



# Lab bias based on research findings

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**Do lab conditions bias respondents and positively influence research findings? A recent study involving both qualitative and quantitative fieldwork suggests that the effect is minimal.**

We recently worked with one of our clients, a major high street bank, in building a business case for a substantial investment in their Internet Banking (IB) platform. Preliminary qualitative user research had identified a customer appetite for a number of proposed changes to the bank's online service. However there were some reservations within the business about making such a substantial investment based upon qualitative research. Consequently, a large-scale quantitative study (1,000 bank customers), in the form of an online survey, was commissioned to increase the confidence with which our client could build a business case for the proposed investment.

The survey consisted of three main elements:

- Question scoring how customers feel about the bank's existing Internet Banking offering
- Introduction of concepts/features which would form the basis of the new IB platform. This was done with Flash animation which demonstrated each feature individually (similar in many respects to a 'site demo' walkthrough of features and functionality). Respondents provided feedback on each of these concepts/features
- Would the introduction of the proposed new features/concepts influence how customers think about and interact with the bank?

Prior to releasing the online survey to customers we ran a pilot study. This was primarily intended to allow us to iron out any bugs associated with the survey delivery and its contents. However, it also provided us with some intriguing insights into respondent behaviour.

Our pilot study consisted of a number of lab-based interviews (twelve in total) where respondents completed the survey unassisted, just as they would at home, but under observation. Once they had completed the survey our researcher then probed for feedback on the ease of completing the survey, its overall length, the quality and nature of the stimulus representing the proposed new concepts/features and the rationale behind their responses. We also incorporated some remote interviews (12 in total) following roughly the same procedure as the lab-based interviews except the respondents completed the survey on their own computer at home or at work and then provided feedback on the survey over the phone.

We very quickly realised that this approach was providing us with an excellent opportunity to compare user behaviour and responses to stimulus (in this case the online survey) in both a lab-based environment and a more natural home/work environment. One of the criticisms that is sometimes levelled at lab-based research is the influence that the lab environment has on responses provided by participants. Do respondents say nice things because they are being observed?



Through this project we were able to address this legitimate concern by conducting some “research into research”. We could compare the survey responses provided by our lab-based respondents with those provided by our 1000 field survey respondents. As a result of the pilot research, a number of questions within the survey set were changed or removed, however a sufficient number of questions remained for us to make this comparison.

The table below lists the question set for which it was possible to make this comparison, each question was scored on a scale of 1-5 and the column titled “Difference” represents the difference in mean scores between the two respondent groups. Concepts 1 to 6 are the animated demonstrations of proposed new features.

Question	Difference*	% Difference
Overall satisfaction with current Internet Banking service	-0.10	-2.00
Likelihood of recommending bank to family friends and colleagues	0.10	2.00
Likelihood of applying for products online	0.13	2.60
Overall reaction to concept 1	-0.06	-1.20
Overall reaction to concept 2	0.15	3.00
Overall reaction to concept 3	-0.27	-5.40
Overall reaction to concept 4	0.06	1.20
Overall reaction to concept 5	0.14	2.80
Overall reaction to concept 6	0.34	6.80
Likelihood of applying for products online if concepts are implemented within Internet Banking	-0.12	-2.40
Average	0.15**	2.94%**

\* = All scores based on a scale of 1-5, survey N = 1000, pilot N = 12

\*\* = All difference scores are converted to positive values to avoid a direction-of-difference skew in results

From the above table we can see that difference scores range from 0.06 to 0.34 and that overall, the differences are reasonably small. Given the size of our online survey sample (N=1,000), we can be very confident in the validity of the mean scores generated by the survey; it is therefore encouraging that there is a reasonably small variation between the two sets of scores. In addition to rating style questions, the survey also consisted of a number of non-compulsory, open-ended questions. Through our analysis of these open-ended responses, we observed similarities in the length and type of responses provided amongst both the pilot and survey respondents.

We have always been confident that findings derived from lab-based research are applicable to real-world behaviours and attitudes – otherwise we could not do what we do. The findings of this project substantiate this confidence and provide a good talking point for those who are not as readily convinced.

So was our client right to conduct a large scale quantitative study to support their business case for investment? When so much is riding on the outcome of research, it is important to feel secure about the findings. The proposed investment in this case was many millions of pounds. So, yes, from an organisational perspective, it was right to conduct the survey. However, the outcomes of this project re-enforce our belief that small-scale qualitative research, with a representative sample, provides a reliable indicator of opinions and behaviours for the wider population.