

What is central tendency bias?

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The concept of central tendency bias is a significant challenge within the fields of psychometrics and survey design. It describes a pervasive human tendency to rate all items or subjects around the midpoint of a given rating instrument, rather than utilizing the full range of the scale to accurately reflect true value or performance. This systematic avoidance of extreme scores--both high and low--results in data that lacks necessary variability, thereby severely hindering meaningful statistical analysis and potentially leading to faulty conclusions regarding performance or preferences.

Understanding and mitigating this bias is crucial for organizations that rely on structured feedback mechanisms, such as employee evaluations, customer satisfaction surveys, or academic grading. When raters consistently gravitate toward the center, the resulting aggregated scores fail to distinguish between highly exceptional cases and those requiring immediate improvement, rendering the entire data collection process unreliable and ultimately unhelpful for strategic decision-making.

Defining Central Tendency Bias in Detail

The core definition of **Central tendency bias** highlights the systematic inclination of an assessor to assign moderate values--typically clustered around the mean or median of the instrument--regardless of the item being assessed. Instead of offering a true representation of performance or quality, the rater defaults to the statistical average, creating an artificial clustering of scores and limiting the effectiveness of the entire rating scale.



This phenomenon is categorized as a type of response bias, often driven by psychological factors

such as a desire to avoid conflict or minimize accountability for extreme judgments. For instance, in an annual performance review utilizing a 10-point scale, managers frequently confine their ratings for most employees to the 6 to 8 range across various evaluation categories, effectively neutralizing the scale's ability to differentiate exceptional vs. poor contributors.

Contextual Occurrence: Internal vs. External Surveys

The frequency and intensity of central tendency bias vary significantly depending on the context of the survey or evaluation. This type of bias is most often observed in **internal surveys**, particularly during managerial evaluations of subordinates. When managers are required to rate their employees, the stakes are inherently high because these evaluations directly impact career progression, compensation, and team dynamics.

In this sensitive environment, managers may choose the middle path for several calculated reasons. They may wish to avoid the appearance of showing preferential treatment toward certain employees or, conversely, avoid generating backlash or conflict from employees who receive ratings on the extreme low end of the rating scale. The path of least resistance is often the middle rating, which minimizes the need for difficult justification or confrontation, thereby protecting the manager from interpersonal strain.

Conversely, this bias tends to occur less frequently when **customers** are completing surveys regarding a company's products or services. In these external survey scenarios, the stakes are substantially lower for the rater. Customers are not directly evaluating individuals they know or interact with daily. Consequently, they are often more willing to express strong opinions, providing extremely high ratings for exceptional service or extremely low ratings for disappointing experiences, as they do not fear the social repercussions inherent in internal feedback mechanisms.

The Detrimental Impact on Organizational Data

The consequences of central tendency bias are twofold and severely undermine the utility of the assessment process. When ratings consistently cluster in the center, the organization is left with two primary problems: inaccurate data and unhelpful insights, diminishing the value of the entire review process.

The data may be inaccurate.

If a manager systematically rates every employee--regardless of actual employee performance--within the middle of a rating scale simply to avoid the perceived risks associated with providing extreme ratings, the collected data fails to reflect the true distribution of talent. This means that

high-performers are potentially underrated, and under-performers are artificially inflated, distorting the organizational reality captured by the survey instrument.

The data will be unhelpful.

When all ratings across all categories fall consistently near the mean, the performance profiles of all employees appear mostly equivalent. This critical lack of differentiation makes it exceedingly difficult for leadership to make objective, merit-based decisions. Key organizational processes--such as identifying individuals who are prime candidates for promotion or determining eligibility for bonuses--are compromised because the underlying evaluation data cannot provide the necessary distinctions between individuals.

Mitigation Strategy 1: Adjusting Justification Requirements

One practical method for combating central tendency bias involves rethinking the administrative overhead associated with extreme ratings. Often, managers avoid the low or high ends of the scale precisely because organizational policy requires them to provide extensive written justification or documentation for unusually divergent scores. This requirement often imposes a significant time cost and increases the manager's perceived accountability for those ratings.

By implementing a policy where managers are not explicitly required to provide immediate, lengthy justification for all ratings, the psychological barrier to using the full scale can be lowered. If the time burden is reduced, raters may feel more comfortable assigning scores that truly reflect employee performance.

The primary benefit of this approach is the likelihood of obtaining more accurate and variable data. However, the inherent tradeoff is that the organization sacrifices the immediate, rich context that written explanations provide, which can sometimes be critical for follow-up discussions and performance improvement plans.

Mitigation Strategy 2: Employing Forced Rank Ordering

A fundamentally different approach involves moving away from independent rating scales entirely and instead implementing methods of **rank ordering**. Instead of asking a manager to provide a 1-to-10 rating for each individual employee on overall productivity, which is highly susceptible to central tendency, the manager is instead asked to order the employees relative to one another, from least productive to most productive.

This strategic shift forces managers to identify the functional extremes within their team, as the mathematical constraint of rank ordering dictates that not every employee can simultaneously be ranked among the least or most productive cohort. This method eliminates the possibility of rating

everyone as "average" or "above average."

By forcing differentiation, rank ordering serves as a powerful antidote to the tendency to cluster scores. While it ensures variability in the results, managers and employees may sometimes find this process stressful, as it creates explicit internal comparison metrics rather than individual absolute scores.

Mitigation Strategy 3: Ensuring Absolute Clarity in Survey Questions

A surprisingly common catalyst for central tendency bias is poorly constructed or ambiguous survey items. When the assessment question is unclear, vague, or open to multiple interpretations, the rater often defaults to a middle score because they are unsure exactly what specific behavior or outcome they are meant to be quantifying. Clarity, therefore, is an essential prerequisite for accurate evaluation.

For example, consider the following survey items that utilize vague, abstract language:

How responsible is employee X on a scale of 1-10?

How would you rate the leadership of employee X on a scale of 1-10?

These questions encourage central tendency because the rater lacks defined boundaries for the scoring anchors (1, 5, or 10). Now, consider the revised survey items that provide specific, anchored definitions for the scale endpoints, significantly reducing ambiguity:

Rate the responsibility of employee X on a scale of 1-10, with 1 indicating that they're **not responsible in any manner** and 10 indicating that they're **completely responsible** for their actions and their work, consistently meeting all deadlines.

Rate the leadership of employee X on a scale of 1-10, with 1 indicating that they have **never taken a leadership role** on a project and do not exhibit any leadership traits, and 10 indicating that they **always take on leadership roles** and proactively exhibit leadership traits on all projects when needed.

The revised survey structure is significantly more likely to produce accurate and differentiated data. By establishing clear, behavioral anchors for the scale endpoints, the rater is provided with a concrete framework, reducing the psychological inclination to retreat to the safe middle ground due to uncertainty.

Conclusion and Related Biases

Central tendency bias is a pervasive challenge in quantitative assessment, often stemming from cognitive reluctance to assign extreme scores due to social pressure or ambiguity. Organizations relying on subjective evaluations must proactively employ strategies such as optimizing justification

requirements, utilizing rank ordering systems, and rigorously refining their survey language to ensure clarity and behavioral anchoring.

While central tendency bias focuses on the avoidance of extremes, it is one of several response biases that can plague assessment processes. Other related phenomena include leniency bias (rating everyone too high) and severity bias (rating everyone too low). Recognizing these patterns is essential for maintaining the integrity of organizational performance measurement systems.

The following tutorials provide explanations of other types of bias:

What is Observer Bias?

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