



Measuring Effectiveness

Showing if a club or programme is making a difference



Hypothetical Example

- Sports club that runs evening basketball games twice a week
- For teenagers in a disadvantaged urban area
- Aiming to raise self esteem, form new social relationships, reduce antisocial behaviour and help improve educational outcomes



Use Surveys You Can Turn Into Data

Question	Answer Options
How do you feel about yourself as a person?	Great, good, OK, bad, terrible
How many close friends do you have?	>10, 5-9, 2-4, 1, none
Do you feel confident in social situations?	Always, usually, sometimes, rarely, never
How often do you get into trouble at school?	Every week, every month, every few months, once a year, never
How often do you do all your homework?	Every day, most days, once a week, once a month, never

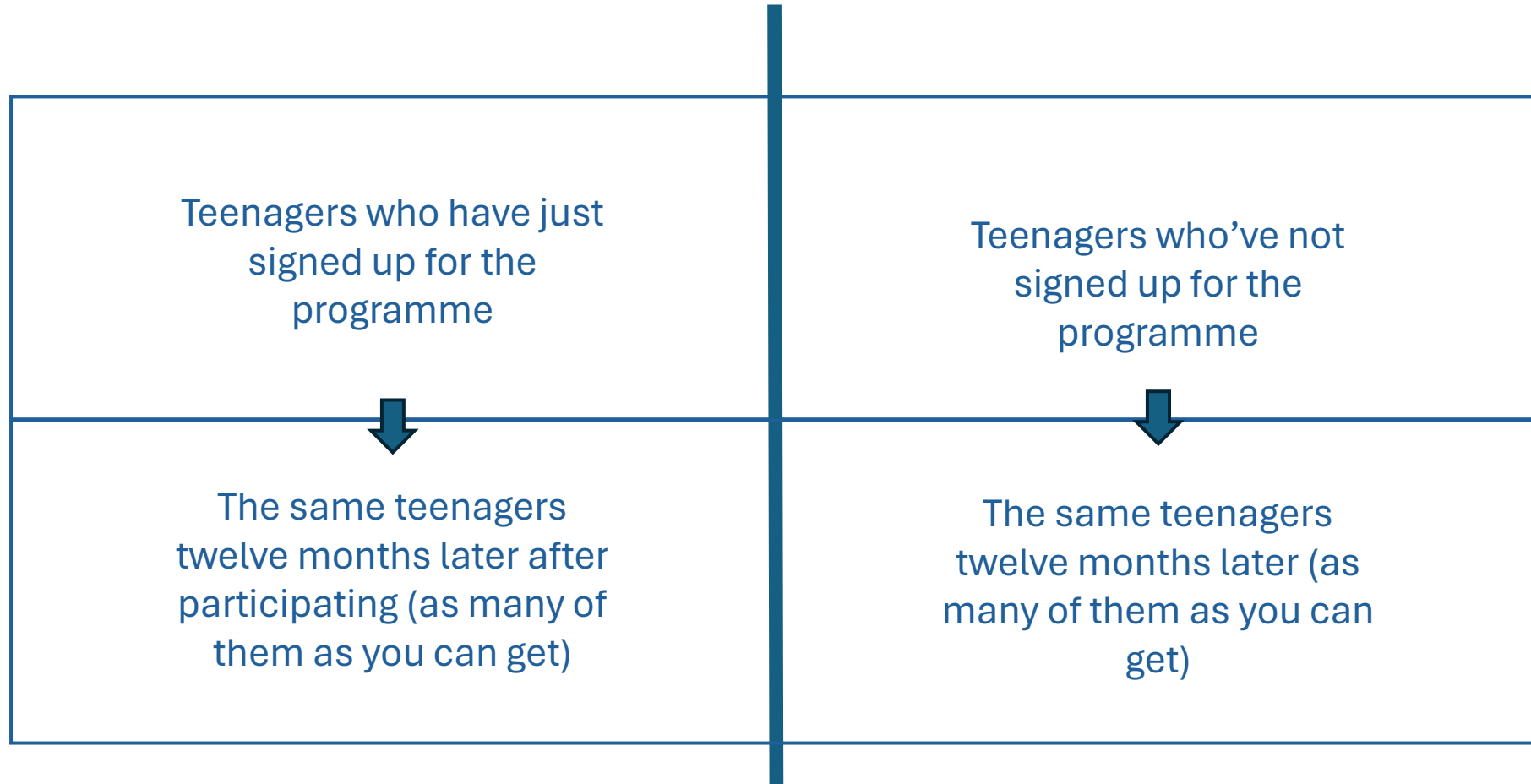
Answer options designed so that you can put them on a 1-5 scale.

Compare Different Groups

Teenagers who've taken part in the programme
>60% of the time over the past year

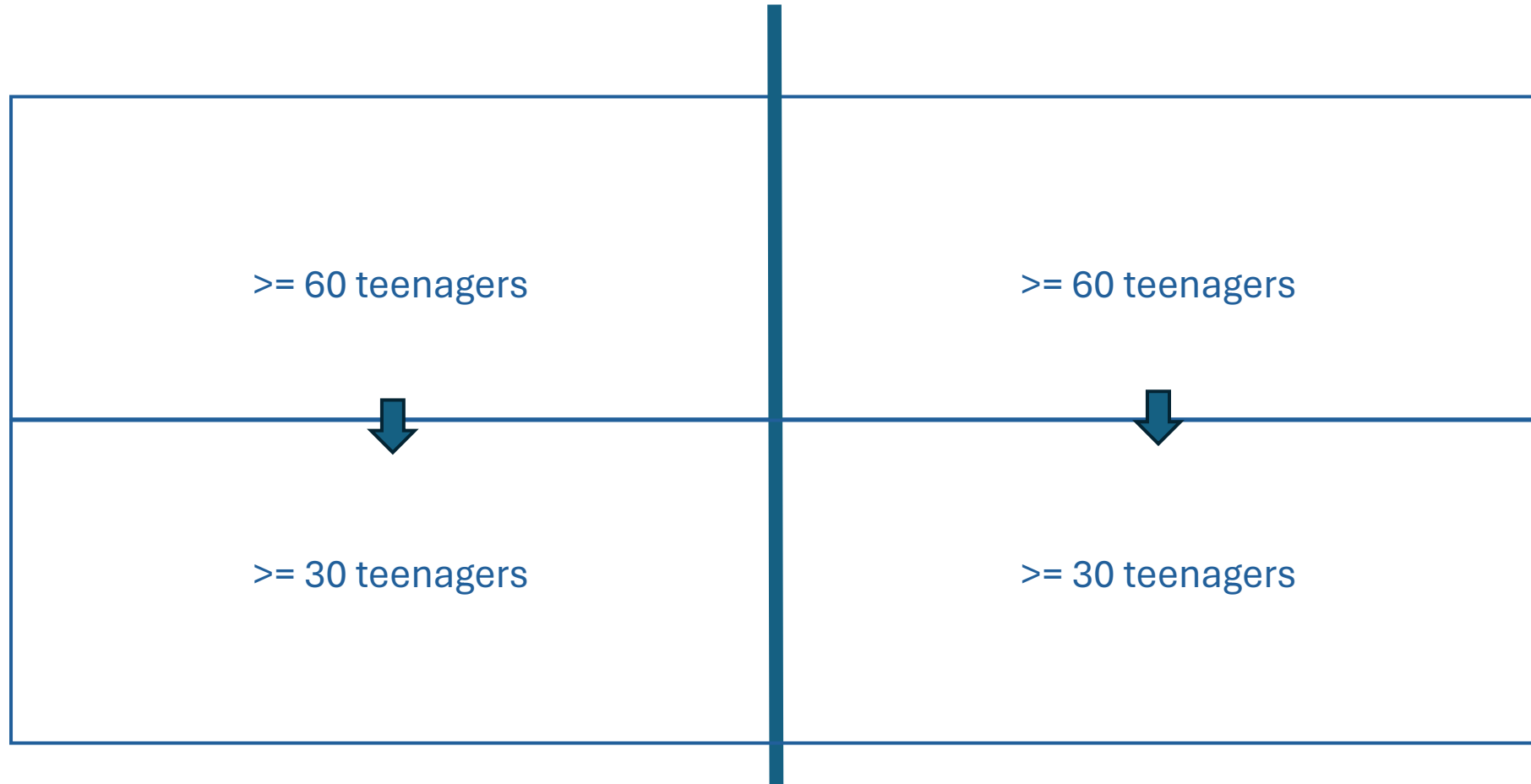
Teenagers who've never taken part in the programme

Ideally, Compare The Groups At Two Different Points in Time



Ask The Same Questions of Everyone in
Every Group.

Ensure Big Enough Samples



30 examples is the absolute minimum for any statistical test to be valid (and better to have more).

Ensure Unbiased Samples

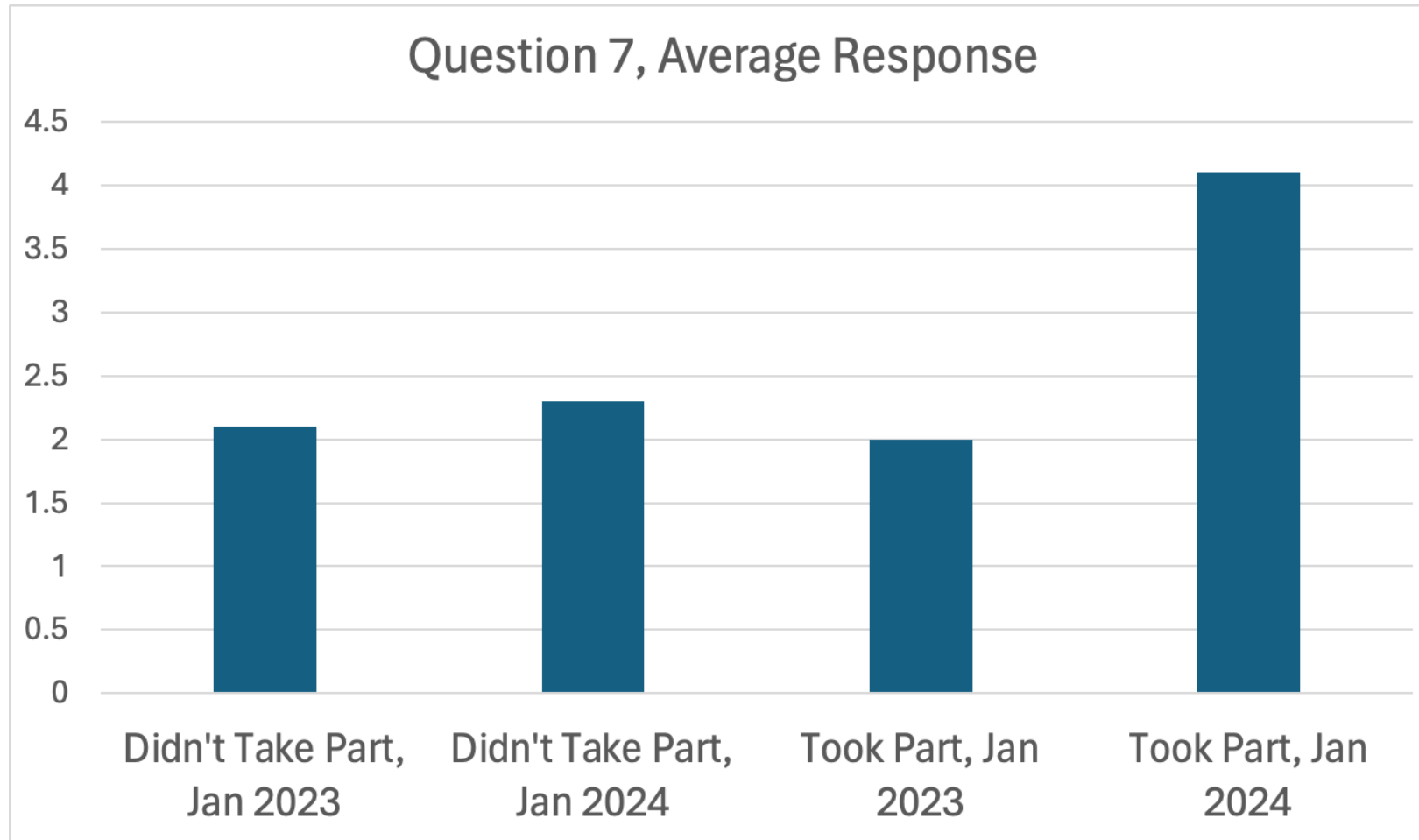
- Ensure the groups you compare were not systematically different in some way before any of them joined the club.
- E.g., work with a school where you know some of your teenagers attend, get an alphabetical list of students, and give the survey to every sixth student on the list.
- Or use the random number function, `RAND ()` in Excel on the list and include everyone this gives a random number of more than 7 out of 10 in your sample.
- Or some other approach. Don't just compare students in your club with another group you found somewhere else in a different way as the teenagers in the club may be a self-selecting group that are different in some way to begin with (e.g., more motivated, or sportier).



Define Your Columns Clearly

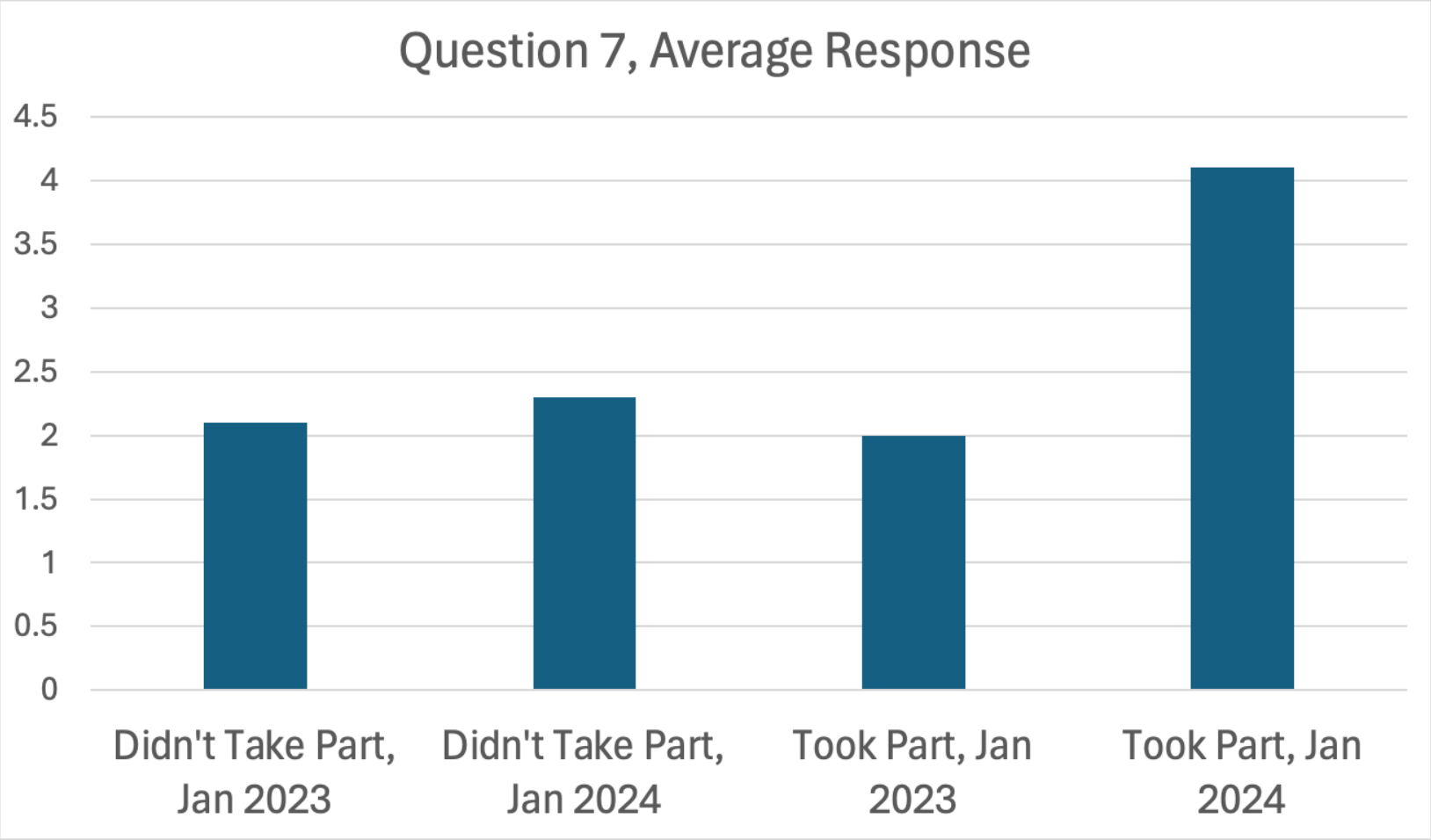
- E.g., “took part” means attended \geq 60% of the time over the course of 2023.
- E.g., “did not take part” means never signed up or attended.
- Define the different groups so that there is clear separation between them.

Compare The Groups





Do A Formal Statistical Test



P=0.451

P=0.623

P=0.002

The p value is the probability you'd see a difference this big compared to a base group due to chance alone.

Any p value less than 0.05 means there is a clear difference, unlikely to be down to random chance.

You can compare any pair of groups. E.g., if columns 2 and 4 had both gone up, you could compare them in this way to see if column 4 had really gone up by more.

Test works better if sample is bigger.

Interpret Your Results

E.g.

“Teenagers who participated in the programme report a large increase in the self esteem score compared to the control group and this difference is statistically significant. By contrast, there was no significant change in the homework completion score. We interpret this as meaning that participation in the basketball programme is having a clear positive impact on self esteem because it is allowing skill building and forming new social relationships, but this is not carrying through to better outcomes at school, so the programme is achieving some but not all of its aims’.