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Some Reservations About a ''Rational Choice'' Model Predicting Employee Turnover

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Professor Russell proposes a decision model of turnover in which the attractiveness of the current job is compared with that of an alternative. In turn, an employee chooses the option with the highest judged attractiveness. For example, ''Employees make decisions to quit based on the relative attractiveness of their current job compared to alternative jobs or activities'' (2013, p. 163). The attractiveness of one's current job and alternative are estimated by a regression equation assessing various attributes of the two targets (i.e., current job and alternative). Evoking March and Simon (1958) for a theoretical foundation, Professor Russell offers a subjectively ''rational model'' for the choice to stay or leave based on expectancy and expected value type decision models. In his empirical work, he uses a ''policy capturing'' simulation to identify how new hires personally weigh various job attributes when deciding whether they would quit hypothetical jobs varying in those attributes (Russell & Van Sell, 2012). When these weights are applied to employees' actual survey perceptions of the levels of job attributes, the resulting ''simulated turnover intention'' score predicts turnover better than a survey measure of quit intentions or job attributes alone. The inference is that turnover scholars can make substantial progress toward the prediction of actual turnover by using this model.

In our response we do not criticize in detail the specifics of what he actually did empirically in Russell and Van Sell (2012) (see Hom and Griffeth in this volume for a discussion of these issues). Instead, we

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We would like to thank Peter Hom and Rodger Griffeth for comments on an earlier draft of this article. Professor Russell presents a timely critique of prevailing theory and research on employee turnover and suggests a new and potentially promising way to investigate the topic. We applaud his efforts and contributions. Our comments respond first to his advocacy of rational choice models and second, to his criticisms of the unfolding model and job embeddedness. We close with a discussion of future research issues and practical implications.

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focus on why Professor Russell's theoretical reasoning may be inadequate for answering why people leave and why they stay. We begin our reply with an analysis of the proposed theory and its underlying foundational model. Professor Russell argues that turnover researchers do not have a comprehensive and *correct* set of variables on the ''predictor side'' of the equation. His Equations 2 and 3 suggest variables that purport to predict the attractiveness of the job and alternatives to the job. Besides the practical problems of policy capturing simulations to estimate attribute weights for these equations (e.g. completely crossed designs, getting the right dimensions), employees often may not know in advance of their alternatives until these alternatives present themselves (e.g., caring for a sick family member, unsolicited job offer, law school acceptance). The listed dimensions may indeed prove helpful, but we suspect that disaggregating job or life characteristics into specific dimensions, generating weights, and then applying the rational choice model suggested by Professor Russell does not substantially improve our *understanding* of the actual process of how people leave their jobs for the following methodological and theoretical reasons.

Predictors Other Than Attractiveness

Recent empirical research suggests that some different types of variables need to be considered as predictors of employee turnover, and these different variables do not easily fit with the logic or design suggested by Professor Russell. For example, Felps et al. (2009), using the Fishbein and Ajzen (1975) ideas for the antecedents of action, present evidence that behavioral intent and choice are based not only on an attitudinal component (e.g., attitude toward leaving a job) but a social component reflecting the norms held by others about the action. In particular, Felps et al. (2009) show that the mean job embeddedness of a focal employee's coworkers (i.e., actual scores, not the employee's perceptions), while controlling for the employee's own job embeddedness, job satisfaction, and organizational commitment, and the group's mean satisfaction and commitment, significantly predicted incremental variance in voluntary turnover. In support of Fishbein and Ajzen (1975), Felps and colleagues show that social components are valid and meaningful antecedents of leaving, independent of attitudes.

Further, Liu, Mitchell, Lee, Holtom, and Hinton (2012) identify two other important predictors of voluntary employee turnover, one is social and one is based on time. First, the mean job satisfaction of one's coworkers predicts incremental variance in employee turnover (controlling for the focal employee's own satisfaction). In other words, how coworkers feel about their jobs influences the focal employee's turnover independently of that employee's own satisfaction. Moreover, the effects of coworker judgments are diminished when dispersion is high; that is, when the agreement among coworkers is low, the impact of coworker satisfaction on the focal employee turnover is decreased.

Second and perhaps more important, Liu and colleagues find that simply measuring the current satisfaction of employees and their coworkers does not fully capture attitudinal influences. Specifically, the longitudinal trajectory of job satisfaction matters as well. Using four waves of data, whether one is more or less satisfied over three points in time and whether one's group is more or less satisfied over three points in time explain additional variance in voluntary employee turnover. At any given moment, at least four cues pertain to job satisfaction (i.e., [1] how did I feel in the past, perhaps multiple times in the past, [2] how do I feel now, [3] how did my group feel in the past, and [4] how do they feel now). Again, these authors access actual group member data, not individual self-perceptions for the latter two variables. Thus, a simple assessment of the attractiveness of one's current job (or using weighted cue scores) at a moment (no matter how sophisticated the policy capturing) omits major changes

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in job attractiveness (for the focal employee and her colleagues) over time.

Finally, Holtom, Tidd, Lee, and Mitchell (forthcoming) investigate the beta weights for job satisfaction and job embeddedness in the prediction of voluntary employee turnover over the first 3 years of employment for 240 newcomers with four waves of data. Using Cox regression, without time effects, job embeddedness explained more variance than job satisfaction in the prediction of actual turnover. With period effects included, the data revealed that both satisfaction and embeddedness become stronger predictors of turnover over time. When both variables are entered separately into the logistic equation, embeddedness is the stronger predictor of turnover. Thus, attribute weights changed over time and job embeddedness outpredicted job satisfaction.

Theoretical Foundations

The above research suggests different variables for the predictor side of the equation than those suggested by Professor Russell. Scholars who advocate for rational expected value type models often say such unmeasured variables are simply included (e.g., ''tucked'') in the attractiveness equation, which renders them unimportant as alternatives to rational models. Indeed, Professor Russell suggests such procedures for embeddedness constructs. We contend that predictors such as coworker's job embeddedness and individual and group trajectories of job satisfaction (along with their dispersion) bolster our understanding and empirical prediction of voluntary employee turnover. From our perspective, these variables are not easily incorporated within the rational decision-making model and cannot be easily assessed with policy capturing.

Westaby (2005), for instance, suggests similar ideas. He elaborated on the Fishbein and Ajzen (1975) behavioral choice model and suggests other determinants, separate from the attractiveness of the act of leaving (reflected by the attractiveness of the current job and alternatives) that can predict quit intentions or turnover. He cites reasons (justifications for a choice, similar to what Beach & Mitchell, 2005 call ''principles''), subjective norms and perceived behavioral control (a variable discussed below with respect to intent to leave judgments). In our view, Westaby's model better approximates the forces shaping turnover decisions (and he cites supportive evidence) than the attractiveness of choices-comparison-intent-turnover model suggested by Professor Russell.

In short, we are skeptical about the theoretical assumptions and narrowness of the rational, expected value approaches for studying employee turn over suggested by Professor Russell. Please see books by Beach (1990) on image theory, an update by Beach and Connolly (2005) and Kahneman (2011) for longer treatments of the deficiencies of these types of approaches. Professor Russell does recognize the value of the work done by Beach and his colleagues and we should probably add that image theory was foundational for the early work on the unfolding model.

Two additional issues merit some mention that are related to Professor Russell's theoretical arguments. First, Professor Russell is somewhat unclear as to how March and Simon's (1958) landmark model translates into his own theoretical approach as well as his empirical work. For example, Professor Russell appears to supplement the March and Simon model with his own chosen variables while he omits key theorized variables from his theoretical analysis and his empirical work (e.g., there is some lack of clarity on how comparisons among alternatives should be made or actually measured). Russell and Van Sell (2012), for instance, did not make this comparison, did not assess the attractiveness of alternatives, and therefore did not present the within-subjects choice model that Professor Russell advocates. Second, Russell's linear model evaluates a given alternative on the attractiveness dimension (and no other dimension). In contrast, we suggest above that attractiveness is only one and

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perhaps sometimes the least important of a number of possible dimensions influencing intent and action.

In Defense of the Unfolding Model and Job Embeddedness

Professor Russell is critical of the research on the unfolding model and job embeddedness. For example, he is ''shocked'' that reviewers and editors allow publication of this research without making the particular validity comparisons which he advocates. More specifically, he criticizes the published research for not including intent to leave as a control in one place in his article, while later saying ''intention to turn over is not the criterion of interest.'' We agree with Professor Russell that actual turnover is the ''gold standard'' criterion for this type of research and it has remained our focus over the years. Many authors have shown that job embeddedness adds to our empirical prediction of turnover while controlling for variables like job satisfaction, organizational commitment, and job search. Jiang, Liu, McKay, Lee, and Mitchell (2012) provide, for instance, meta-analytic support for the predictive validity of job embeddedness, with multiple controls, on employee turnover. We have not, however, included intent to leave as a control, partly because we believe intent to leave suffers from many of the same problems as the job attractiveness measure suggested by Professor Russell. That is, just as job attractiveness is not the only predictor for intent to leave or turn over, intent to leave is deficient as the ultimate predictor of turnover and we will augment that argument in a moment.

Turning to the unfolding model, while numerous studies confirm that substantial numbers of people take the four turnover paths as described in the unfolding model (see the summary by Holtom, Mitchell, Lee, & Eberly, 2008), the unfolding model is not amenable to the type of testing suggested by Russell. It was constructed by interviewing or surveying leavers and describing how they say they exited. There are no stayers against whom we can compare. In addition, we have paths that do not fit the rational model. For example, ''Path 1'' involves script-driven turnover without reference to job attractiveness. In discussing Path 1, Russell mentions impulsive quitting, preplanned quitting, and conditional quitting found by Maertz and Campion (2004) but did not recognize that these three (of the four they suggested) decision types do not fit easily into a rational choice model.

Also, Paths 2 (i.e., shock only driven turnover) and 4a (i.e., dissatisfaction only driven turnover) from the unfolding model do not invoke a comparison between alternatives. People just leave, often saying they do not know what they will do. Our own research suggests up to 25% of all shocks occur off the job (Holtom, Mitchell, Lee, & Inderrieden, 2005). Such shocks are not related to job attractiveness but certainly induce leaving (Lee, Mitchell, Wise, & Fireman, 1996). We also repeatedly find numerous examples of satisfied people leaving their jobs (e.g. Lee et al., 1996). Thus, much of this work clearly shows that people do not turn over in the manner prescribed by the model suggested by Professor Russell.

Further, one cannot simply combine unfolding model paths to generate overall scores for the attractiveness of the job or alternatives or for an overall leaving score based on the Russell and Van Sell (2012) methodology. The paths in the unfolding model unfold at different speeds for different people and cannot be captured easily at one point in time prior to leaving. There is a conceptual basis for the distinctiveness of these paths as well as empirical verification.

Perhaps most important, researchers have documented the predictive validity of unfolding model constructs. Tharenou and Caulfield (2010) and Kammeyer-Mueller, Wanberg, Glomb, and Ahlburg (2005) established that shocks (assessed before incumbents have quit) can forecast turnover. Donnelly and Quirin (2006) report a study of 84 accountants, of which 46 left their jobs and 42 of the 46

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were properly classified with the unfolding model. Siebert, Kraimer, Holtom, and Peirotti (2013) recently demonstrated that people who intended to go to graduate school stayed in their job with a positive shock like a raise or promotion and people who intended to stay left if their mentor left. They go on to say that shocks ''are likely to have an independent impact on the decision'' (p. 2).

Finally, with a sample of 352 nurses who had quit their jobs, Morrell, Loan-Clark, and Wilkinson (2004); Morrell, Loan-Clark, Arnold, and Wilkinson (2008) tested some specific and general aspects of the unfolding model. While their data suggested some improvements in both measurements (e.g., shock dimensions) and path specifics (e.g., role of image violations), they also report some generally supportive results. Forty-four percent of the nurses report a shock as initiating the leaving process; work shocks often operate on turnover through job satisfaction, while personal shocks do not. They found clusters of nurses who left based on the shock type. Morrell and colleagues summarize one implication of their work by saying, on the one hand, that ''relying on an expected utility model of choice is inadequate'' and on the other, why the unfolding model was helpful by saying that ''shocks play an important role in many decisions to quit'' (p. 344). In summary, the main tenants of the unfolding model and resulting inferences appear supported.

Future Directions

We agree with Professor Russell that an overarching problem with the research on turnover is that a substantial amount of criterion variance remains unexplained and that his techniques for assessing decision weights can and should help increase the explained variance in turnover research. But we also believe that there are other important reasons why our predictions fall short. First, the low correlations between job satisfaction and turnover (or quit intentions) suggest that many people who leave like their jobs (high attraction to the job), whereas many people who stay do not like their jobs (low attraction to the job). On the basis of the interviews, focus groups and the literature, especially Maertz and Campion (2004), we suggest that many people stay or leave in ways and for reasons that are not captured by a rational choice model based on relative attractiveness of the current job and alternatives (please see Hom, Mitchell, Lee, & Griffeth, 2012). Understanding these (''off quadrant'') people remains the underlying impetus for much of the research on the unfolding model and job embeddedness.

A second reason for low correlations is poor measures of predictors or criteria—both the content and the instruments. We assert that knowing more about the criteria, the destinations where people actually go (instead of just knowing whether or not they leave), will help to determine antecedents for their departure and the alternatives they may consider (an issue with which Professor Russell appears to agree). These destinations are discussed in detail by Hom et al. (2012). As mentioned, however, Professor Russell focuses mostly on the content and design strategies for the predictor side of the equation presenting intent to leave as the most proximal and important variable. While these strategies are likely to be helpful, the quit intention construct, as currently conceptualized or measured, is theoretically deficient in critical ways. In particular, it does not capture the dimension of control over the decision, which can partially reflect the social context (independent of job attractiveness; Hom et al., 2012; Westaby, 2005). Westaby emphasized what he calls ''reasons'' for leaving as do Maertz and Campion (2004) and gives the example (reflecting control) of an employee who says she has meaningful work, good pay, and excellent benefits but says she is likely to leave because ''her spouse's need to relocate will be the ultimate reason for deciding not to stay'' (p. 101). Siebert et al. (2013) also discuss how the intention to leave is not the only predictor of turnover and a shortcoming of rational models. They go on to say

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that intent ''is the assumption that employees can have full control over their careers'' and that such an assumption is problematic.

The third reason for low correlations pertains to the design of research studying turnover. At least two design issues related to theory are important. First, turnover is a process that unfolds over time and at different speeds and with different content for everyone. Professor Russell recognizes that decision weights may change over time and there may be a need to repeat the policy capturing simulation. We concur. Specifically, we agree that measurements should be taken more frequently if we hope to capture temporal changes in job attributes and other causal influences (e.g., shocks) and their effects on ongoing behavior and one's proximal states about leaving. Second, we need to look at changes in states. One of the overarching reasons that traditional turnover models do not work well is that we do not have a good idea of how people feel right before they leave. Russell and Van Sell (2012) attempt to do so by inferring indirectly that people who become substantially more or less satisfied over 6 months may have experienced a shock between measurement occasions, and the shock could be directly related to staying or leaving. More measurement occasions will not only get us closer to the departure, it can actually assess these shocks and their impact on proximal states. Hom et al. (2012) discuss, for example, how reluctant stayers (want to leave but are stuck) may become voluntary leavers when the impediment to their departure is removed (e.g. the last child leaves home) or how a voluntary leaver (wants to leave and can leave) becomes a voluntary stayer with a promotion, raise, or upgraded responsibilities.

Practical Implications

Finally, we disagree with the suggestion that our work has no practical implications or usefulness. Our article on shocks in *Human Resource Management*, a practitioner journal (Holtom et al., 2005), describes numerous strategies used by companies to manage shocks. Our *Organization Dynamics* article, which won the award for ''Best Practitioner Oriented Publication'' from the Organizational Behavior Division of the Academy of Management (Holtom, Mitchell, & Lee, 2006), describes how job embeddedness can and is being used in HR practices. Holtom et al. (forthcoming) also estimated that a one standard deviation increase in on-the-job embeddedness reduces turnover risk by approximately 35% in years 1 and 2 and 50% in year 3. In addition, every time we discuss the unfolding model or job embeddedness to business executives they nod in agreement and provide us with examples of strategies they use and are excited to get new ideas about how to manage turnover. Professor Russell suggests our ideas would not work well in call centers. In actuality, we completed an embeddedness study at a call center (Lee, Mitchell, Sablynski, Burton, & Holtom, 2004), and management utilized our advice on how to embed their staff and increase retention. At SIOP and other conferences with sessions on job embeddedness and the unfolding model numerous practitioners have told us how our work informed their management practice or their consulting.

Conclusion

In summary, our work over the years has been grounded in both the theory and research in the literature (usually starting with March and Simon's ideas) as well as results of our interviews, focus groups, and discussions with others about their leaving or staying on jobs. We agree with Russell on a number of shortcomings about the field of turnover, but we hold reservations about a retrenchment into a rational choice model and a potentially cumbersome policy capturing method as mechanisms that will substantially enhance our understanding of why people leave their jobs.

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