

Collecting Data Using Attitudinal Scales



Topics covered

- Attitudinal scales in research
- Function of attitudinal scales
- Developing attitudinal scales
- Types of attitudinal scales
 - Likert scale
 - Thurstone scale
 - Guttman scale
- Attitudinal scales and measurement scales



Attitudinal scales in research

- Helps to find out how people feel towards certain issues and situations (level of satisfaction, agreement, positive/negative attitude, etc.)
- Quantitative research explores types of attitudes, how many people have a certain attitude and intensity of attitude
- Qualitative research explores the spread of attitudes and establish types of attitudes
- Attitude scales are prevalent in quantitative research such as the Likert scale



Function of attitudinal scales

- Measure of intensity of respondents' attitudes toward the various aspects of a situation or issue
- Provide techniques to combine the attitude toward different aspects into an overall indicator



Developing attitudinal scales

1. Which aspects of a situation or issue should be included when seeking to measure an attitude towards an issue or problem?
2. What procedure should be adopted for combining the different aspects to obtain an overall picture?
3. How can one ensure that a scale really is measuring what it is supposed to measure?



Types of attitudinal scales

- The summated rating scale, also known as the Likert scale;
- The equal-appearing interval scale or differential scale, also known as the Thurstone scale;
- The cumulative scale, also known as the Guttman scale.



Likert Scale

- Most common attitudinal scale
- Measures intensity of attitude toward an issue
- Each statement has equal attitudinal value
- Measures in categories or on a numerical scale
- 1, 2 or 3 dimensions of attitudes (e.g. 2 as in positive and negative)
- Scores will be assigned to the attitude scale if calculations are used for weighting responses



Figure 10.1 An example of a categorical scale

<i>The lecturer:</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Uncertain</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
1 Knows the subject well	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Is unenthusiastic about teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Shows concern for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Makes unreasonable demands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Has poor communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Knows how to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Can explain difficult concepts in simple terms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Is hard to approach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Is liked by some students and not by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Is difficult to get along with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 10.1 An example of a categorical scale



Figure 10.2 An example of a seven point scale

The lecturer:

1 Knows the subject well	7	6	5	4	3	2	1
2 Is enthusiastic about teaching	7	6	5	4	3	2	1
3 Shows no concern for students	7	6	5	4	3	2	1
4 Demands too much	7	6	5	4	3	2	1
5 Communicates well	7	6	5	4	3	2	1
6 Knows how to teach	7	6	5	4	3	2	1
7 Can explain difficult concepts in simple terms	7	6	5	4	3	2	1
8 Is seldom available to the students	7	6	5	4	3	2	1
9 Is liked by some students and not by others	7	6	5	4	3	2	1
10 Has published a great deal	7	6	5	4	3	2	1

Figure 10.2 An example of a seven-point numerical scale



Figure 10.3 An example of a scale with statements reflecting varying degrees of an attitude

1: The lecturer

- (a) knows the subject *extremely well*
- (b) knows the subject *well*
- (c) has an *average* knowledge of the subject
- (d) *does not know* the subject
- (e) has an *extremely poor knowledge* of the subject

Figure 10.3 An example of a scale with statements reflecting varying degrees of an attitude



Other scales

Thurstone scale:

- Calculates an attitudinal value for each statement
- Mean score is recorded for each statement
- The mean score is equivalent to the attitudinal value assigned by a group of judges
- Reflects absolute rather than relative attitudes

Guttman scale:

- Cumulative scale which is rarely used



Attitudinal scales and measurement scales

Table 10.1 The relationship between attitudinal and measurement scales

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Attitudinal scales	Measurement scales
Likert scale	Ordinal scale
Thurstone scale	Interval scale
Guttman scale	Ratio scale

