

Think about which Scale you use!

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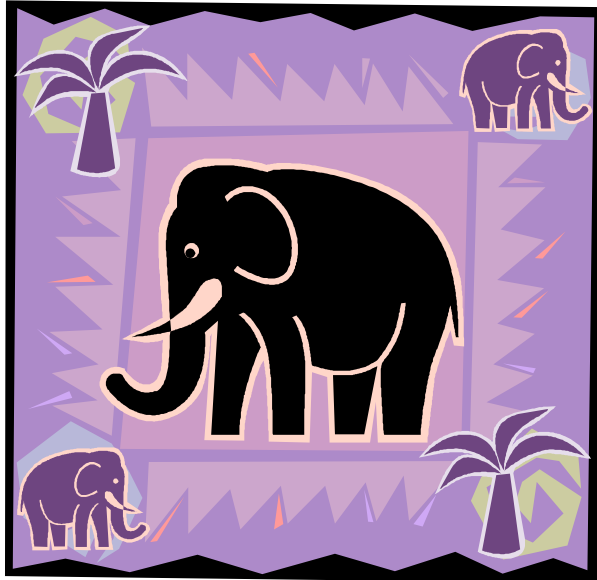


Today's topic is a “soapbox” session



And specifically, it focuses on correctly accounting for cross-national differences in scale usage in international research.

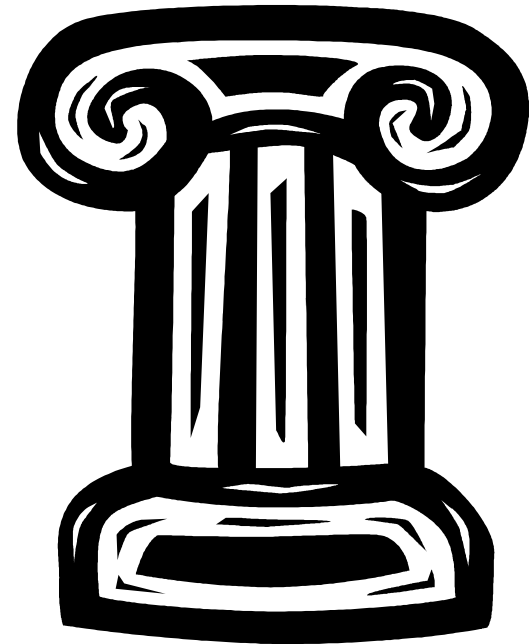
To begin ...



We can start with the story of the blind men and the elephant.

We all know the story ...

One person felt the
elephant's leg,
and assumed the
object was a pillar.



... Someone else felt the tip of the tail,
and announced ...

“It’s a brush!”



... While a third person felt only the tusk,
and proclaimed ...

“This is a
sword!”



The lesson is clear ...

The conclusion that each person drew about what they were evaluating depended on their place about the elephant.

Different people can view and report the same situation differently.

To use non-pachyderm examples:

Business school classes teach of cross-cultural differences in the assessment of risk

Not just that different cultures are differentially risk-averse, but that they define and assess risk differently

Psychological studies have shown that cultures define hyperactivity in children differently

Some cultures define behavior as extreme that other groups define as normal

To bring it back to market research ...

We all know that respondents from different nations can see things differently.

We also know that they can report things differently.

We should take care not to allow this to negatively affect the data we collect, nor the important decisions that we make based on these data.

The Context

Pharmaceutical marketing and market research
has always necessitated a global context ...

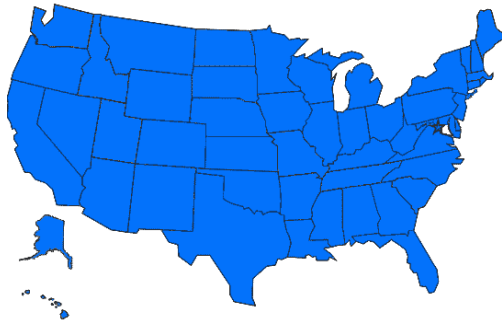
... now more than ever.

Today's economic and global climate requires
research output that is usable in today's global
context.

The need for reliable cross-national data



Strategies must be applicable
to independent sub-markets
AND to overall global markets



The traditional choice: Likert scales

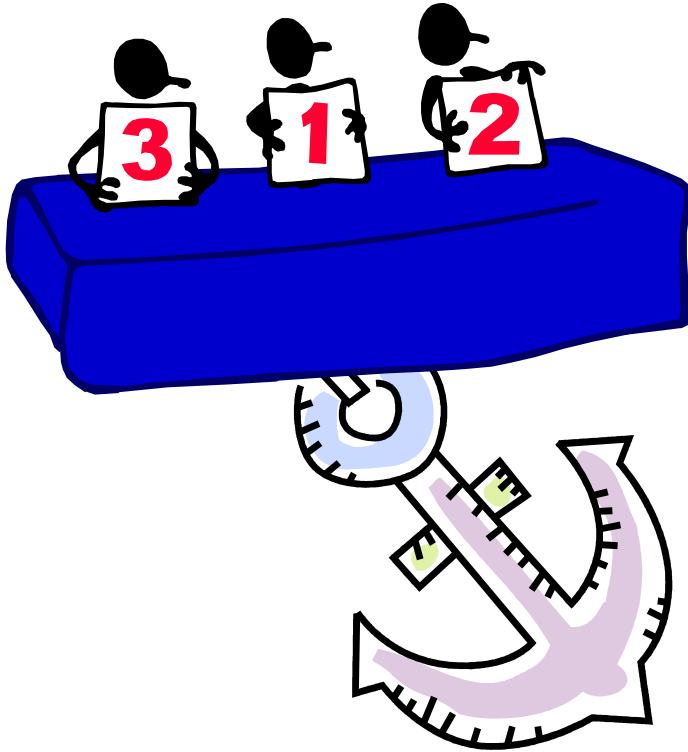
We all know Likert scales – They have a long (and mostly good!) history in social science and market research:

Please indicate how much you agree or disagree with each of the following statements using the scale below:

{{ STATEMENT }}

- 4 - Agree completely
- 3 - Agree somewhat
- 2 - Disagree somewhat
- 1 - Disagree completely

But, Likert scales are particularly susceptible to data discrepancies

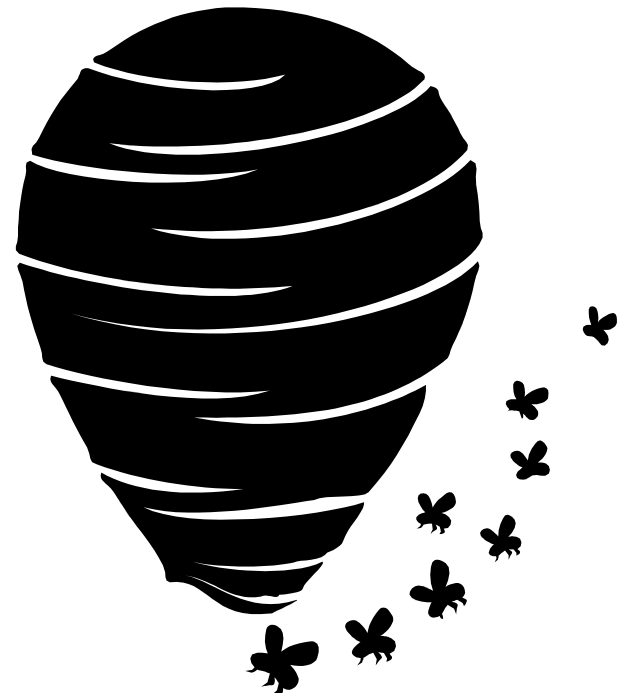


- Respondents tend to anchor their answers around limited parts of the scale
- Different respondents can have different positional anchoring
- And, there can be different positional anchoring across countries

Furthermore, traditional scales produce data “clumping”

Instead of seeing answers across the spectrum ...

Answers tend to “swarm” around a small part of the scale.



An alternative: Modeled Choice Exercises

- A good history in market research
- Myriad techniques
 - Bradley-Terry-Luce paired comparisons
 - Rasch triplet analysis
 - Maximum Difference Scaling (MaxDiff)

The techniques share the philosophy of asking respondents to choose between alternatives selected via an experimental design.

Example of a Rasch triplet exercise

Respondents choose items that are most and least important

	Most	Least
Item 1	X	
Item 5		
Item 18		X



Enables rapid evaluation of many variables

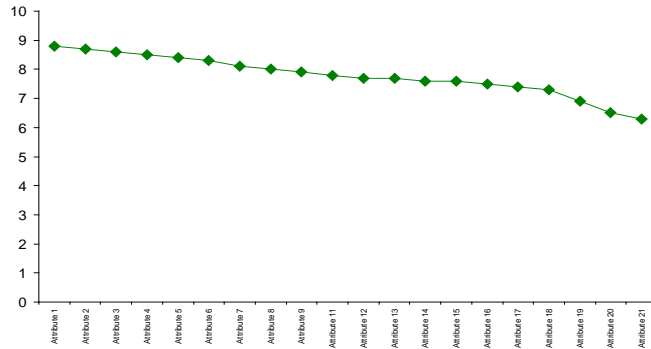
Produces agreement scores for each respondent

Modeled Choice Exercises carry many benefits

- Straight-forward tasks that are easy for respondents, but require attention
- Output is culture- and scale-independent
- Produces interpretable “winning percentage” output

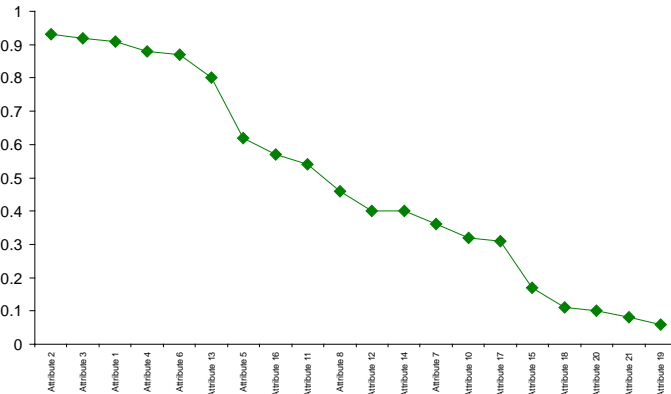
Example: Stated importance

Attribute Importance Ratings on 10 Point Likert Scale



Mean responses only use a narrow portion of a Likert scale.

Attribute Importance Ratings Using Rasch Triplet Analysis



Rasch triplet analysis produces data across the entire range.

Other techniques are available when Modeled Choice techniques are not used

- Modeled Choice Exercises should be used whenever possible
- However, sometimes Likert scales are unavoidable
 - Consistency with previous waves or other research
 - Preference of affiliate / stakeholder
 - LOI is of particular concern (Choice Exercises take longer)

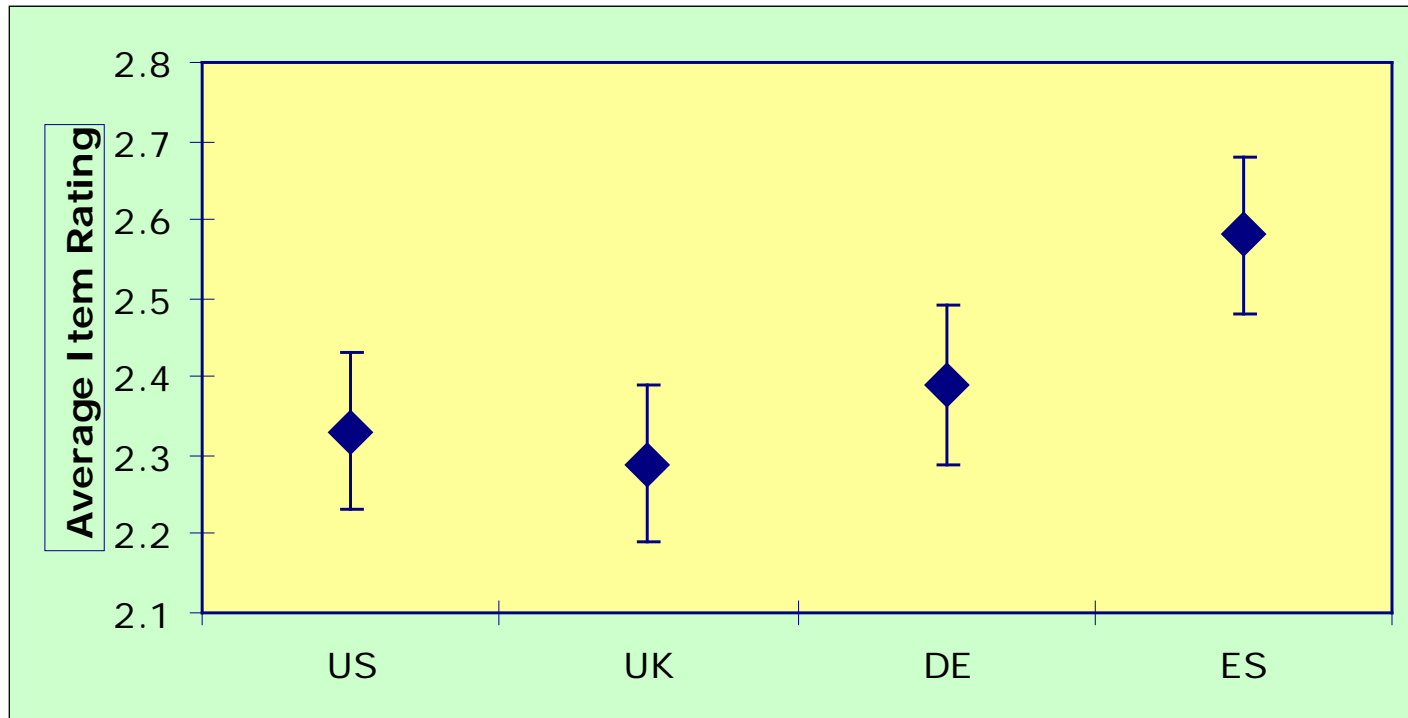
One technique is the individual-level standardization of responses

- This technique puts each questionnaire item on an identical scale for all respondents
 - Clearly shows which items are most and least preferred for each respondent
 - Reduces anchoring and individual- and country-specific biases

Example: Segmentation

- Segmentation in a specialty market
- Over 2,500 patients interviewed online
- Used 4-point Likert scales for 200+ attitude items
- Four countries:
 - US, UK, DE, ES

Raw Likert ratings showed differences by country, particularly Spain

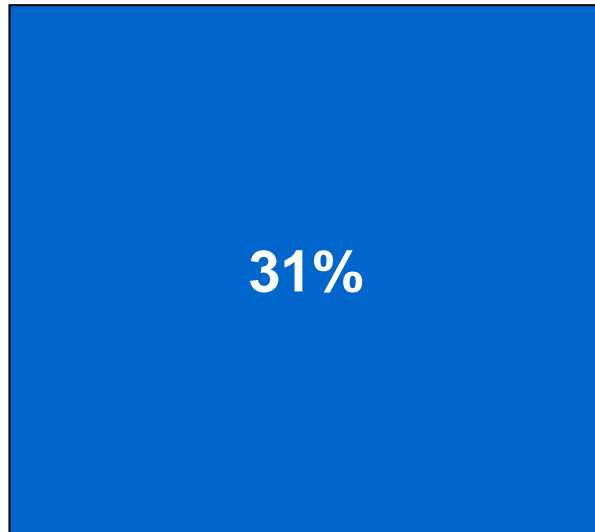


Data were standardized at the individual level ...

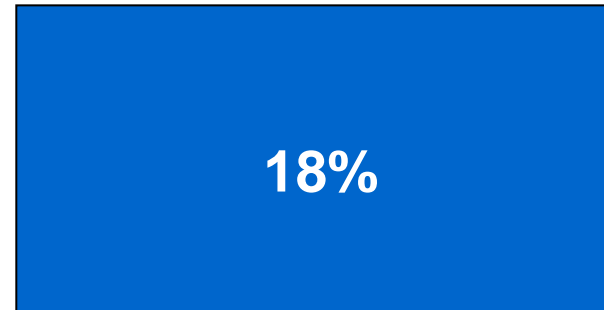
- Without such standardization, each country's scale-use bias becomes an (unintentional) differentiating variable in the segmentation
- This brings two risks:
 - Mis-assigning respondents to segments
 - Producing mis-guided segment solutions

... and the positive-themed “Content and Managing” segment was less dominated by Spanish respondents.

Raw Likert Data



Post-Standardization



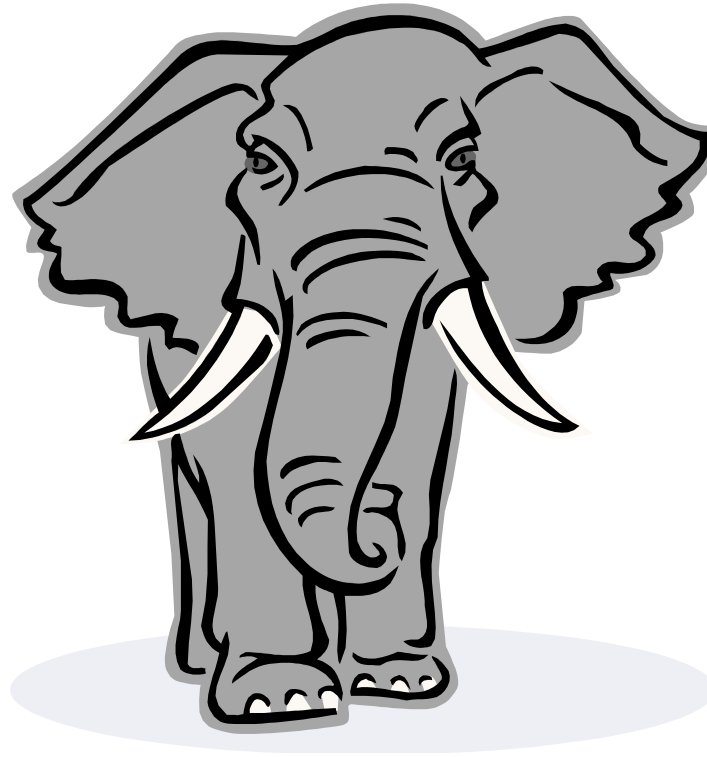
In conclusion

Don't rely on traditional Likert scales for attitude measurement.

Wherever possible, use Modeled Choice techniques.

If Likert scales are used, work to minimize their negative effects.

And in the end



We'll see the whole elephant.

Thank You!

For more information, please contact . . .



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