



Scaled questions

Description

Using numbers assigned to identify categories, rank order, or equal intervals, a scaled question provides a set of response options that allows you to measure attitudes, opinions, personalities, and descriptions of people's lives and environments.

Developing Scales

Present response choices in a logical and consistent order to avoid confusion. Within a range of choices, it is good practice to make the relative differences between response choices roughly equivalent.

Although some surveys label only the endpoints of a rating response scale, it is better to label each point along the response scale, so the meaning of each rating is clear (except for semantic differential scales)

Using a greater number of response scale points increases the variability in responses, which gives the investigator more detail about the variables under study. Choosing the number of response scale points depends on three considerations:

1. Number of items in the survey
 - Surveys with many items should have a narrower response scale while surveys with few items may have a wider response scale.
2. Ability of respondents to discriminate among response choices
 - Wider response scales can make it harder for respondents to decide among alternatives.
 - Word choice can also make it difficult to discriminate among alternatives (e.g., “several,” “many,” and “few”).
3. Researcher's goal
 - Use an odd-number of response choices to allow respondents a “neutral” option.
 - Use an even number of response choices so that respondents are forced to choose one side of the response scale, preventing neutrality.

Additional Information

DeVellis, R.F. (1991). *Scale Development: Theory and Applications*. Newbury Park, CA: Sage Publications, Inc.

Punch, K. F. (2003). *Survey research: The basics*. London: Sage Publications Ltd.

Spector, P.E. (1992). *Summated Rating Scale Construction: An Introduction*. Newbury Park, CA: Sage Publications, Inc.

Types of Response Scales

Type	Description	Advantages	Disadvantages	Example
Likert	<ul style="list-style-type: none"> Measures attitudes and opinions Provides statements to which respondents indicate degree of agreement or disagreement Usually contains strongly-worded statements that can be phrased positively or negatively 	<ul style="list-style-type: none"> Contains items that are easily understood and quantified Accommodates neutral or undecided responses Provides a meaningful way to group a series of items Enables computation of overall scores 	<ul style="list-style-type: none"> Requires a great deal of decision-making Fails to measure true attitudes if respondents are concerned with looking good or meeting expectations of the instructor 	<p>The University of Texas is committed to providing outstanding undergraduate education.</p> <p>__ Strongly Agree __ Agree __ Neutral __ Disagree __ Strongly Disagree</p>
Semantic Differential	<ul style="list-style-type: none"> Usually measures a series of attitudes toward a complex concept Typically uses a 7-point response scale with bipolar adjectives at each end 	<ul style="list-style-type: none"> Identifies particularly favorable or objectionable aspects of multi-faceted issues and concepts Provides an overall response scale score (average) for the concept 	<ul style="list-style-type: none"> Only useful for questions involving bipolar opposites (e.g., interesting/dull, simple/complex, active/passive) Adjectives may have different meanings for different respondents 	<p>Please rate exam review sessions this semester by circling a number for each description:</p> <p>Efficient -3 -2 -1 0 +1 +2 +3 Inefficient</p> <p>Useful -3 -2 -1 0 +1 +2 +3 Useless</p> <p>Engaging -3 -2 -1 0 +1 +2 +3 Boring</p>
Frequency	<ul style="list-style-type: none"> Indicates the frequency of a behavior 	<ul style="list-style-type: none"> Enables measurement of behaviors rather than attitudes 	<ul style="list-style-type: none"> Does not measure reasons for behavior Frequency ratings may have different meanings for different respondents 	<p>How often do you review your notes the same day as you have attended a lecture?</p> <p>__ Never __ Rarely __ Sometimes __ Often __ Always</p>
Importance	<ul style="list-style-type: none"> Used to find the importance of goals, objectives, or activities. 	<ul style="list-style-type: none"> These categories simplify analysis, survey construction, and data entry. Works well to force respondents to give meaningful replies. 	<ul style="list-style-type: none"> Little variance is allowed and statistical uses are limited. Does not provide much discrimination between items. 	<p>How important is...?</p> <p>_ Very Important _ Somewhat Important _ Not Important</p>
Quality	<ul style="list-style-type: none"> Provides rating of quality 	<ul style="list-style-type: none"> Enables direct evaluation 	<ul style="list-style-type: none"> Requires a great deal of decision-making Fails to measure true attitudes if respondents are concerned with meeting expectations of the instructor 	<p>Overall, how would you rate the quality of instruction in this course?</p> <p>__ Excellent __ Very Good __ Good __ Fair __ Poor</p>