

Daydreams are yellow, about the creative power of psychological research ...

By Professor Jan Willem de Graaf

Professor of Brain and Technology, Saxion University of Applied Sciences, Deventer, Netherlands

Probably the most common method for obtaining information through psychological research is to postulate a position and then ask the respondent to indicate to what extent they agree or disagree. For example, the respondent will receive 5 options: (1) completely disagree, (2) disagree, (3) do not disagree / agree, (4) agree and (5) completely agree. Both for individual diagnostics and for large-scale surveys, this so-called Likert scale method is often used, with answer possibilities (the scale) varying between 3 and 7 "points".

For example, individual diagnostics involves questions such as "How often do you have thoughts about death" (almost continuously, regularly, occasionally, rarely, never) or statements like "I find it difficult to give my opinion when asked in a group where I still do not know anyone". Questions are then clustered by subject (eg in a cluster of suicidal thoughts, or social anxiety). If there are a number of questions per cluster, one can compute the internal consistency reliability. After all, it is unlikely that someone who often worries and thinks of death indicates in a different question to be seen at home as a jet of sunshine .

With surveys, the opinion of the average Dutch person, or the average visitor of your company (eg a catering company) can be determined. This is very frequently applied. With (favourable) outcomes, the results are proudly added to the ads ("customer satisfaction is very high", or "we score 4.3 on average on a 5 point"). There is, however, a lot to do with this for several reasons.

In this way social desirability often plays a role. If you have just checked out and the friendly receptionist asks you to fill in the short evaluation, you are inclined to evaluate the hotel experience differently than if you look back on it from a distance later on. There are also more mathematical objections to, for example, the conversion of nominal scale values into (interval scale) numbers. For example, is the distance between completely disagree and disagree as big as between agree and completely agree? Although social desirability and measurement-technical aspects can be serious limitations, there is, in my opinion, a much more serious objection: the measurement creates its own reality.

Suppose you want to know what the average European thinks of a completely idiotic position, for example daydreams are yellow, or blue. You ask an institute for opinion polling, which selects a representative group of respondents and presents both statements with 5 answer options each (from totally disagree to completely agree). After the survey we have an opinion: most people find daydreams (just a little) more blue than yellow (or the other way around). In this case it is clear that this is nonsense, but if a stakeholder starts marketing daydreams with the colour yellow (or blue) he may create a new reality: the association between daydream and blue. A psychologist interested in individual differences, may add a new dimension to personality psychology: people who think daydreams turn yellow are often the people who believe more in change, for example. Or something arbitrary different ...

Now you may say this is nothing but nonsense and flights of fancy that, at best, may be content for a television show or commercial advertising folders. But did you ever wonder why, for example, despite investing of millions of research funding, there is still no clarity regarding the definitions of many (psychological or psychiatric) images such as Autistiform Spectrum Disorder, or ADHD? Could it be that, at least partly, the images consist of psychological realities created by Likert scales (unconsciously)? Because often questions with Likert scales are also used to diagnose these psychological syndromes. That is why it is important to determine to what extent the "etiquettes" create their own "carriers".