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COMMENTARY

Turnover as decisions: How judgment and decision-making (JDM) research can inform turnover modeling

Don C. Zhang*

Louisiana State University
*Corresponding author. Email: zhang1@lsu.edu

The penultimate outcome of employee turnover is a dichotomous decision ("stay or leave," Speer, Dutta, Chen, & Trussell, 2019). Current models of turnover and attrition, however, have largely ignored the considerable body of research in judgment and decision-making (JDM). Although some areas of industrial and organizational (I-O) psychology research such as employee selection and performance appraisal have embraced JDM theory and methodology (Highhouse, Dalal, & Salas, 2013), its influence on turnover research remains sparse. In this commentary, I introduce several well-established JDM principles and discuss their implications for turnover research and practice.

Preference reversals

The availability of job alternatives has been theorized as one of the key predictors of turnover (March & Simon, 1993). Employees are more likely to leave a job when there are desirable alternatives. The presence of *undesirable* alternatives, however, is rarely considered in turnover research. After all, why would the presence of undesirable alternatives affect employee's turnover decisions?

Consider a situation where an employee has two new job offers: job A and job B. If job A is preferred over one's current job, and the current job is preferred over job B—an inferior option (i.e., job A > current job > job B), the assumption of binary independence posits that: (1) the employee will prefer to leave his or her current job for job A and (2) the presence of the undesirable job B should have no bearing on an employee's preference between job A and the current job. However, research on preference reversal has demonstrated that the presence of an inferior option ("decoy option")—an option that is identical in one attribute, such as commute time, but inferior on another attribute, such as salary (i.e., asymmetric dominance)—can have systematic effects on people's choices (Slaughter, Sinar, & Highhouse, 1999).

Table 1 illustrates how decoy options may affect turnover decisions. In the example, the employee may be hard-pressed to choose between staying at his or her current job and leaving for a new job. However, the introduction of Prospect 1 may enhance the attractiveness of the current job because Prospect 1 has same salary but worse commute, which magnifies the desirability of the asymmetrically dominant option (current job). In contrast, Prospect 2 is asymmetrically dominated by the new job (same commute time, worse salary), thereby enhancing the new job's relative attractiveness. In both cases, the decoy prospects are clearly undesirable options. But based on JDM theory, their mere presence may alter decision makers' preference for the existing choices.

The decoy effect is one of the most robust findings in JDM research and may inform how employees make turnover decisions. First, as illustrated in the example, the effects of

Table 1. Example of decoy effect in turnover decisions

Job options	Salary	Commute time
Current job	$70,000	60 minutes
New job	$60,000	15 minutes
Decoy prospect 1	*$70,000*	*90 minutes*
Decoy prospect 2	*$55,000*	*15 minutes*

organizational factors such as pay and commute time on turnover decisions depend on contextual factors (presence of decoy options) that are not considered traditional turnover models. Furthermore, by recognizing the effect of decoys on preference reversals, organizations may more strategically negotiate with their employees by offering benefits that maximize the perceived attractiveness of staying.

Immediate, anticipated, and retrospective emotions

Emotions and emotional experiences are well-researched in the study of work and turnover (Grandey, 2008). From a JDM perspective, a combination of immediate, anticipated, and retrospective emotions simultaneously contributes to a person's decision-making process. Immediate emotions, such as anger from being mistreated by your supervisor or fear from the prospect of being unemployed, may play an important role in an employee's assessment of risks associated with quitting. Past research has found that anger and fear elicit different perceptions of risks. Specifically, dispositional and state-level anger tend to minimize risk assessments, whereas fear tends to magnify them (Lerner & Keltner, 2000). These findings suggest that not all negative emotions are the same. Anger, for example, may increase the probability of employee turnover due to more optimistic assessments of risks, whereas fear may curb an employee's intentions to leave because of the inflated perception of risks related to being unemployed.

Anticipated emotions are predicted emotions as a result of counter-factual thinking (Connolly & Zeelenberg, 2002). When deciding whether or not to leave a job, the decision maker forecasts how he or she will feel after the decision has been made: Will I be happy or sad? Will I regret my decision later? When decision makers anticipate feelings of regret, they are more likely to be indecisive and, as a result, delay or defer their decision. Furthermore, people tend to predict a greater sense of regret due to an action rather than inaction (Kahneman & Tversky, 1982). In contrast, retrospective regret is experienced after the fact. People experience more retrospective regret over inaction, rather than action (Gilovich & Medvec, 1995). In other words, people tend to experience more retrospective regret over things they did not do (e.g., regretting staying at their job) than things they did do.

In the context of turnover, research on retrospective and anticipated regret suggests that current employees will anticipate quitting their job as more regrettable, whereas ex-employees may experience greater retrospective regret for staying too long. Both affective states may lead to job and general dissatisfaction: unhappy employees may overstay their tenure and ex-employees may ruminate on their decisions. Indeed, there are important post-decisional processes that may affect post-turnover behaviors of the ex-employee (Lee & Sturm, 2017). Future research may consider bridging the gap between turnover decisions and subsequent job search or retirement behaviors to fully capture the career trajectories of workers.

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Formal cognitive models of turnover decisions

Traditional turnover models have relied on statistical modeling (e.g., linear regression), whereby organizational and psychological constructs (e.g., employee attitudes, supervisor behaviors, and individual differences) are theorized to correlate with various outcomes of interest (e.g., voluntary turnover). Statistical models, however, do not directly illuminate the underlying mechanisms that give rise to a psychological phenomenon (Luce, 1995). In contrast, JDM researchers often rely on *formal cognitive models* to understand basic human decision processes. Formal models utilize mathematical equations to represent internal cognitive and affective processes that produce behaviors of interest (See, Vancouver, & Weinhardt, 2012, for review).

One particularly noteworthy application of cognitive modeling is observed in college withdrawal decisions (Pleskac, Keeney, Merritt, Schmitt, & Oswald, 2011). Building on the unfolding model of turnover (Lee, Mitchell, Holtom, McDaneil, & Hill, 1999), Pleskac et al. (2011) used a signal detection theory (SDT) framework to understand how external shocks (e.g., losing financial aid, death in the family) affected college withdrawal decisions. From an SDT perspective, withdrawal decisions (leave vs. stay) are modeled based on the presence (vs. absence) of shock events. Shocks, therefore, are conceptualized as signals to leave. Based on this framework, one can ascertain how the accumulation of shocks contributes to students' decisions to withdraw from the university.

Formal models allow researchers to more precisely examine the underlying psychological mechanisms of turnover decisions and test competing theories. For example, the unfolding model theorizes multiple discrete pathways by which shocks enter the decision process (Holtom, Mitchell, Lee, & Inderrieden, 2005). However, Pleskac et al. (2011) concluded, based on comparing the unfolding model to a Gaussian detection model, that college withdrawal decisions are best characterized by a continuous accumulation of evidence (shocks), which is then compared to an internal psychological criterion on a singular continuum. A decision is made when a certain threshold of evidence is met. Formal cognitive models are invaluable to turnover research because they allow researchers to open the proverbial "black box" of cognition, thereby illuminating the basic psychological processes that underlie turnover decisions.

Conclusion

In conclusion, employee turnover and attrition research have been extremely fruitful in identifying organizational and individual factors that contribute to turnover. However, the momentary psychological processes by which an employee makes the final decision have been overlooked. By integrating JDM theory and methodology, future research can further shed light on the psychological mechanisms underlying employee's final decision to stay or leave.

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