

# Is the Likert Scale Still IN in 2025? Revisiting Usage, Interpretation, and the Rounding Paradigm

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## ABSTRACT

The Likert scale remains one of the most valuable instruments for studying education and the social sciences, as it is simple to use, quick to administer, and adaptable. Its effectiveness will be determined by how successfully it is used in 2025. Experts debate whether it is beneficial or detrimental to group data and analyze it using parametric tests. Some argue that this strategy is easily abused, particularly when individuals believe that decimalization implies completely revealing what people think. This study found that these kinds of actions can give individuals an inaccurate impression about how accurate something is and influence how decisions are made in business, education, research, and politics. To address these issues, a rounding-based understanding technique is proposed. It employs mode-based tests, ordinal reasoning, and rounding to whole numbers to ensure that the findings are accurate. To maintain the validity and utility of the Likert scale, researchers must apply it in a methodologically sound, unambiguous, and ethically correct manner. *Keywords: Likert scale, ordinal data, interval scale, measurement integrity*

## INTRODUCTION

Educational institutions worldwide are navigating a rapidly evolving research environment shaped by machine learning, artificial intelligence, data analytics, and continually expanding digital infrastructures. To support evidence-based decision-making in curriculum, assessment, policy, and pedagogy, researchers are expected to produce faster and more trustworthy insights in this dynamic environment. Real-time dashboards, adaptive surveys, and sophisticated data visualization tools are now commonplace. However, amid all these methodological and technological advancements, one question subtly calls for our attention: Does the Likert scale remain "in"?

At first glance, this question may seem strange. After all, the Likert scale is almost a century old, having been first used by Rensis Likert in 1932. Nevertheless, it remains one of the most reliable tools in the social sciences, psychology, education, and even business. We still ask administrators, parents, teachers, and students to rate their agreement with statements like "I feel safe in school" or "The teacher explains the lesson clearly." Following that, these figures are tallied and averaged, and interpreted as measures of engagement, satisfaction, or perception.

However, that is where the issue is. The Likert scale is often applied without a thorough understanding. Its simplicity is both a strength and a weakness. Although it provides a methodical approach to measuring subjective opinions, it is also prone to misunderstanding, particularly when researchers treat it as producing interval-level data instead of ordinal data. According to recent data, scale transformations alone can produce wildly disparate survey analysis results (Kaiser & Lepinteur, 2025). Similarly, to prevent methodological over-reliance on scales, ethnography and qualitative context should be incorporated with survey data (Lowis, 2025).

The debate about whether the Likert scale will remain useful in 2025 has extended beyond technical discussions among researchers. It has evolved into a conversation that encompasses philosophy, technique, and teaching. The main point is simple but essential: can a tool designed nearly a hundred years ago still demonstrate how complicated people's ideas and feelings are today? This study gives a careful but clear answer: yes, the Likert scale will still be "in" in 2025, but only if people use it more carefully and thoughtfully.

### **Problem Statement**

For a long time, the Likert scale has been a mainstay in research in the social sciences and education. Despite its widespread use, experts remain divided on the optimal approach to comprehend and implement it. One major issue is how to handle the data: although the scale gives ordinal responses, most researchers still calculate decimalized averages as if the data were interval in nature. This strategy might make human answers too easy, potentially leading to inaccurate conclusions and consequences. It would be premature to eliminate the Likert scale concurrently. Recent methodological advancements—such as non-parametric statistical techniques, item response theory, and mixed-methods triangulation—offer opportunities to improve its use and strengthen its validity. The real question is not whether the Likert scale will still be around in 2025; it is what situations it should be utilized in, so that people can still trust it. The Likert scale is now the most common method for determining what people think, feel, and value in various fields, including education, psychology, health sciences, political studies, and practical research. Many people use it to gauge others' opinions on various topics. Many people still do not understand it; the methods used were incorrect, and the results may not be accurate or reliable (Feuerstahler, 2023; Abreh et al., 2025; Alabi & Jelili, 2023). Many experts remain uncertain whether Likert data should be classified as event-based or number-based. Most of the time, this ongoing argument leads to ineffective study methods and poor results (Huh & Gim, 2025; Yamashita, 2022). Jebb et al. (2021), Dauzón-Ledesma and Izquierdo (2023), and Zeng et al. (2024) have all said that when a scale is made or looked over, it should be accurate from a psychological point of view, take into account cultural context, and be mindful of how the items are worded. Researchers have used Best-Worst Scaling, binary polls, and forced-choice designs, among other scaling methods, to get more detailed answer trends (Heo et al., 2022; Yang & Yagi, 2024; Suárez-García et al., 2024; Rosenthal-von der Pütten et al., 2021). There haven't been enough tests of these ideas in a wide range of study groups yet, despite their promising nature. Z-numbers and tree-based models are two new computer tools that enable us to view Likert data in different ways. They do this by better showing how doubt and reaction change over time (Anjaria et al., 2025). These ideas have considerable promise, but they are not often utilized. The old-fashioned Likert test remains the most widely used method. There is a gap here that makes it clear we need a better methodological synthesis and empirical review to ensure that both old and new methods are used in a moral and helpful way. People still use the Likert scale for various purposes, such as polls (Aybar et al., 2024), advice studies (Abreh et al., 2025), imaging (Asfuroğlu et al., 2022), and picture studies (South et al., 2022). The scale is easy to use, but it does come with some risks. When academics use data too quickly and fail to keep pace with changes in psychometrics, cultural sensitivity, or other areas, they may obtain data that is not as accurate or even fabricated. To be responsible, researchers need to excel in a particular area and be transparent about how they utilize it.

Why isn't there a single framework that encompasses all of these functions: defining everything, measuring scientific progress, comparing different methods, and utilizing Likert ratings in various ways? This is the focus of the study. A mistake in a Likert scale study needs to be corrected to ensure it remains scientifically sound and applicable in real-life settings. This is especially important right now because we need more data.

### **Research Objectives**

We aim to learn how to utilize Likert scores in at least five different areas, including health, education, technology, and other relevant fields.

### **Literature Review**

In 2025, Likert scales remain useful, but they must be employed with caution. They all demonstrate the same thing: the Likert scale remains useful, but one must exercise caution when using it.

### **There are bad ways to use Likert means in statistics. Old habits die hard.**

People still use the mean to show the central trend in Likert data, even though we have told them many times not to. The incorrect approach is to use intervals, as Likert responses are already ordered. Although they are not exact, researchers still discuss numbers like 3.47 or 4.21 as if they were. South et al. (2022) demonstrate that poor management also affects the presentation of information, as fractions are often displayed in misleading

ways. Zeng et al. (2024) also note that even slight changes in how a question is phrased can significantly impact the answers, which contradicts the notion that distances between scale points are equal. DIF analysis is employed by Effatpanah, Ravand, and Doebler (2025) to demonstrate that Likert scales may not function uniformly across all groups. This means that decimalization is a significant contributor to confusion.

Intervalists argue that summed-up Likert data appear to be interval-level measurement, which implies that means and parametric tests can be applied. For example, the analytic ranking process ranks medical education programs using Likert scales (Ponsiglione et al., 2022). Still, different points of view disagree with this assumption. For example, Suárez-García et al. (2024) show that binary polls can sometimes get student views more accurately. This means that it may be best to use a variety of methods instead of just one.

#### **Why is this important in 2025?**

Polls are crucial now, in 2025. What if you change a small thing about how the Likert scale is used and the law, how money is given out, or how jobs are filled? In 2023, many people are discussing the importance of colleges and universities using certified Likert-type polls to obtain accurate results. Hirschthal-von der Pütten et al. (2025) demonstrate that the type of method used—whether it is Likert, binary, or forced-choice—has a significant impact on the study's results. This is especially true when considering how people interact with robots. These results also make it clear that you should be very cautious when interpreting Likert data.

**The Likert scale is widely used in educational, healthcare, and social studies, but there is still some disagreement about it.** Many experts, including Feuerstahler (2023), Alabi and Jelili (2023), and Robinson (2024), advise against repeating the same mistakes. Additionally, people are still uncertain whether Likert data should be classified as accurate ordinal data, continuous data, or interval data. It has been demonstrated that more specific and narrow uses can aid larger projects, as shown by Huh and Gim (2025), Yamashita (2022), who used Rasch modeling, and Lehmann and Vogt (2024), who employed compositional methods. Three studies indicate that we must exercise caution as we proceed with the scale growth process. These are Ponsiglione et al. (2022), Dauzón-Ledesma and Izquierdo (2023), and Jebb et al. (2021).

**It's more important than ever now that computers and tests have come a long way.** It has been found that the words used in items, the different ways that items work (Effatpanah et al., 2025), and the various steps that replies take (Zeng, Wen, & Jeon, 2025) all have a significant effect on the results. Zeng, Wen, and Jeon (2025) and Z-numbers (Anjaria, 2022). Two new tools that help us understand questions and complexity in new ways. Heo et al. (2022), Yang & Yagi (2024), Suárez-García et al. (2024), and Rosenthal-von der Pütten et al. (2025) all demonstrated that Best-Worst Scaling, binary polls, and forced-choice approaches can yield different outcomes. Aybar et al. (2024) used the scale in politics, Abreh et al. (2025) in therapy, Asfuroğlu et al. (2022) in imaging, South et al. (2022) in visualization, and Lowis et al. (2022) in a mixed-methods study. However, it can be dangerous if misused.

**The numbers show that the Likert scale is a valuable and flexible tool if it is made, tested, and studied correctly.** Researchers interested in cross-cultural truth should be willing to utilize it with more effective tools, including psychology, computers, and other methods. As long as the Likert scale is used correctly, facts will still be used to decide what people think. It could hurt the trust that it was meant to build if you are not careful with it. Polls are more important than ever in the year 2025. Small changes in how the Likert scale is used can have a significant impact on rules, funds, and the quality of work. Yes, schools and universities have to use validated polls of this type. Rosenthal-von der Pütten et al. (2025), on the other hand, demonstrate that the results of research can vary significantly depending on the type of method employed, such as Likert, binary, or forced-choice. This is especially true when examining how people and robots interact and communicate with each other. This makes a critical point clear: you need to be careful and responsible when you look at Likert data.

**Despite its widespread use in education, healthcare, and economics, there are still people who dislike the Likert scale.** Some people still don't agree on whether Fully Ordinal, Fully Continuous, or Fully Interval Should Be Used To Show Likert Data. Firestein (2023), Alabi and Jelili (2023), and Robinson (2024), on the other hand, say that mistakes shouldn't be made. Better and more specific uses can be beneficial for large projects, as demonstrated by the parametric treatments of Huh and Gim (2025), the Rasch modeling of Yamashita (2022), and the compositional methods of Lehmann and Vogt (2024). Jebb et al. (2021), Dauzón-Ledesma and Izquierdo (2023), and Ponsiglione et al. (2022) have all emphasized the need for careful planning in scaling up progress.

**This is more important than ever, now that computers and tests have advanced significantly.** The results were very different for Effatpanah et al. (2025) and Zeng et al. (2025). These studies found that item working, item language, and multi-process reaction dynamics all played a significant role. There are two new approaches to addressing questions and complexity: tree-based models (Zeng, Wen, & Jeon, 2025) and Z-numbers (Anjaria, 2022). Using different methods, such as Best-Worst Scaling (Heo et al., 2022; Yang & Yagi, 2024), binary polls (Suárez-García et al., 2024), and forced-choice methods (Rosenthal-von der Pütten et al., 2021), can yield different results. The scale was used by Aybar et al. (2024) in politics, Abreh et al. (2025) in medicine, Asfuroğlu et al. (2022) in imaging, South et al. (2022) in vision, and Lowis (2025) in a mixed-methods study. However, if you misuse it, it could be dangerous.

People can still use and modify the Likert scale, but only if it is developed, validated, and understood in a manner that is grounded in science. People who study cross-cultural truth need to be ready to change computer models, psychological tests, and other tools they use. People will continue to make decisions based on facts when you use the Likert scale in a certain way. It was meant to strengthen trust, but if you don't do that, it might break it.

## **MATERIALS AND METHODS**

### **Design**

The Likert scale is expected to continue being used in social science and educational research in 2025. This study examined its in-depth use. The scale is not seen as a fixed tool in this study. Instead, it examines how it is understood, used, and sometimes misused, and how its purpose evolves. People will discuss its main ideas to identify the problems and bad habits they share. Then, new tools will be developed to help people use them more effectively. To achieve this, the study examines all previous research, compares global polling methods, and investigates how different methodological models influence the interpretation of Likert data.

### **Research Approach**

The study examines various aspects and attempts to understand them. There are three types of Likert data that researchers use: ordinal, interval, and continuous. The experimental part aims to determine how they categorize and group these types. It also attempts to determine how factors like this influence the dissemination and interpretation of results. It also examines how the scale can be applied in other areas, such as science, healthcare, education, and public opinion. We use tools in math, such as scale aggregation, parametric testing, and decimalized means, to evaluate how well current methods are working. We don't just check something to make sure it's okay. We also consider how it will benefit and help people.

### **Data Collection and Processing**

**A Look at the Writing.** A considerable amount of research has been conducted on the Likert scale, examining its operation and how individuals should interpret it. This is the foundation of the study. Old works and new studies that question old ideas and introduce new ones are also re-examined. There are different opinions on whether interval or ordinal data should be used for Likert scales. People also have other ideas about how reliable the tools are and how they should be shared in general. A variety of individuals from diverse backgrounds have utilized the measure in real-life studies included in the review. The data should be published in a peer-reviewed journal within 2021-2025.

This is the study of differences. Many different areas and fields utilize Likert scales. The study examines patterns, new ideas, and recurring mistakes. In this paper, I discuss how experts formulate questions, explore the answers, and select the most suitable statistical methods for analysis. Therefore, we need to examine how people utilize (or abuse) decimalized means, how they handle answer distributions, and how the results change when the scale is altered, such as when things are added together or when groups are combined. It is also examined when and why other methods, such as Best-Worst Scaling, forced-choice designs, and binary polls, yield better results.

Planned how to handle things. A significant part of the study involves a plan for analyzing data based on rounding in Likert scales. This is intended to help people avoid some of the common mistakes they often make. To begin, ordinal thinking is used to determine the meaning of the outcomes. Second, mode-based checks ensure that all outcomes are the same. Lastly, decimalized means are rounded up to the nearest whole number so they are not too exact. Several studies have shown that these methods make things easier, less biased, and more honest. Tree-

based models, such as Z-numbers, can enhance Likert analysis, but they aren't widely used at present. The study talks about this.

### **Ethical Considerations**

The following sources were used in this study: peer-reviewed studies, written works, and methodological reviews. It examines the proper use of information from a moral perspective. Honesty is observed about how we select, understand, and assemble sources. It also means not talking too much about general things, like how people in different countries and places do things. We did the study because we want to be open and aware of how different research situations work. This study's ethics stem from this idea.

## **RESULTS AND DISCUSSION**

### **How to Use the Likert Scale Again**

People from various academic fields frequently use it, which demonstrates its usefulness and ease of use. You can quickly gather information with this tool when you don't have a lot of time, money, or technical skills (Jebb et al., 2021; Robinson, 2024), as it is easy to use. Alabi and Jelili (2023) argue that this is bad news for poor countries and groups that lack financial resources, as it suggests that more complex psychological models may not be effective. The Likert scale has some flaws, but it is easy to understand and is helpful for many projects.

However, the scale can be used for various types of research, ranging from small classroom polls to extensive studies that examine the entire country. Due to this freedom, the methods for gathering data remain unchanged. This enables the comparison of experts and facts over time. Even if new tools emerge, the Likert scale may still be a suitable starting point for people.

Likert scales have been around for a long time, which highlights the importance of being aware of new ideas. What are the good and bad things about data that is built on Likert scales? This is something that people who use polls to inform their decisions should be aware of. Because of this, rules that utilize this kind of data will only be based on accurate readings and not just unfounded claims that they are correct.

### **Making mistakes and doing things the wrong way**

The fact that decimal-based methods are repeatedly used to describe views raises doubts about the study's validity. The differences between groups can be exaggerated if ordinal data is presented as interval data (South et al., 2022). To establish higher standards for their work, experts must be clearer in their writing and data sharing.

If decimalized Likert means are used to measure success, many people may make decisions that benefit or harm some groups more than others. You take a look to see how crucial it is to be honest and understand the limitations of Likert statistics.

Significant changes can occur when policies are revised regarding how things are done. If poll results are misinterpreted, it could impact how groups allocate their resources, determine which policies to prioritize, and the level of trust people have in them. It is not just a matter of how to check and understand Likert data in schools and the government. It is also a problem for society.

### **Different thoughts and ways to see things**

The Likert scale is not fixed; it changes constantly. Concepts such as Z-numbers (Anjaria, 2022) and interval correction methods (Lionello et al., 2021) exemplify this. This means that academics don't have to change how they do things because new analysis tools can make old tools more reliable. People can use this two-part method to maintain the status quo and generate new ideas.

People who work with these state-of-the-art tools can utilize the data they already have to gain further insights. One way to help make multi-scale polls less skewed is to change the spacing. Z-numbers will still show the answer. In other words, information from a long time ago can be re-examined with greater clarity. Therefore, the data available to inform decisions is stronger.



The additional rules at the policy level ensure that poll-based proof remains accurate and genuine. One way for institutions to demonstrate their commitment to science ethics is by utilizing both traditional and innovative tools in their work. As long as people believe policies based on studies, this balance is crucial.

### **Arguments against what you say and other points of view**

People are still deciding if Likert data should be treated as a range or not. This has significant effects on both academic debates and real-world applications, as individuals who agree with interval-level treatment, means, and parametric tests find these methods suitable, given that they employ mixed Likert indices. The most effective statistical methods rely on the type of data and the question being asked. Researchers need to be able to make decisions based on facts.

This means that practitioners should not pick out just one tool as the most important. Most of the time, Likert scales work well. However, binary polls (Suárez-García et al., 2024) and mixed models (Ponsiglione et al., 2022) may sometimes be more effective. The ways data is sent are always in line with the study's goals, not just what is usually done, because they can be adjusted.

It's better to use more than one way to plan based on facts. Policymakers can lower the risk of bias and ensure that the results are not overly dependent on the flaws of a single tool by combining data from multiple sources. Many people trust this method, and it is straightforward for everyone to join.

### **It can be applied in various settings and functions effectively in the real world.**

It is not advisable to draw the wrong conclusions from Likert scores in real life. Small changes in decimalized scores can lead to unfair outcomes because they influence how teachers are evaluated, the allocation of school funding, and the timing of policy announcements (South et al., 2022). When experts share their results, they should be honest about them and ensure that they are not distorted or exaggerated.

How it makes the people who do the work feel is also very important. Dauzón-Ledesma and Izquierdo (2023) emphasize the importance of using Likert scales to obtain a clear understanding of how involved college students are. When people use technology in the wrong way, such as when they use Likert, binary, or forced-choice forms, it can alter the results of studies that test how well humans and robots can recognize each other. It is possible to change how you do things by how you learn.

Significant changes happen at the policy level. If people do not understand Likert scale data, they might not trust groups as much. This might make it unfair to use things the way they were meant to be used. Poll results need to be carefully examined to ensure fairness, accountability, and public trust in the government.

### **Conclusion and Recommendations**

There are still many effective ways to utilize the Likert scale to enhance your learning. It is easy to understand and adapt to the situation. It works because it allows you to measure feelings that are difficult to express in words. Still, it's beneficial in places with limited resources, as more complex models may not always be accessible. You can still use it, but watch out. Sometimes, decimalized means are considered exact opinions, and at other times, ordinal data is regarded as interval data. This may lead you to make poor decisions.

The Likert scale is still used, but not because people want to follow old rules. It's something they do because they can change it to suit their wants. There are better and stricter ways to make the scale these days. Some of these methods include filling in blanks in data, examining data compositionally, utilizing Rasch models, and employing computer tools like Z-numbers. Apart from Best-Worst Scaling, other effective methods for mitigating bias and gaining insight into how others perceive things include polls and forced-choice questions.

The Likert scale remains valid and up-to-date despite these changes. It can be used by anyone willing to try new things and mix it with other ways when needed. It can still be a good way to find out what people think and feel, as long as you are honest and pay attention to the method. Long after school is over, it will be a big part of the work.

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