

Research: qualitative versus quantitative

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ABSTRACT: Use **qualitative** research when you want to know the range of responses to a situation: the different attitudes, emotions and reasoning that people can respond with. Use **quantitative** research when you want to know how many people think a certain way, or what the average rating for something is. In some situations, hybrid models may work.

Qualitative values

Suppose you want to know how people react to a certain thing – let’s say a proposal for a fast food chain to sponsor sport in primary schools.

Some people will think it’s outrageous, that it’s just a way of promoting junk food and that it’s driven by profit obsession.

That’s a specific structure of thought and emotion that can be described and explored via qualitative research. We might learn, for example, that a condition that the sponsors food be available at canteens in sponsored schools drives this response to be even stronger, while an undertaking not to impose such conditions could soften opposition.

Other people may say, well the schools need the money, they’re not going to get it any other way and they are already exposed to fast food advertising, so let’s be pragmatic and get the best result for the kids. These people might be more positive if the sponsor announces a new healthy eating range.

That’s a different, specific structure of thought and attitude.

As well as illuminating the various possible responses, qualitative research can also highlight the differences between them.

Basically, qualitative research helps us understand by uncovering key attitudes, emotions and patterns of thought. It can be used to explore and develop new concepts.

Quantitative values

Continuing with our fast food sponsorship example, the question we most want to answer next is, which of these two attitude groups is most common? If it comes to a vote, who wins?

We are after numbers, measurements and weightings. That’s what quantitative research seeks to provide.

Use quantitative research to assess, measure, compare and even predict.

One without the other

Qualitative only

Suppose we had just the qualitative research. We would understand each attitude group, but we would not know whether they are about equal or if one is the dominant response – or which one.

Would this information be useful?

If we wanted to change the attitude of one group or another, yes. For example, the fast food company might develop material emphasizing that their food is really not so bad and their new range (the only range they will put in schools) actually improves average nutrition and will help kids who skip breakfast to concentrate better at school.

The company won't know how many people feel this way, but it may expect some opposition and will be able to respond to and blunt that opposition. Maybe that's enough.

Maybe not: if 75% of people are offended by the sponsorship proposal, the damage it does to the company's existing business if it gets up may far outweigh the advantages of getting into schools. The company can only test and quantify this risk by doing quantitative research.

Quantitative only

Supposing the fast food company instructed its researchers to only do quantitative research. That means they wouldn't know about the attitudinal groups above. They might guess, but they could be wrong. They could easily miss the triggers to heightened or reduced opposition or support.

Quantitative research done without qualitative input is based on assumptions and broad generalizations. It could for example ask, *Do you support this proposal?* And advise the client, *65% of parents support this.* Again, this might be enough; if there is going to be a vote of parents, they know they will win. But they don't know how to finesse that victory by winning over some of the middle ground.

Cost and time

Clearly, doing first qualitative and then quantitative research gives the best information that is most likely to lead to success. It also costs more and takes longer. In the real world, it may not be possible. A choice may be necessary – or a hybrid model.

Making a choice: pros and cons

Qualitative: Pro

In-depth understanding of attitudes and emotions

Good at discovering things that are not known.

Can suggest effective words and lines for promotional use

Qualitative: Con

Substantially subjective: requires skilled and experienced researchers to gather unbiased results and interpret them effectively.

Cannot say which attitude groups are most important: may report attitude structures that are not common in the population

Quantitative: Pro

Helps determine the value of markets and marketing proposals, enabling profit projections.

Statistically reliable results can be obtained.

Quantitative: Con

Unlikely to discover new information, even about important attitudes, if they have been overlooked.

No in-depth understanding.

Can appear to confirm attitudes and expectations that have been built into the questionnaire.

Hybrid models

In some circumstances, both qualitative and quantitative information can be extracted from one piece of research.

This can happen when qualitative techniques are applied to very small target groups. For example, suppose a manufacturer wants to know what retail store managers think about new product trends. In this manufacturer's sector, let's say there are only 200 store owners nationally (counting chains as one). The manufacturer might conduct qualitative research involving say 60 store owners. Out of a potential 200, 60 is actually a reasonable sample: some qualitative results can be obtained, if the research is structured to support it.

A hybrid model can also be used when the market is large but the client is only interested in a niche segment, so the area of interest is in effect small.

Finally, qualitative data can be gathered as part of larger samples by introducing more open-ended response questions to a questionnaire (quantitative) based model, replacing tick-the-box options. However, this significantly increases costs as it extends both interview and data analysis time and requires more much more experienced interviewers.

Hybrid models have however been used with some success by Glide Strategic in a range of research situations.

Survey numbers and the qualitative-quantitative divide

Qualitative

Qualitative surveys will often have a very small sample size, say 10 to 20. People may see the number and dismiss the research out of hand.

A sample of 10 to 20 is generally not valid for making statements about numbers and proportions. If you say, “60% the sample think...” and your sample size is 10, this is probably junk information.

However, qualitative research is not about numbers and proportions and shouldn't be used this way.

It's about discovering what attitudes exist.

If you talk with 10 people and discover four main attitude groups, then talk with another 5 and discover just the same attitude groups, then you don't need a larger sample. You have reached what researchers call “saturation”, meaning that no new attitudes or factors are emerging. You've got them all. It's enough. Not enough to know what proportion of people hold each attitude, but enough to know what the range of attitudes is.

So qualitative research can be totally valid as qualitative research even with a sample under 10, if that's enough to reach saturation.

Quantitative

Usually when you want to know numbers (how many people think this or that) you are looking at quote a large group or “population” in research terms.

For example, “48% of people intend to vote for Party A” is a statement about a population of several million voters. Obviously, not all of them have been surveyed. Instead, the researchers have used a sample and made predictions about the actions of the population, based on the sample.

Now numbers really do matter. If your sample size was say 1,000 your error range might be 2 or 3 percentage points. If you're predicting the outcome of an election, 2 or 3 percentage points is all there is going to be in it, so a prediction with an error variance of 3 % is useless.

You might need a sample of 5,000 to get a really accurate prediction. (Yes, most newspaper polls have error variances greater than the margins by which elections are won and lost.)

However, not even quantitative numbers have to be really big, it depends on circumstances.

For example, suppose you want to know what organisations that help pensioners write their wills think about a new charities bequest proposal. There may be only 80 such organizations existing nationally. A sample of 40 might well be quite reliable statistically, because it is a high proportion of the total population being predicted.