

COMMENTARY

## Starting with the basics: Getting turnover rates right

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Speer, Dutta, Chen, and Trussell (2019) highlight key issues in the research on and practice of understanding turnover. Although they clarify several theoretical and practical issues related to advanced turnover models (e.g., decision trees, survival, regression), their focal article skims over fundamental issues in understanding turnover that have plagued the field for decades.

For most organizations, turnover rates are the predominant method of quantifying turnover. Stakeholders (e.g., HR personnel) are often most comfortable understanding turnover based on turnover rates due to their ubiquity and seemingly simple interpretation (i.e., the rate at which members separate from our organization). Although Speer et al. (2019) mention turnover rates more than a dozen times in their article, they do not provide a definition or an examination of these fundamental metrics. Advanced turnover models may be a worthwhile aspiration, but it is critical that we get foundational metrics like turnover rates correct first. This commentary offers solutions for several open issues noted by Speer and colleagues (e.g., the “‘new hire’ and ‘replacement hire’ conundrum”; p. 298).

### What’s wrong with turnover rates currently?

Traditionally, turnover rates have been conceptualized as the number of people who separate from an organization over a certain period of time, divided by an estimate of the number of people at the organization during that time. Organizations use turnover rates to forecast personnel costs; inform workforce planning; and infer employee sentiment, organization outlook, and the impact of events and interventions (e.g., company news, promotions; Maurer, 2017; US Bureau of Labor Statistics, 2018).

Unfortunately, the most commonly recommended and used turnover rates today are rife with issues, some well-known and others largely unacknowledged.<sup>1</sup> First, who is included in turnover rates varies by organization (i.e., who counts as a “separation,” who counts as “headcount,” what snapshots of headcount are used to calculate “average headcount,” etc.). These differences make it difficult to benchmark accurately between organizations. Second, currently used turnover rates often encapsulate heterogeneous time periods (e.g., periods just before and just after bonus payouts). This type of “rolling” period makes sense for some organizations, where rates can be erratic for shorter timeframes (e.g., due to small numbers of employees), but this type of smoothing hides meaningful trends in many cases. Third, turnover rates are unnecessarily approximated by averaging headcount at the level of month-end, quarter-end, or even year-end estimates to form the denominator. Fourth, turnover rates are misinterpreted, in part because they do not answer stakeholders’ essential questions and in part because they are not deeply understood.

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<sup>1</sup>Many of these issues also apply to the calculation of similar metrics that are widely used in other fields (e.g., customer churn rate in marketing, mortality rates in epidemiology; cf. failure rates in engineering).

## Current turnover rate methods

Many organizations calculate employee turnover in line with the methodology recommended by the Society for Human Resource Management (SHRM; 2005, 2017) and used by the Bureau of Labor Statistics (2018):

$$\text{Turnover rate} = \frac{\# \text{ separations}}{\text{average \# employees}} \times 100$$

SHRM's turnover rate guide (2017) also recommends including all employees on payroll and excluding contingent workers and employees on leave of absence/furlough. It further suggests pulling snapshots of employee headcounts at regular intervals. Monthly snapshots are typical. Who is included/excluded, how this rate is calculated, and how this rate is interpreted all warrant improvement in order to make this key HR metric more accurate and impactful. These issues and respective solutions are detailed below.

## Key issues and recommended solutions

### **Issue A: Differences between organizations in the calculation of the conventional turnover rate**

*Issue A1: Who is counted as headcount (i.e., included in the denominator)?*

Depending on an organization's staffing model and how it plans to use the turnover rate, it can make sense to include/exclude contingent workers, interns, people on leave of absence/furlough, and a host of other special types of workers. This issue also encapsulates the "new hire' and 'replacement hire' conundrum" noted by Speer et al. (2019, p. 298). Additional differences arise between organizations based on how each treats the timing of events. For example, is an employee who separates today also included in today's headcount? Severance cases and mutual release legal agreements introduce additional opportunities for organizations to use different logic in tabulating headcount. Differences even arise between departments in the same organization (e.g., Finance may include employees on leaves of absence in headcount whereas HR may exclude such employees).

*Issue A2: Who is counted as a separation (i.e., included in the numerator)?*

Organizations also use idiosyncratic logic to determine who counts as a "separation." Some include all separations, others exclude "special cases" (e.g., deaths, reductions in force, fixed-term workers), and others calculate a variety of turnover rates with different numerators (e.g., "voluntary separations," "intended separations," "regrettable losses," etc.). For example, the Bureau of Labor statistics includes laid-off employees as separations, but SHRM does not include these as separations. Similar to Issue A1, additional differences between organizations arise based on how the organization treats the timing of events (e.g., separation, hire, leave of absence, conversion). For example, is an employee who quits today counted as a "separation" today or tomorrow?

### *Solution to issues A1 and A2*

Given that some organization-specific customizations are legitimate based on the organization's operating model, aims, and context (e.g., some track the exact time of separations and count them on the day of occurrence, and others might only track at the day level and count them the next day/the day the worker is no longer counted as headcount), the best antidote to the above two issues is to clearly consider, understand, and communicate (or at least document) what logic is used to calculate turnover rates and why.

*Issue A3: How frequently are headcount snapshots pulled?*

The "average headcount" forms the denominator of the traditional turnover rate, but what values should be averaged? Answers range from headcount at the beginning and end of the year to

headcount at the end of each month to headcount at the end of each day. The most common practice seems to be pulling headcount at the end of each month (Payscale, 2012). This instantaneous view serves to simplify the calculation and (ostensibly) represent headcount throughout the rest of the time period but ignores variation within a month. Some organizations ignore even more variability in headcount by simply averaging headcount at the beginning or end of each quarter, or even year, to calculate the same metric.

#### *Solution to issue A3*

Avoid using coarse snapshots. Instead, pull headcounts on the same timescale that separations are recorded (e.g., at the end of each day) to ensure that all fluctuations in headcount are captured. Because headcount and separations are tracked at the day level in most organizations and most turnover rate computations are done automatically by computers, the additional effort required by this recommended approach, compared to the traditional turnover rate, is trivial. Even in smaller organizations, such detailed tracking can be useful (e.g., to identify that separations are more common on Fridays, the last/first day of the month, right after birthdays).

#### *Issue A4: How are cross-organization turnover rates compared?*

The interorganization differences in the above calculations can make it difficult or inaccurate to create turnover rate benchmarks across organizations. The different logics and calculations used also impede researchers studying turnover across organizations.

#### *Solution to issue A4*

Document the logic and exact calculations used to compute turnover rates. Also maintain databases of the underlying components (e.g., hire and separation dates). These steps help to identify discrepancies between organizations' logics and calculations and also allow cross-organization-consistent turnover rates to be calculated in the future, if necessary.

#### ***Issue B: Smoothing rates can oversimplify and hide trends***

Organizations often smooth turnover rates by dividing separations in a given timeframe (e.g., a year) by the average headcount during the timeframe (e.g., past 12 months). This lumping of time can be useful in small organizations, where small headcount and separation numbers can make more fine-grained turnover rates erratic. In groups with larger headcounts and separation numbers, however, lumping of time can hide useful trends (e.g., decreases in turnover rates right before a bonus payout and spikes in turnover rates right after the bonus payout). If separations are unevenly distributed, months with large numbers of separations can disproportionately impact the turnover rate for the following 11 months of calculations. Turnover rates can also appear to artificially dip in the 13th month when the spike from 12 months ago is no longer included.

#### *Solution to issue B*

Instead of using "rolling" calculations, which include a denominator that amalgamates heterogeneous periods of time, organizations with large headcounts should examine turnover in monthly, weekly, or even daily timeframes. Examining smaller periods can provide insights about the impact of organizational announcements, seasonal trends, and other factors on turnover rates.

#### ***Issue C: Use of an average in the denominator***

The conventional turnover rate uses a sum in the numerator (i.e., total number of separations in a given time period) but an average in the denominator. This simplifies the calculation, which is

helpful if the metric is being computed by hand, but it is antiquated now that technology enables more complex and useful calculations. Using an average in the denominator leads to an approximate estimate of headcount rather than an accurate metric, and it can make the metric misleading if headcount changes significantly during the timeframe, which happens very often to at least one group within an organization.<sup>2</sup>

#### *Solution to issue C*

A single data point is often not representative of the data stream in a period. Given that the numerator captures the full stream using a sum (i.e., total separations during a time period), it is logical to also use a sum in the denominator (e.g., total opportunities to separate during a time period). For example, a team might consist of five employees throughout January until the 30th day, when five separate and 50 are hired who stay for the rest of the month. The numerator would be 5 and the denominator would be 250 (given that each employee in the group has one opportunity to separate per day), which would yield a rate of 2% (versus 10% by the traditional 1-month turnover rate calculation). This smaller rate offers a very different perspective on turnover in the organization and indicates, “What proportion of opportunities to exit during the time period were realized?” This “realized turnover rate”<sup>3</sup> is akin to the survival rate mentioned by Speer et al. (2019), and it accounts for differences in tenure while providing fine temporal, as well as individual, resolution to help illuminate when and why people separate. (See Appendix B, available online in the Supplementary Material, for a further comparison of turnover rates using example data. See Appendix C, available online, for how the average survival time can be derived from the realized turnover rate, which has the additional benefit of not being bound to a static initial cohort.)

#### **Issue D: Confused interpretations**

Many believe that the traditional, 12-month turnover rate indicates the percentage of employees who left during the past 12 months. This interpretation misses the fact that employees are hired and separate at different points throughout the time period, employees can be rehired, and some employees may not even be captured in the headcount snapshot (e.g., those hired and separated in the same month). These flaws make the traditional turnover rate suboptimal for identifying whether people are leaving the group at a faster/slower rate than during the previous time period or for measuring the impact of certain events (e.g., leadership changes) on retention—items that leaders and scholars often are more interested in.

#### *Solution to issue D*

Organizations should supplement (and eventually supplant) the traditional turnover rate with a realized turnover rate that more accurately accounts for how many employees exit given all the opportunities they had to exit. The realized turnover rate can be interpreted as, “What percent of opportunities to separate were exercised?” or “Of all the separations that could have occurred, what percent did?” This perspective can be used to answer key stakeholder questions like, “Are people choosing to leave more this month than last month?”, “What time of the year are separations most prevalent?”, and “Did the retention bonus we offered to acquired employees help

<sup>2</sup>Even when averaging the headcount at the end of each day in the time period, using an average in the denominator can still produce a misleading metric. For example, if a group of five employees is replaced with 50 new hires on the second to last day of January, the day-level version of the 1-month turnover rate (i.e., sum of separations/average of headcount on each day  $\times$  100) yields 62%, which is not well-suited to meaningful interpretation.

<sup>3</sup>So named because all workers separate from the organization at some point, and this rate captures when those separations actually occur compared to when they could have occurred.

retain them?” The realized turnover rate is distinct from a traditional turnover rate and has advantages such as accounting for employee tenure (so that an employee who stays 29 days impacts the rate differently than an employee who stays only 2 days); including all employees (e.g., even those who are hired and separated in the same month); being flexible enough to show trends at the year, month, or even day level; and yielding a clear interpretation that can easily be leveraged to answer stakeholders’ crucial questions. (See Appendix A, available online, for further information about the various turnover rates.)

In not addressing the issues noted above, human resource professionals are handicapping their organizations and researchers are compromising accuracy. Turnover rates are fundamental organizational metrics that should not be needlessly approximated (e.g., using intermittent snapshots), rigidly bound to conventional time frames (e.g., month-end examination), or difficult to interpret (e.g., a traditional turnover rate of 100% does not mean everyone separated or that all positions turned over). Currently, it is quite possible for a leader to be told that turnover is at 900% when really less than 2% of separation opportunities were realized (see Appendix B, Example 1), or that the turnover rate is not available because an acquired company has not been with the firm for 12 months yet, or that it is unclear exactly what effect retention bonuses had on turnover because the timeframes used in the calculation are too coarse. We can do better for our organizations and stakeholders. All that is required are minor adjustments of our calculations and a larger shift in mindset to better align what stakeholders need and what we are providing to them.

## Summary

Although the sophisticated turnover modeling discussed by Speer et al. (2019) is a worthy ambition, practice and research would be best served by getting the calculation of fundamental turnover metrics correct first. Traditional turnover rates have several problems:

1. They are not calculated using consistent logic or formulae across organizations.
2. They utilize unnecessary headcount approximations.
3. They often lump together heterogeneous time periods.
4. They use a sum in the numerator but an average in the denominator, which leads to issues when headcount is not constant.
5. Their common interpretations do not match the logic or formulae used to compute them, and their proper interpretations do not answer some of the key questions that stakeholders have.

This commentary provides several recommendations to alleviate these issues and improve the calculation and interpretation of turnover rates. In addition, it demonstrates that to answer some of the key questions stakeholders have and increase the impact of this fundamental organizational metric, we may need to supplement traditional turnover rates with a new concept—“realized turnover”—that focuses on what proportion of separation opportunities are realized rather than what proportion of the organization separates. This shift solves all the problems noted with traditional turnover rates and yields a metric that, due to its accuracy and sensitivity, can be more useful to those trying to understand, lead, and improve organizations. In doing so, this metric serves as a more robust and sturdy foundation to pursue the advanced turnover modeling methods mentioned by Speer et al. (2019).

**Supplementary material.** To view supplementary material for this article, please visit <https://doi.org/10.1017/iop.2019.52>

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