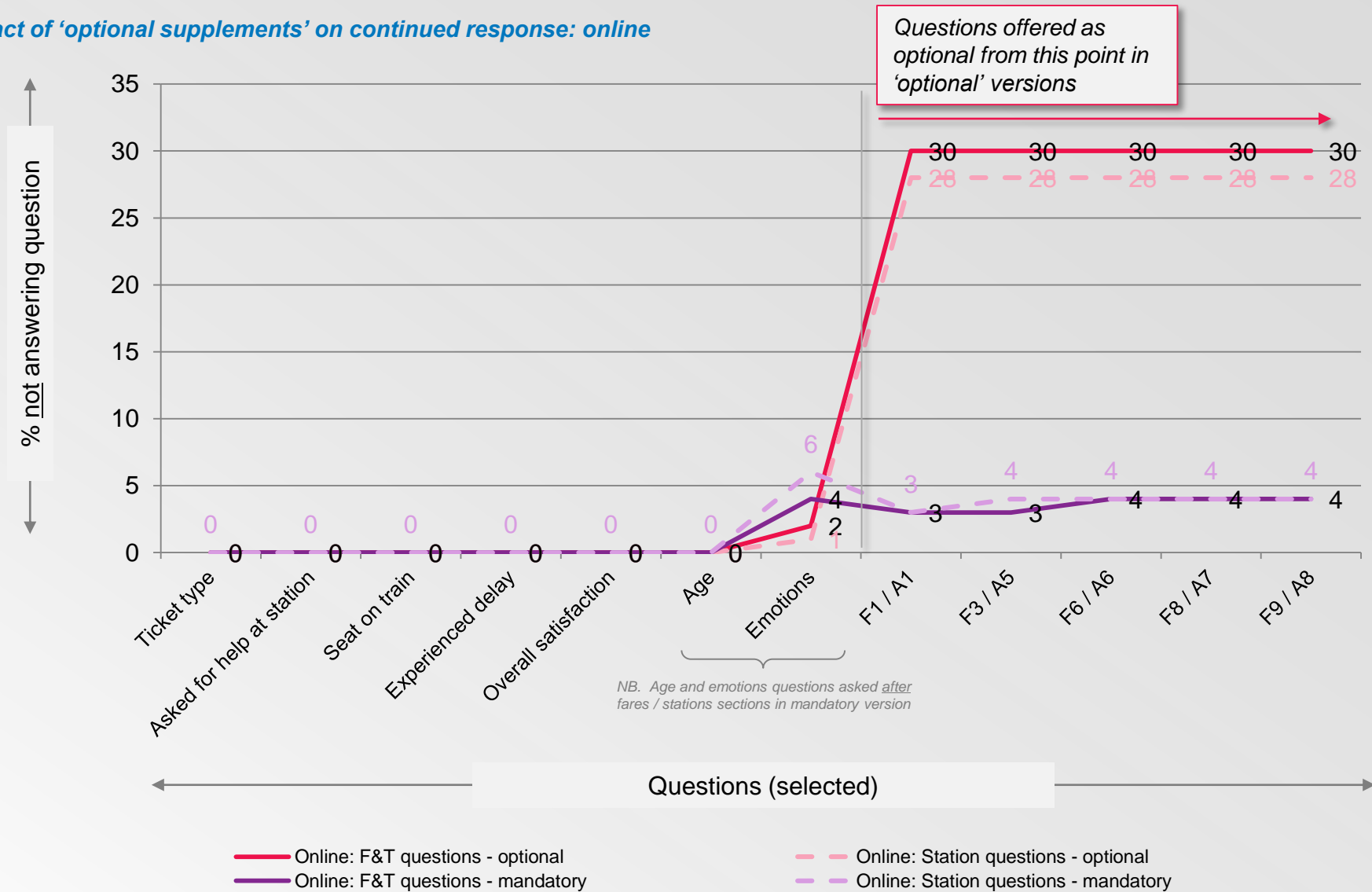
Impact of 'optional supplements' on continued response: paper



...but a quarter of online respondents drop out with the same offer



Impact of 'optional supplements' on continued response: online



Why do so many respondents continue with optional questions?



- Might as well – have got this far
- My feedback is important
- Can see it's not much more/looks easy
- Experience so far has been fine
- Missed the fact it was optional (didn't read the blurb)
- NB. a minority indicated that the offer to finish 'early = sense of respect for respondent



We recommend not presenting some questions as optional

- Presenting as optional encourages drop-outs among certain groups – with potential for minor skews in results
- But presenting as mandatory has no material negative effect

...but having variants to enable a shorter questionnaire seems sensible

"Overall the survey is goodpartly because I started it, I hadn't got bored, it's important, also respect...we've gotten this far...I want to do it"

Online, desktop

"I suppose in the hope that I would be able to say something more general about the service, because that specific journey was absolutely fine and that was not indicative of my experience with that company all the way along"

Online, desktop

"Because you had won me over [by that point] and I trusted the survey and probably because I still had a few minutes to spare! Also it was all relevant, and because I do so much travel I thought well hold on, no, these guys are trying to make travel better so let's give them my two penn'th"

Paper

"I look at that bar at the top right hand corner, the fact that it said 85% was okay for me"

Online, desktop

"Just to see if there was anything that I thought wasn't included"

Online, desktop

"My answers could make a difference so it seems a bit silly to not bother. I mean if it had been an extra 10 pages ... but an extra couple on top didn't seem like too much for me to do"

Paper

The softer side of
passengers'
experience:

**New questions on
trust and how
people feel**

How does a train journey make passengers feel?



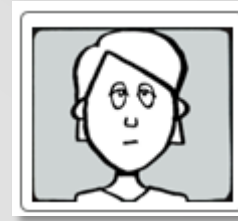
% choosing each emotion



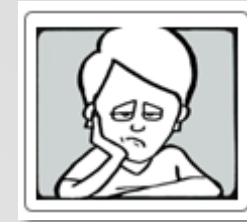
Relaxed
16%



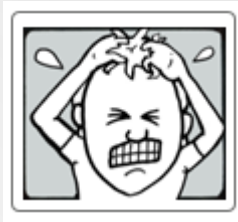
Happy
29%



Indifferent
32%



Bored
12%



Frustrated
1%



Stressed
1%



Angry
2%



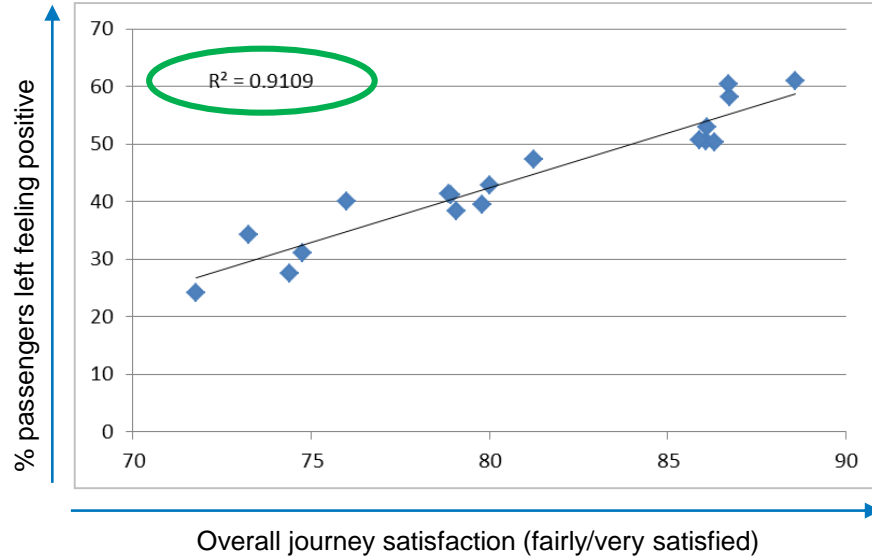
Worried
1%

No answer: 6%

Positive emotions and overall journey satisfaction correlate well



Any positive emotion* vs overall journey satisfaction (fairly/very)



*relaxed / happy

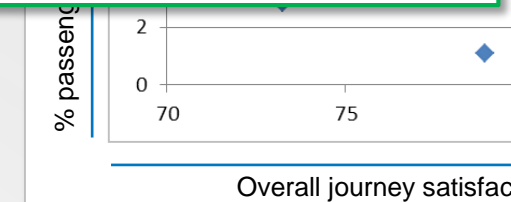
Strong inverse correlation between journey satisfaction and indifference in particular suggests that satisfactory journeys genuinely leave passengers feeling pretty good (when we ask them to think about it!), rather than simply being 'fine' as we have sometimes speculated previously for the meaning of 'satisfaction'

journey satisfaction (fairly/very)

Strength of correlation between overall journey sat and...

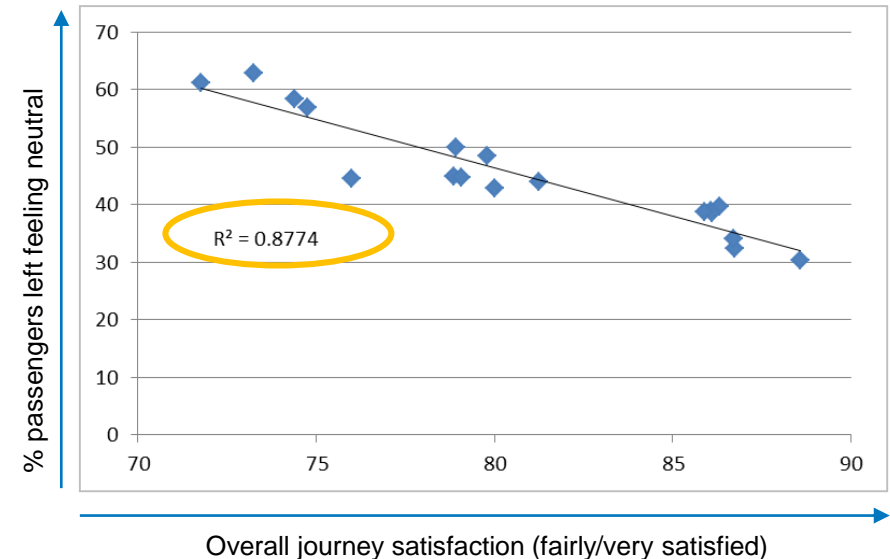
Relaxed	0.79
Happy	0.74
Indifferent	0.70
Bored	0.52
Angry	0.48
Frustrated	0.08
Stressed	0.04
Worried	0.00

(R² values)



*angry / frustrated / stressed / worried

Any apathetic emotion* vs overall journey satisfaction (fairly/very)



*indifferent / bored

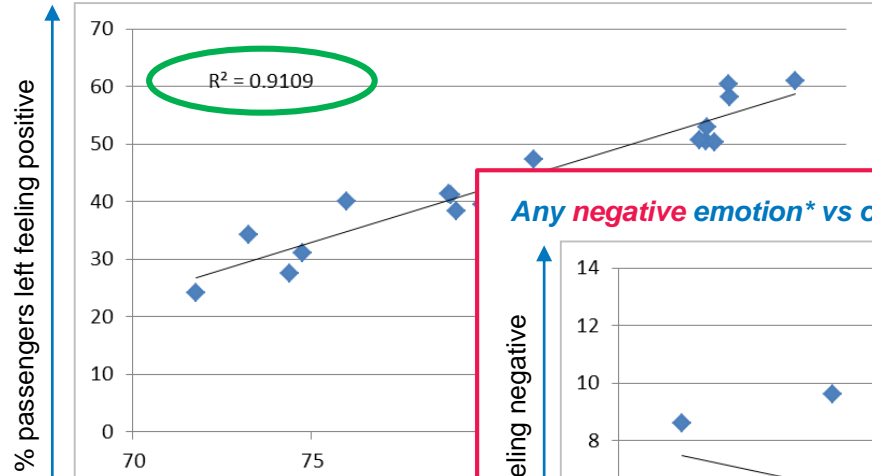
Bored vs dissat: R² = 0.53

Worried vs dissat: R² = 0.02

...but negative emotions have much weaker relationship with satisfaction



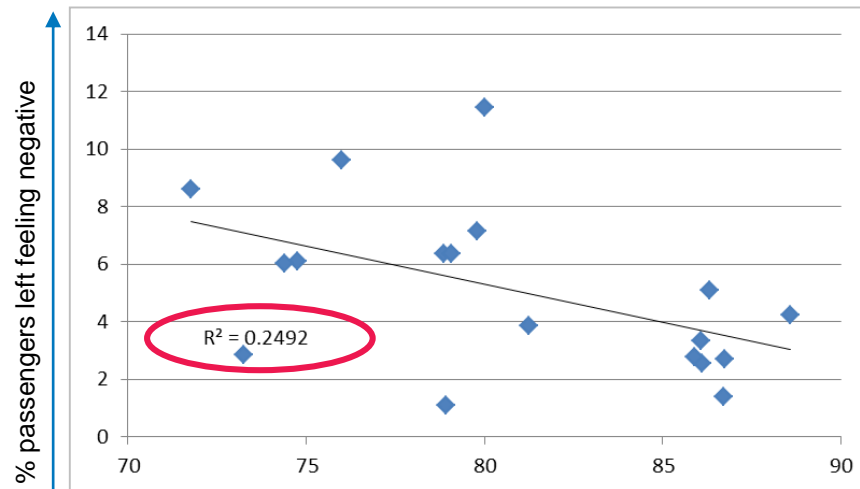
Any positive emotion* vs overall journey satisfaction (fairly/very)



*relaxed / happy

Overall journey satisfaction

Any negative emotion* vs overall journey satisfaction (fairly/very)



*angry / frustrated / stressed / worried

Overall journey satisfaction (fairly/very satisfied)

Strength of correlation between overall journey sat and...

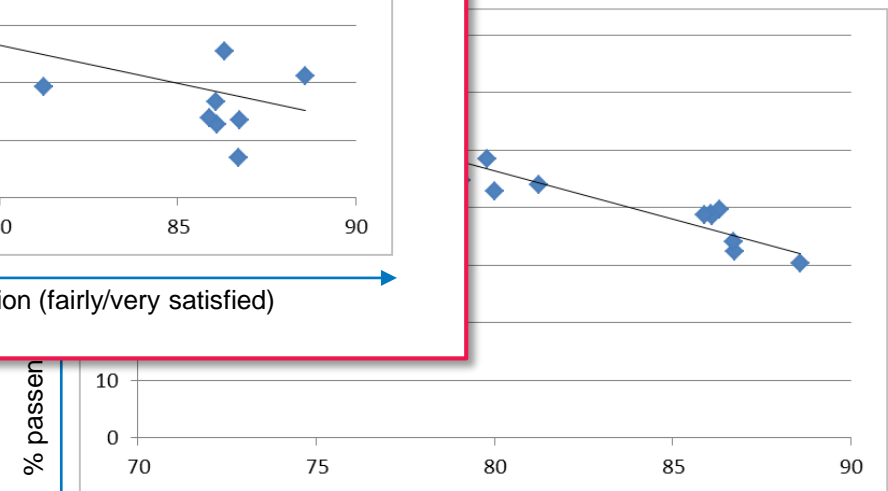
Relaxed	0.79
Happy	0.74
Indifferent	0.70
Bored	0.52
Angry	0.48
Frustrated	0.08
Stressed	0.04
Worried	0.00

(R^2 values)

Bored vs dissat: $R^2 = 0.53$

Worried vs dissat: $R^2 = 0.02$

Any negative emotion* vs overall journey satisfaction (fairly/very)



*indifferent / bored

Overall journey satisfaction (fairly/very satisfied)

Do the emotions questions add value?



	Total	Very satisfied	Fairly satisfied	Neither / nor	Fairly dissatisfied	Very dissatisfied
Relaxed	16	28	13	3	-	2
Happy	29	51	23	3	1	8
Indifferent	32	14	47	48	15	-
Bored	12	1	9	34	52	24
Worried	1	0	1	3	6	-
Stressed	1	-	0	2	4	5
Angry	2	0	1	2	14	39
Frustrated	1	0	0	1	6	15

Although positive emotions simply tell a similar story to the 'overall journey satisfaction' question, **negative emotions, though rare, highlight other elements of passenger experience**

TOCs are generally quite good at making people "fairly satisfied" – but this often means they're left feeling indifferent. This may be the maximum, and appropriate expectation for many passengers, but **perhaps TOCs can still work harder to leave people feeling good even when they do generally satisfy on a basic level?**

Plus, qualitative feedback indicated that...

- **Greater variety in question format/presentation may boost engagement**
- **Interpretation of images is fairly consistent and as intended**

"It was about my expectations. I want the train to be on time, to be clean, and it was that so it was ok, but it wasn't exceptional, it was what I would expect"

(Indifferent, fairly satisfied overall)

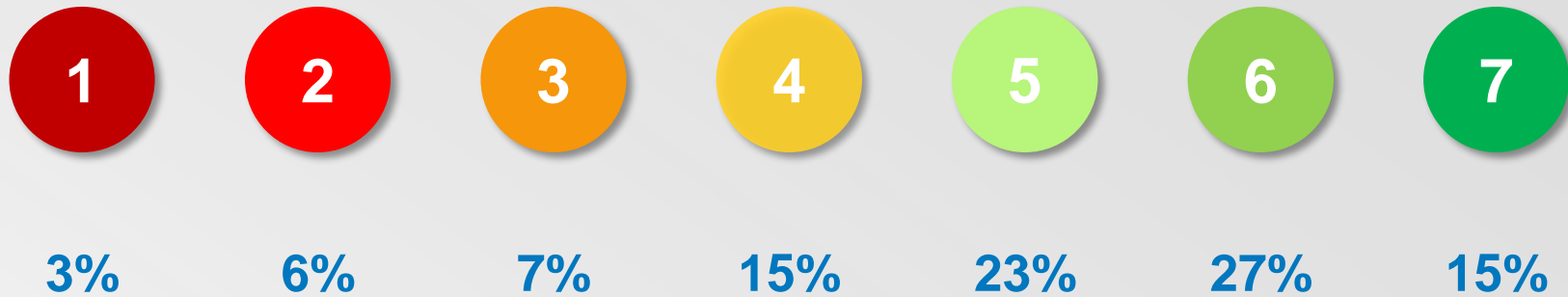
Do passengers trust train companies?



% passengers trusting TOC travelled with today

Do not trust
them at all

Trust them a
great deal

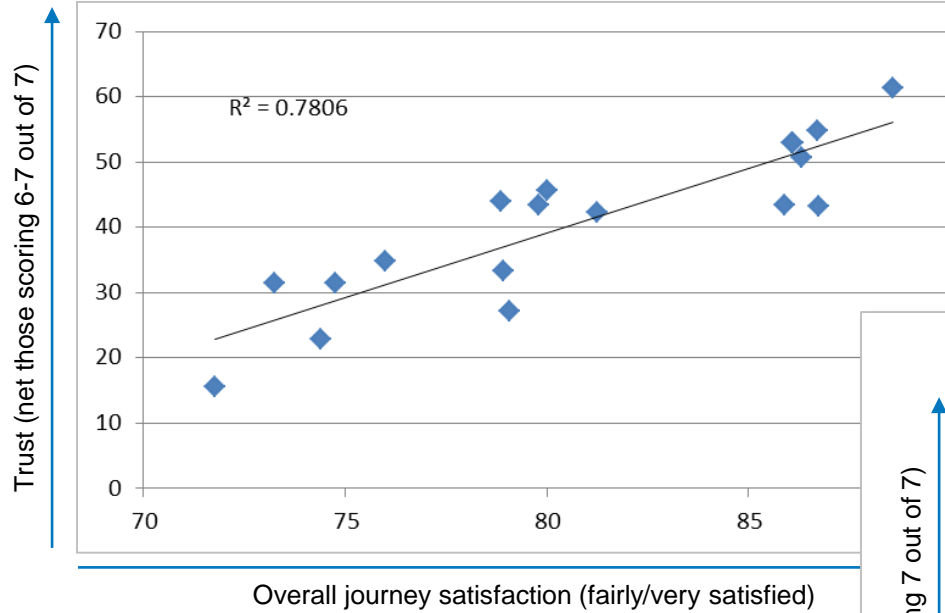


No answer: 3%

Trust and overall journey satisfaction are correlated a little less strongly than positive emotions



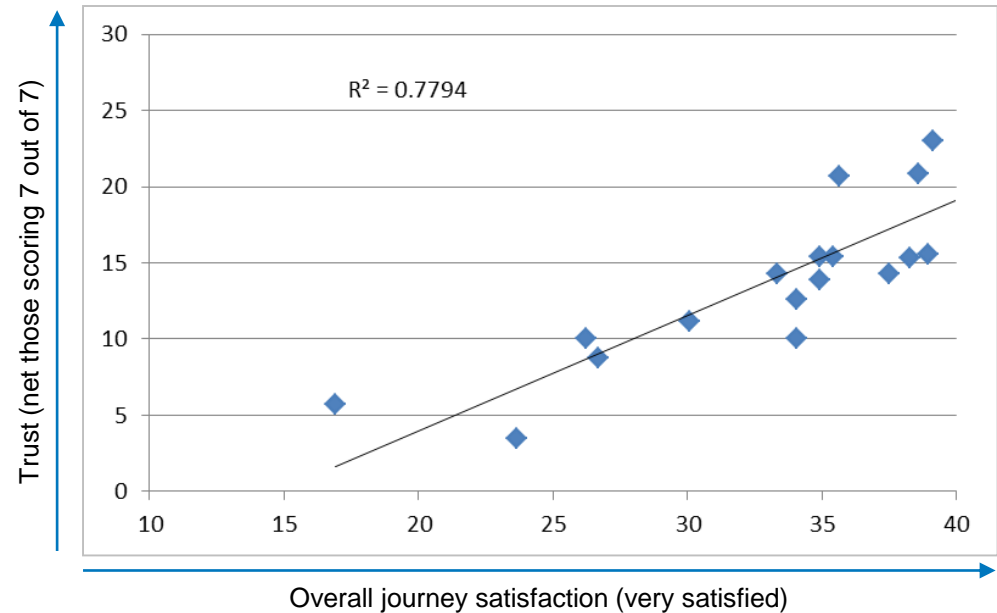
Overall trust (6-7) vs overall journey satisfaction (fairly/very)



Trust is about general experience and overall opinion, and so this question does say something different – though not contradictory – to the overall satisfaction question

Consider asking about trust on an annual (rather than bi-annual) basis?

Absolute trust (7) vs very satisfied with overall journey



(Absolute trust (7) vs overall journey sat: $R^2 = 0.7805$)

Evaluating
respondents'
experience of the
survey to increase
response

Overview of experience in completing the survey



1

Generally straight forward

"Well I didn't have any problems filling it in... I think it was clear what you had to do, I don't think anyone would get confused... I didn't find it difficult – sorry I'm not being very helpful am I!"

Paper

2

Questions largely relevant and easy to understand and answer

"Questions that are succinct and straight to the point"

Online, desktop

"You don't bang on about household, kids, household income...black, white, disabled or whatever, which often takes up so much survey space. I think it was tailored specifically to rail, it was good"

Paper

3

Presentation, on paper, desktop and mobile, generally either not mentioned (so no issue) or complemented

"Text size was good, clear where you had to put responses in"

Online, desktop

"Clean, clear"

Online, desktop

4

For some, survey is quite long

"It took a long time to get a quarter done"

Online, desktop

"It was quite a long and meaty questionnaire – I suppose you have to do all the extra ones like ethnicity?"

Paper

Evaluating
respondents'
experience of the
survey to increase
response:

The presentation of
questions

Summary of feedback on the questionnaire



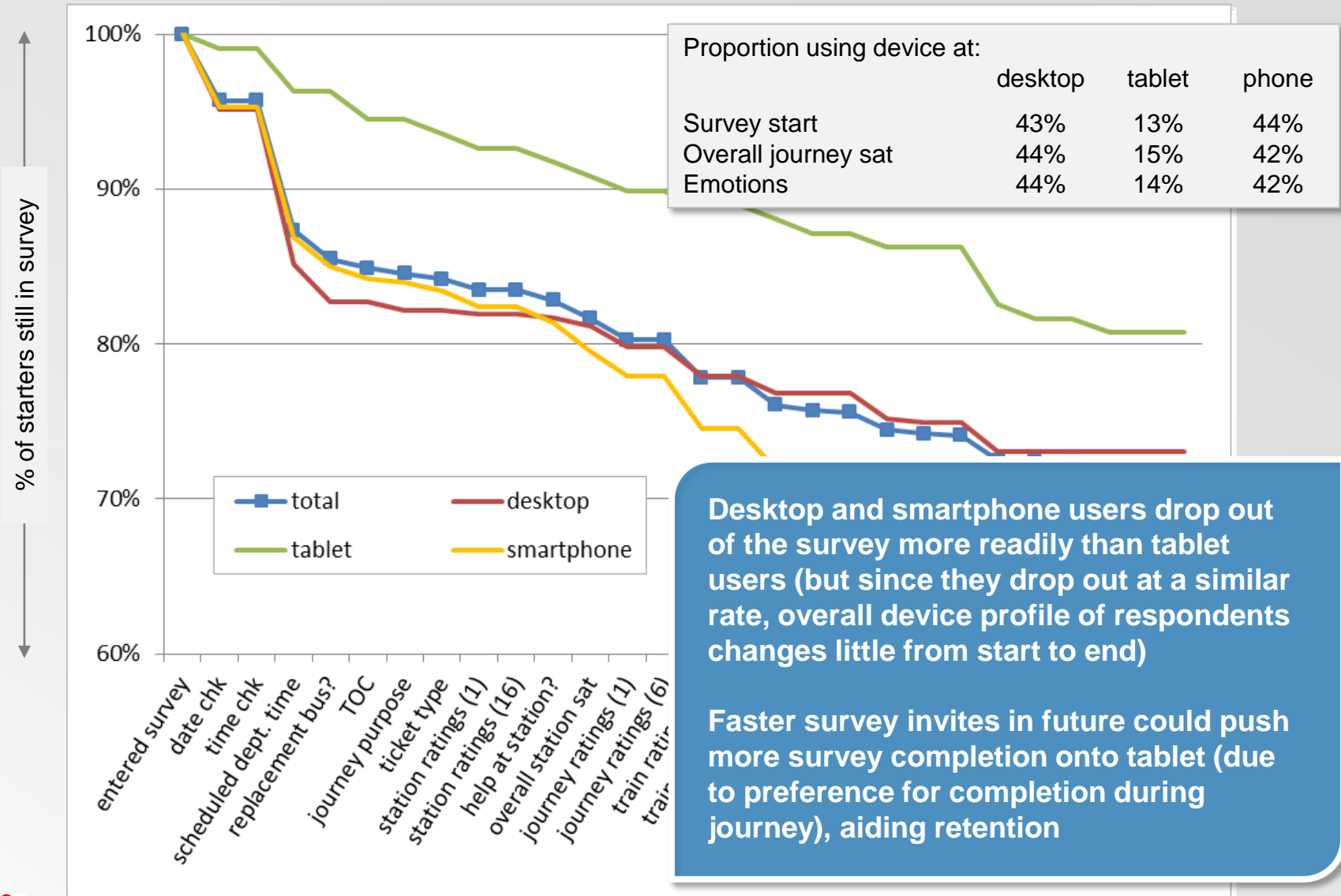
Generally, a favourable or 'no issue' reaction to layout and presentation

- Clear, looks straightforward
- Not explicitly praised as 'engaging'...but not criticised as daunting or very boring (like the old version)
- Professional, credible looking

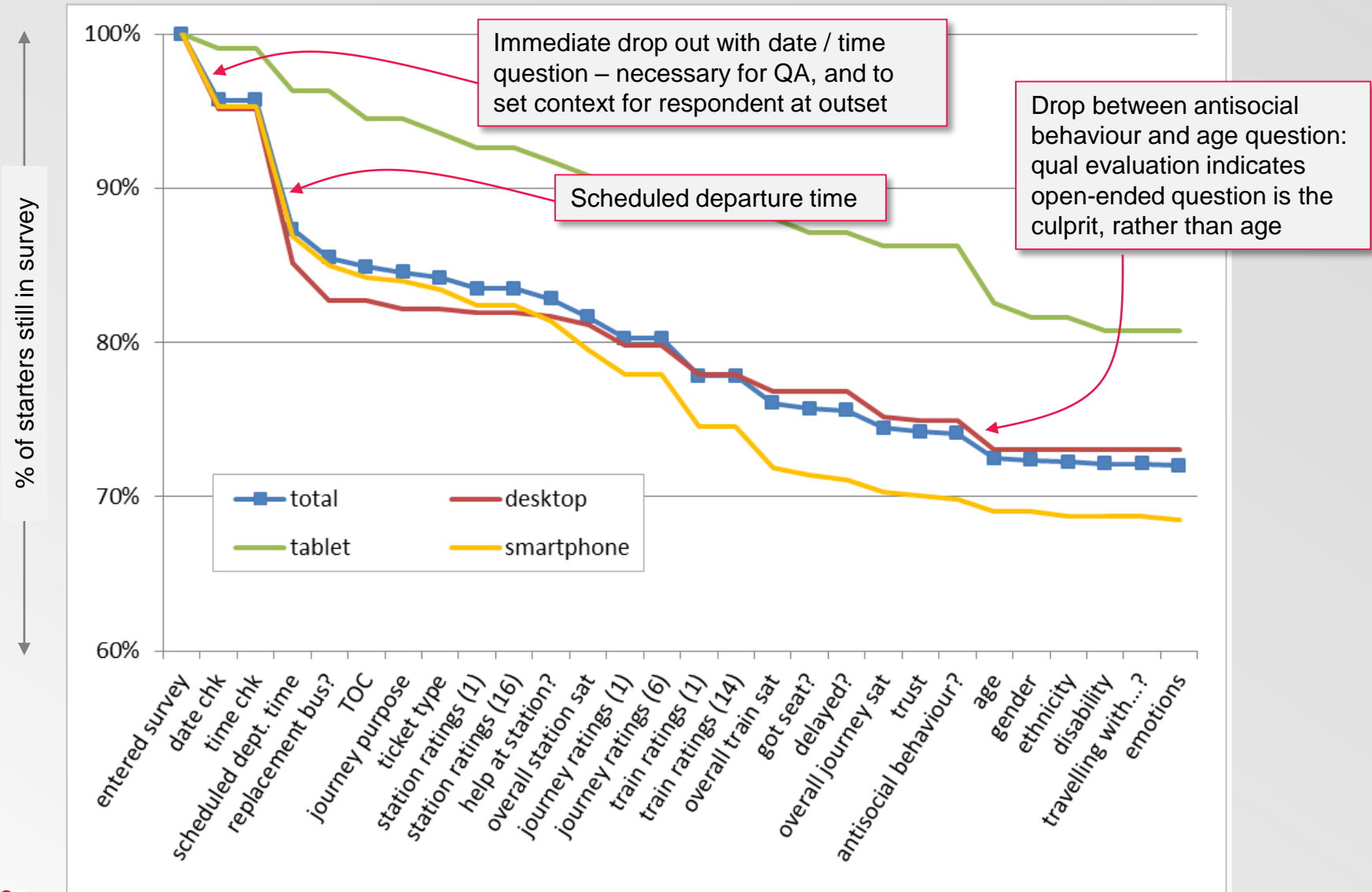
- Clear, clean
- Straightforward and easy
- Not 'exciting' (could more colour and questions layouts be used?)
- ...but bear in mind consistency = fast + easy to complete
- Few, and minor, specific issues for mobile

Improving the online survey experience

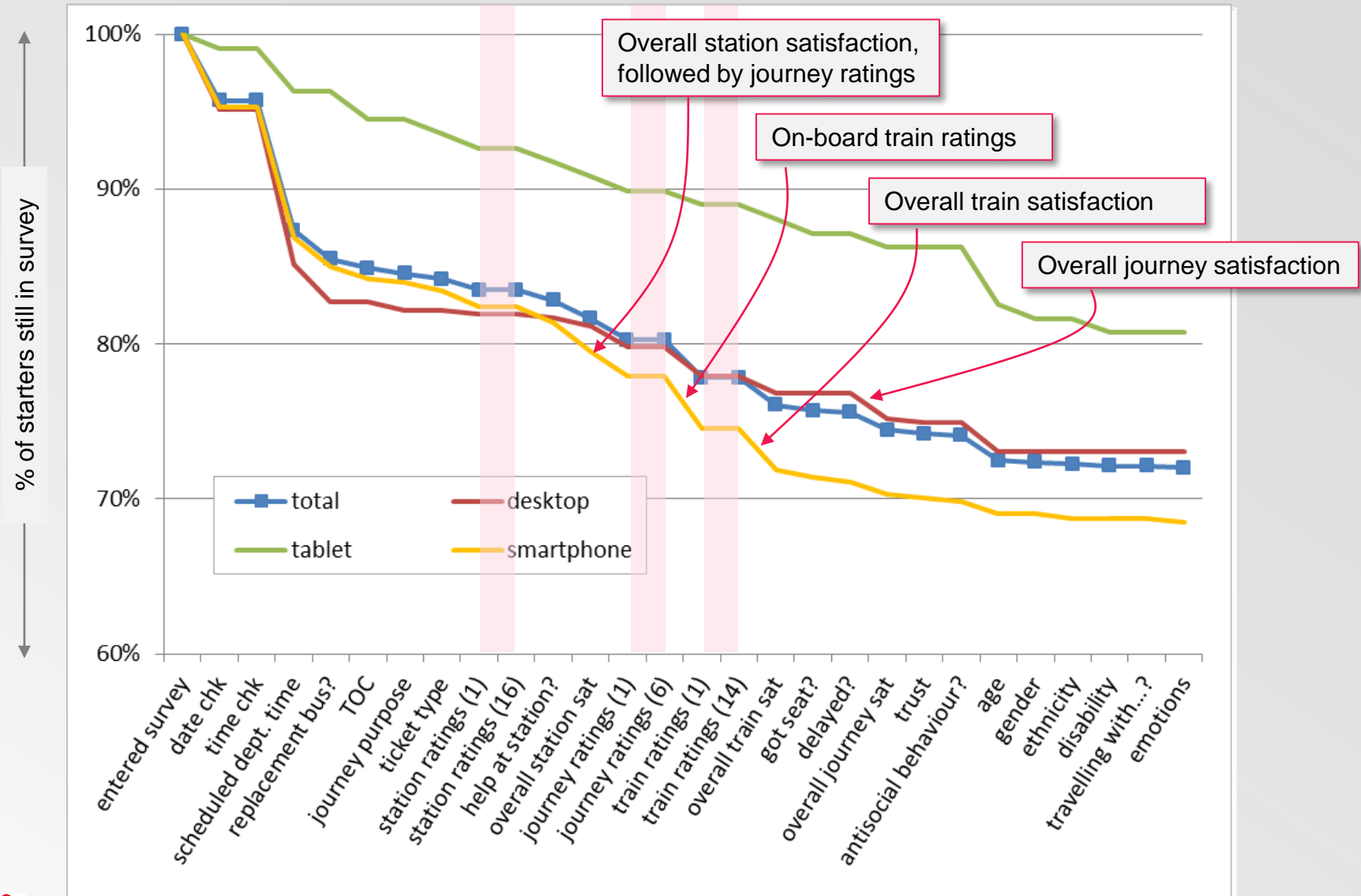
Drop out points through the survey, by completion device



Drop out points through the survey: culprit questions (1)



Drop out points through the survey: culprit questions (2)



Evaluating
respondents'
experience of the
survey to increase
response:

Questionnaire content
and scope

“Your journey today”



No issue with understanding that the questions relate to today's journey

...but many are concerned that we might miss more typical feedback

“I think it was pretty clear, the survey is quite specific when it wants you to think about your journey ‘on this day’... the questions direct you quite straightforwardly to whether you need to be thinking about kind of an overall view or this particular occasion”

Paper

“The only thing I'd like is to make more comments about my general experience ... to compare this journey with others... the context, I think that is important to people... it takes quite a long time to do that survey and it's quite frustrating... I understand about sampling...but you have to do it on people's own terms if they're giving their time... it's very important that people feel you are listening to them”

Paper

The “any other comments” question is valued

“I liked the overall opinion question... say for example on a normal Saturday I might have got into London and everything was fine,... but my overall experience of the company [due to weekday commute] is not great so it's good to give people a chance to say, yeah this journey was great but in general there are other things here which should be noted”

Paper

Could we let respondents know up front that they will have this opportunity, both to appease frustration for those who do take part, and potentially limit drop-out?

“ *Most of the questions will be about the journey you were making when approached by the interviewer. However, if you would like to feed back about more general experience, there will be opportunity for this* **”**



The survey length



Despite the shortened pilot version, questionnaire length is still a common criticism

"Maybe there's too many questions...maybe the survey is a bit on the long side"

Online, desktop

"Shorter...it was a big thick document and if I'd have seen that [before I accepted it] normally I'd have said no, and other people even said to me, 'you're brave taking that on'"

Paper

(and this is among those who have completed it and agreed to follow-up research)

(...It's not all bad, a few of our (warm) respondents had no issue with length, particularly on the paper version)

"It wasn't too long, the print was clear. Black ink on a white background, it was a lot easier to read than some fancy surveys I sometimes get from other people"

Paper

What can we do about it?

- Really clear signposting upfront and throughout?

“

This survey will cover:

- Your journey today
- Your experience at the station where you started
- Your experience on board
- ...etc

”

- Improvements to progress indicator (especially for grid questions)
- Additional variety within question format (within reason)
- Clearer notification that you can save and return later

(Suggestions are based on feedback from respondents and our observations, rather than direct suggestions from respondents themselves)

Does it matter that some people complete the survey during their journey?



Of all 26 core questions in the shorter version of the survey, in normal circumstances only 5 questions/statements within questions cannot be answered until towards end of journey

- Punctuality
- Whether got a seat for all/part of journey
- Whether delayed
- Several Qs on how well delay was dealt with (typically relevant to c. 25%)
- Overall satisfaction



...and in most cases passengers have a very good idea of how to answer, within their first few minutes



If they're taking the time to provide feedback, passengers want their feedback to be accurate

"Sorry... if the answers were messy! – I had to go back and cross them [information provision] out because when we were delayed they suddenly went quiet"

Paper

"...But there were a couple of questions that I left... about the journey itself that I wasn't able to answer, so I did a couple and finished it off when I got to work ... it was the stuff about the train itself, but all the stuff about the station, I do it every day so it was easy enough to answer those ones [while waiting for the train in the first place]."

Paper



Anecdotal feedback suggests response rate would drop off dramatically if post-journey completion was enforced (if it could be!)

"I think I've been handed them before, and I've just dropped them in my bag and haven't done anything with them, but [because I was delayed by 20 minutes] in this case I had time"

Paper



Recall of journey details and experience (especially if emotional Qs are included) is immediate if survey is completed then and there

We strongly recommend no alteration to the current notional agreement, that respondents should be guided towards completing after their journey, with acceptance that many may not

Summary...and what
next?

Key take-outs (1)

➡ **NRPS still gets a good review from passengers** – in terms of purpose and overall respondent experience

Dual data collection

➡ **Offering both paper and electronic completion options does bring benefits:**

- Broadens appeal and convenience to more passengers
- ...in particular to visually impaired people
- Enables better completeness of response (fewer missed answers / mistakes)
- Has potential to increase representation of commuters and younger people, improving weighting efficiency – and survey credibility
- Overall a dual approach enables higher volume recruitment = more efficient fieldwork

And increasing the contribution of online response could realise these benefits further – gains already made since learnings transferred from BPS Autumn '15

➡ **Note of caution: an online element does have potential to suppress satisfaction ratings a little, but:**

- **We recommend the benefits of greater representation (a closer picture of reality!) outweigh this**
- Weighting by journey purpose will control the effect, which is likely to be marginal – paper likely to remain dominant over online for the foreseeable future

Key take-outs (2)

Questionnaire enhancements: shortening the survey

- ➡ Though difficult to completely separate the impact of data collection vs questionnaire enhancements, a shorter questionnaire does not appear to have contributed to response rate or quality (unlike a much more ruthless 4-page option might)
- ➡ ...however, logically, a shorter questionnaire is more palatable for respondents, and creating variants to achieve smaller (but still robust) samples for non-core questions is relatively straightforward



We recommend implementing the 8-page questionnaire with variants

- ➡ Deliberately offering non-core questions as ‘optional’ is appreciated by a minority, but by this point in the survey most are happy to continue
- ➡ ...and while minor, there is potential impact on results from these questions



Overall we recommend not offering questions as ‘optional’, and treating the full 8 pages as standard

Key take-outs (3)

Questionnaire enhancements: the softer side of passenger experience

➡ Adding a new trust question has mixed outcomes:

- Adds a different layer to understanding passenger relationship with rail industry
- Allows respondents to express broader opinions – which is valued
- Disrupts and re-engages respondents
- ...but confuses some, and in extreme cases acts as 'last straw' if other questions have felt irrelevant or overall too long



On balance we suggest it's worth keeping – perhaps on an annual basis given sentiment unlikely to change quickly

Merits of the emotions question – as part of NRPS – are less clear:

- ### ➡
- Positive emotions add relatively little to overall journey satisfaction
 - But negative emotions can help highlight issues more keenly than the satisfaction rating, with a more personal flavour
 - Generally popular with respondents – good for overall engagement and survey image



Is NRPS too blunt an instrument for effective capture and use of emotions data (at least on a regular basis)?

Key take-outs (4)

Optimising response

➡ Response to the survey continues to be driven by:

- Opportunity for and perceived importance of feedback
- Engaging interaction with fieldworkers
- Measures to reduce respondent effort

....which must be front of mind in all development / enhancement of the survey going forward

➡ And we suggest some enhancements to improve respondent experience, to maintain engagement and boost response:

- Further tweaks to early questions to reduce effort
- Up front sign-posting of survey content, especially the up-coming opportunity to give general (not just today's journey) feedback
- Indication of average completion time for online survey
- Various small programming / formatting tweaks to reduce niggles
- Full implementation of 'accessible' survey (with some programming improvements)

Thank you....