# Likert-Type Scale

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The Likert-type scale is a widely used psychometric instrument for measuring attitudes, opinions, or perceptions in research contexts. It presents respondents with a series of statements accompanied by symmetrical response options, typically structured on a five-point scale ranging from "Strongly Disagree" to "Strongly Agree". Each point on the scale represents a gradation of agreement or sentiment, allowing researchers to transform subjective responses into quantifiable data for statistical analysis and interpretation.

Likert scale    measurement    psychometrics    scale development    questionnaire design

survey design

## Overview of the Likert Scale

The Likert scale is a widely utilized rating scale for measuring unobservable constructs, such as attitudes, opinions, or perceptions through a structured response format [1]. It consists of a series of statements or questions, each accompanied by a symmetric range of response options that allow respondents to indicate their level of agreement or disagreement. A typical five-point scale includes options ranging from "Strongly Disagree" to "Strongly Agree", with intermediate responses such as "Disagree", a neutral "Neither Agree nor Disagree", and "Agree". The term "Likert-type scale" encompasses both the original methodology introduced by Rensis Likert and its variations, including scales with different numbers of points (e.g., 4 to 7 points).

The Likert-type scale is a valuable research tool due to its ability to capture human sentiments in a standardized manner, enabling respondents to express varying degrees of opinion rather than binary choices. By transforming subjective qualitative data into quantifiable metrics, it facilitates detailed data collection and robust statistical analysis. Furthermore, aggregating responses across multiple items offers a comprehensive measure of underlying attitudes or opinions. This versatility makes the scale an indispensable tool in disciplines such as psychology, marketing, social sciences, and healthcare, where understanding participants' perspectives is critical.

## Historical Background and Development

The Likert (pronounced as "Lick-urt") scale was developed by American social scientist Rensis Likert (1903–1981) in 1932 as part of his doctoral thesis, *A Technique for the Measurement of Attitudes* [2]. In subsequent work, Likert and his colleagues refined the process by simplifying the Thurstone scaling technique, a contemporary method for measuring latent variables such as attitudes on a continuous scale.

The Thurstone method, one of the earliest techniques for measuring latent variables such as attitudes on a continuous scale, required experts to evaluate and assign scale values to statements, making it resource-intensive and dependent on complex scoring procedures. The Likert scale addressed these challenges by introducing a simplified scoring system, where numerical values were directly assigned to participant responses. This approach made the process more efficient, consistent, and reliable, representing a significant advancement over the original Thurstone method [3].

Over the decades, the original scale has undergone numerous adaptations to meet diverse research needs. These include even-numbered scales, which eliminate the neutral midpoint and compel respondents to take a definitive stance, as well as seven-point scales that offer greater response granularity. Moreover, the scale's language and response options have been customized to align with specific research contexts, shifting from the traditional agreement-based format to alternatives that measure frequency, importance, satisfaction, and other perceptual dimensions. Despite its widespread adoption, debates continue regarding the appropriate analysis and interpretation of Likert-type scales, particularly whether their response options should be treated as ordinal or interval data [4].

## References

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