

5

Turnover and Retention Research: *A Glance at the Past, a Closer Review of the Present, and a Venture into the Future*

BROOKS C. HOLTOM*

McDonough School of Business, Georgetown University

TERENCE R. MITCHELL

University of Washington Business School

THOMAS W. LEE

University of Washington Business School

MARION B. EBERLY

University of Washington Business School

Abstract

Given the extensive research on the topic of voluntary employee turnover in the past decade as well as new managerial approaches to employee retention, labor market dynamism, and evolution in research methodology and technology, it is important that researchers evaluate the current state of the field. In

*Corresponding author. Email: bch6@msb.edu

this chapter, we critically review prior research to provide a solid foundation and clear perspective to guide future research. Some of the major trends of the past decade include: (1) new individual difference predictions of turnover (e.g., personality, motivating forces); (2) increased emphasis on contextual variables with an emphasis on interpersonal relationships (e.g., leader-member exchange, interpersonal citizenship behaviors); (3) enhanced focus on factors looking specifically at staying (e.g., organizational commitment and job embeddedness); and (4) dynamic modeling of turnover processes with the consideration of time (e.g., changes in job satisfaction). We believe these trends point to a number of important issues to consider in the next decade, including the influence of social networks, differences across cultures, temporal aspects (e.g., early vs. late turnover), consequences of turnover, multi-level investigations of turnover and other types of withdrawal (e.g., retirement).

Introduction

From a managerial perspective, the attraction and retention of high-quality employees is more important today than ever before. A number of trends (e.g., globalization, increase in knowledge work, accelerating rate of technological advancement) make it vital that firms acquire and retain human capital. While there are important differences across countries, analysis of the costs of turnover (Hinkin & Tracey, 2000) as well as labor shortages in critical industries across the globe have emphasized the importance of retaining key employees for organizational success. In response, managers have implemented human resources policies and practices to actively reduce avoidable and undesirable turnover (Fulmer, Gerhart, & Scott, 2003; Hom, Roberson, & Ellis, 2008; Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006; Michaels, Handfield-Jones, & Axelrod, 2001).

Given the development of new managerial approaches to retention, labor market dynamism, and evolution in research methodology and technology, it is not surprising that turnover continues to be a vibrant field of research despite more than 1500 academic studies addressing the topic. While strategic human resource researchers are still investigating the causal mechanisms between HR practices and firm performance (Collins & Clark, 2003; Hatch & Dyer, 2004), most include voluntary turnover as a critical component of the equation (Shaw, Gupta, & Delery, 2005; Ulrich & Smallwood, 2005). Put differently, the topic of voluntary turnover is a vital bridge between macro strategies and micro behavior in organizations. It is one variable that conceptually connects the experiences of individuals in organizations to critical measures of success for those organizations. Emerging evidence suggests that as much as 30–40% of market value is attributable to intangible factors (e.g., strategy execution, managerial credibility, management experience, attracting and retaining talent, and compensation strategy) (Beatty, Huselid & Schnerier, 2003).

Moreover, employee turnover has important implications for the individual leaving the job. Significant energy is expended on finding new jobs, and adjusting to new situations. In addition, giving up known routines and interpersonal connections at one's previous place of employment can be very stressful (Boswell, Boudreau and Tichy, 2005). Thus, the topic of turnover is clearly relevant to managers, researchers and individuals (Zedeck and Mosier, 1990).

The most recent thorough reviews of the turnover literature were Hom and Griffeth (1995) and Maertz and Campion (1998). In 2000, Griffeth, Hom and Gaertner published a valuable turnover meta-analysis. Importantly, since the last major review there have been many theoretical advances including relational perspectives (e.g., network centrality, perceived coworker support, interpersonal citizenship behavior [Mossholder, Settoon, & Henagan, 2005]), "overall job attitude" (e.g., combination of job satisfaction, organizational commitment) as a predictor of "integrative behavioral criteria" (focal performance, contextual performance, lateness, absence, turnover; Harrison, Newman, & Roth, 2006), the unfolding model of turnover (Lee, Mitchell, Holtom, McDaniel, & Hill, 1999), and job embeddedness (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). Given the importance of turnover for researchers and practitioners and a number of compelling new turnover theories, we believe that there is a need for an extensive summary of the field coupled with recommendations for future research.

Accordingly, we have four primary objectives for this chapter. First, we explain why scholars continue to study voluntary turnover after more than 50 years of research attention and 1500 published articles on the subject. Second, we illustrate the evolution of turnover research from its modest beginnings to the multifaceted research stream it has become. Third, we emphasize the recent trends in turnover research and illustrate how these trends help us better understand why employees stay or quit. Finally, we conclude by making recommendations regarding future research.

To capture the evolution of the field we have organized this review chronologically. In the following pages, we will first briefly address the time period before 1985, then move on to the time period from 1985 to 1995, and finally focus on the advances of the past decade from 1996 until the present. For each time period, we will present a figure illustrating the focus of the period's research. These graphs will help in visualizing how turnover research has progressed from a fairly simple view to a more complex, dynamic, multivariate view. Because prior review articles have done an excellent job in reviewing the turnover research from the 1970s through 1995 (Cotton & Tuttle, 1986; Hom & Griffeth, 1995; Maertz & Campion, 1998), we will emphasize work from the past decade. Further, because space limitations do not permit us to mention every paper that has contributed to the turnover research domain, we will focus on articles that are representative of the trends. We will also highlight a number of exemplary articles to clearly signal where the field needs to go and

how it might get there. To identify research that is both representative and exemplary we carefully reviewed all articles on the topic of voluntary turnover or employee retention published in major journals over the past decade.

As we review this evolving literature we will describe how the research has expanded both horizontally and vertically. More specifically, in looking at the earliest models of turnover, the basic tenet was that job dissatisfaction caused turnover. Over time, researchers looked at more predictors (e.g. organizational commitment, job alternatives). They investigated the causes of these predictors (moving horizontally to the left) and the consequences of turnover (moving horizontally to the right). They also added predictors and criteria (vertical expansion) and looked at different levels (horizontal expansion) such as group or organizational variables (e.g. HR practices, turnover climate). Thus, our chronological review will show the expansion from immediate causes and consequences to more distal ones and from a focus on individual attitudes and individual turnover to other levels of interest such as group or organizational variables. In short, turnover has emerged as an interesting, complex process with multiple indicators and outcomes.

Why Study Voluntary Turnover?

Two college roommates were reunited at a golf outing 15 years after graduation. Both had sought advanced degrees in business from top-ranked schools; one obtained an MBA and the other a PhD in management. After a hole or two of small talk, the MBA—now venture capitalist—asked, “So what do you study?” to which the PhD replied, “Voluntary turnover”, to which the MBA replied, “But why? There is a strong negative correlation between unemployment rates and voluntary turnover rates. When demand for workers is high, so is mobility. What else do we need to know?” To introduce his research agenda of the past decade, the PhD provided the following response (without the figures and references, of course).

Yes, we know from aggregate-level economic-demographic studies that labor market conditions significantly impact turnover rates (Schervish, 1983; Terborg & Lee, 1984; see also Figure 5.1). Yet when we examine the decision-making process individuals follow in determining to stay in or leave an organization, we find that actual unemployment rates do not affect actual individual-level turnover (Carsten & Spector, 1987; Hulin, Roznowski & Hachiya, 1985).

Further, different types of organizations and industries face very different average turnover rates. For example, as can be seen in Figure 5.2, since the Bureau of Labor Statistics started tracking voluntary turnover in the USA in 2001, the rate for accommodation and food service employees has averaged around 50% per year while the rate for educational services has averaged just over 10%. Yet across firms in the same industry, turnover rates vary widely.

Moreover, not all turnover is equal. First, involuntary turnover (i.e., firing, lay-offs) is presumed to be within the control of the organizational leaders.

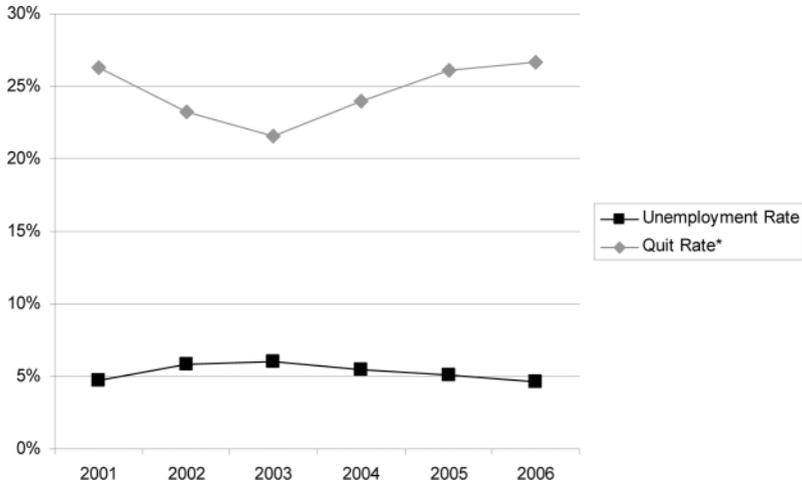


Figure 5.1 US Unemployment and Quit Rates: 2001–2006.

Note: *Quit rates are for the private sector only, not seasonally adjusted; **Source:** US Department of Labor, Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

Thus, while the effects of involuntary turnover are interesting and relevant for both researchers and managers, the findings are not generally integrated into the voluntary turnover models. Second, because people who are more intelligent or who perform better in their jobs are believed to have more external employment opportunities available to them than average or poor employees

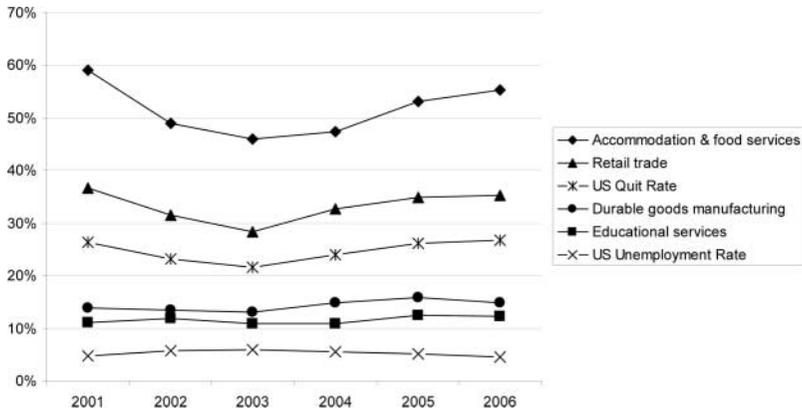


Figure 5.2 US Unemployment and Quit Rates for US Total and Representative High Turnover and Low Turnover Industries: 2001–2006.

Note: Quit rates are for the private sector only, not seasonally adjusted; **Source:** US Department of Labor, Bureau of Labor Statistics, Job Openings and Labor Turnover Survey.

and, thus, are more likely to leave (Trevor, 2001), high rates of voluntary turnover are often found to be harmful to firm performance (Glebbeck & Bax, 2004). Third, managers know that while turnover in general may be disruptive or harmful, not all turnover is bad. In fact, when poor performers choose to leave, this can be quite functional (Abelson & Baysinger, 1984). Fourth, if there is some balance to be struck between functional and dysfunctional turnover, managers would like to be able to encourage or discourage specific turnover cases. Thus, it is important to differentiate between avoidable and unavoidable turnover (Barrick & Zimmerman, 2005).

From a financial perspective, turnover costs are important but often hidden from managers. There are no profit and loss statements that specifically capture the “cost of voluntary turnover”. Instead, the costs are buried in line items like recruitment, selection, temporary staffing and training. Or worse still, the real but unmeasured costs from losses of customer service continuity or critical implicit knowledge are never calculated. Estimates of the losses for each employee vary from a few thousand dollars to more than two times the person’s salary depending on the industry, the content of the job, the availability of replacements and other factors (Hinkin & Tracey, 2000). In some industries, chronic shortages of qualified employees (e.g., petroleum engineers, nurses), have driven up the costs of turnover much faster than the rate of inflation.

Across the globe, rates of voluntary turnover and its impact also vary. For example, there are marked differences between the European Union and United States. Data from Eurostat indicate that Europeans are half as likely to change jobs as Americans in a given year. In part this may be due to higher unemployment rates, but there are many other issues that inhibit employees from leaving other than not finding alternative jobs (Tanova & Holtom, *in press*). Moreover, in many parts of the world, voluntary turnover is almost non-existent—but not because the jobs are enriched, the employees empowered or the reward systems just.

In short, there are many reasons to study voluntary turnover. It can be costly and disruptive to organizations. The acquisition, development and retention of talent form the basis for developing competitive advantage in many industries and countries (Pfeffer, 1994, 2005). And while it may appear to be easily predicted by macro-economic data, decades of research suggest that a rich understanding of individual behavior under constantly evolving global and local conditions will require additional research effort. Thus, we now turn our attention to what is known to set the backdrop for our later discussion of what still needs to be explored.

Turnover Research Before 1985

The time period before 1985 witnessed the development of several key turnover models, which built the foundation for future research. The researchers

who significantly contributed to the initiation of scientific turnover research in this time period were March and Simon (1958), Porter and Steers (1973), Mobley (1977), Mobley, Griffeth, Hand, and Meglino (1979), Price and Mueller (1981, 1986), Steers and Mowday (1981) and Hom, Griffeth, and Sellaro (1984). Their contributions will be briefly outlined below. Further, Figure 5.3 provides a graphical summary of the major topics addressed during this period. *(Although many variables mentioned below are associated with a “box number” captured in subsequent figures, not all variables are so labeled. Space and a concern for readability required judgments about when to include these box numbers. Also, different authors described the relationships depicted in these figures in different ways. Since the mediators and moderators they suggest cannot be accurately represented in one figure, we have simply organized the variables by content and time—where they appear in the unfolding dynamic of deciding to leave a job.)*

In their now-classic book “Organizations”, March and Simon (1958) introduced a general theory of organizational equilibrium, which emphasized the importance of balancing employee and organization contributions and inducements. The two factors that determine an employee’s balance are perceived desirability and perceived ease of leaving the organization; today these concepts are typically labeled as job satisfaction (Figure 5.3; Box 3) and perceived alternatives (Figure 5.3; Box 8) (e.g., Trevor, 2001). Both factors were proposed to independently operate to influence an employee’s motivation to leave the organization. March and Simon emphasized individual differences in ability and biodata such as tenure, gender, and age (Figure 5.3; Box 1) as key determinants of perceived ease of movement while organizational size (Figure 5.3; Box 5) and job satisfaction drive perceived desirability of movement. Note that organization size is a macro-level variable.

Porter and Steers (1973) introduced a model in which employees’ met expectations (Figure 5.3; Box 3) were the driving factor in influencing turnover decisions. While their model and other previous models focused on single antecedents to turnover, Mobley (1977) identified a more comprehensive withdrawal process and shed light on the sequence of steps employees go through before turning over. His intermediate linkages model proposed a set of withdrawal cognitions (e.g., thoughts of quitting, expected utility of withdrawal) (Figure 5.3; Box 7) and job-search behaviors (e.g., job search, evaluate alternatives) (Figure 5.3; Boxes 8 & 9) that link job dissatisfaction to actual turnover behavior. In the expanded model, employee values, job perceptions, and labor market perceptions combined to influence withdrawal intentions via the linkages (Mobley et al., 1979). Interestingly, Mobley et al. (1979) were among the first to identify potential moderating effects on the turnover decision. For example, it was hypothesized that the centrality of non-work values and the need for immediate gratification moderate the effects of job satisfaction and expected utilities on turnover (Figure 5.3; Box 7), and that impulsivity

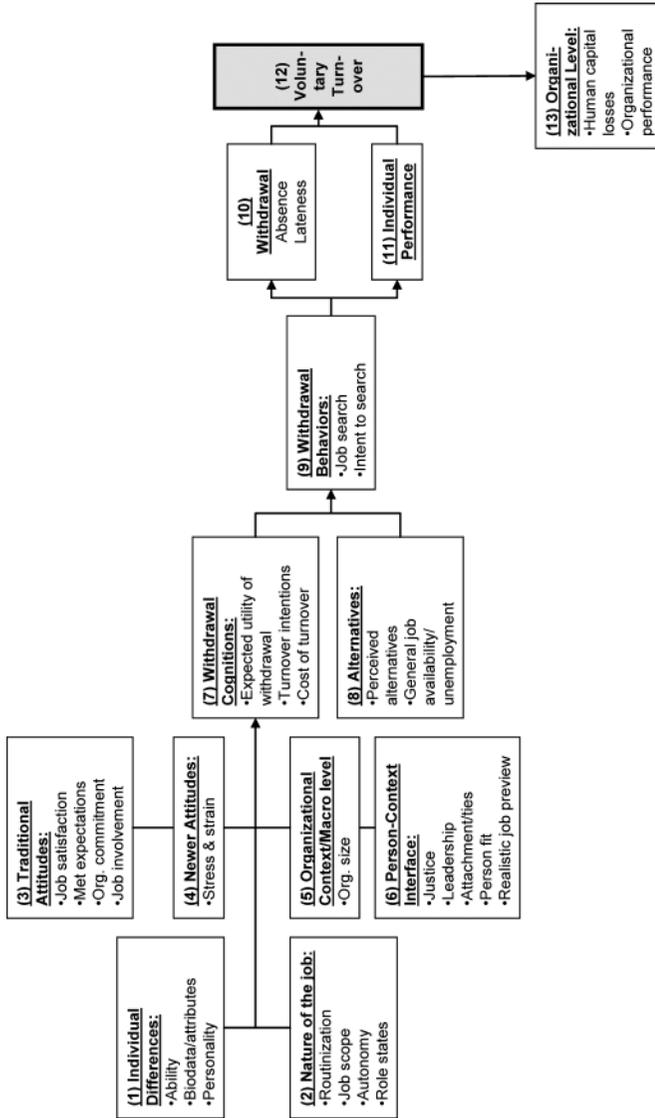


Figure 5.3 Turnover Model before 1985.

moderates the relationship between turnover intentions (Figure 5.3; Box 9) and actual turnover (Figure 5.3; Box 12). They also stretched our understanding by recognizing the impact of changes over time. Finally, they suggested that employees may engage in alternative withdrawal behaviors such as increased absenteeism (Figure 5.3; Box 10).

Based on Price's (1977) earlier work, Price and Mueller (1981, 1986) developed a comprehensive structural model, which identified the antecedents of job satisfaction and intent to leave and added organizational commitment (Figure 5.3; Box 3) as a mediator between these two variables. Distal antecedents of turnover were, among others, the nature of the job (e.g., routinization), participation, distributive justice, and family ties (e.g., kinship responsibility). Price's work represented a major shift in focus horizontally and vertically, by moving our analysis to the causes of job satisfaction. Steers and Mowday (1981) attempted to incorporate all prior "piecemeal" turnover models into a comprehensive process model of voluntary employee turnover. Finally, Hom et al. (1984) drew from Mobley's process model to propose an alternative model that suggests two decision paths. Once employees think about quitting, intend to quit, and evaluate the expected utility of quitting (Figure 5.3; Box 7), they either undertake a job search (Figure 5.3; Box 9) and compare their available alternatives to their current job or directly resign (Figure 5.3; Box 12).

The models briefly outlined above have initiated and significantly advanced turnover research, and much of today's research is still grounded in one or more of these traditional theories. A more unconventional turnover theory was introduced by Sheridan and Abelson's (1983) cusp catastrophe model. The model incorporates two withdrawal determinants, organizational commitment and job tension (Figure 5.3; Box 4), which define a two-dimensional control surface with withdrawal behavior as a third, vertical axis. The model made some unique predictions and suggested, for example, that employees with dissimilar commitment and tension levels may exhibit the same level of withdrawal behavior. It was seen as "a provocative divergence from traditional linear thinking and was the first to model turnover as a dynamic process" (Hom & Griffeth, 1995). However, little subsequent research directly tested these specific ideas.

In the early 1980s, other researchers looked at a number of antecedents of turnover in isolation. For example, Graen, Liden, and Hoel (1982) found that the quality of the leader-member exchange relationship (Figure 5.3; Box 6) predicted employee turnover, and Pfeffer (1983) argued for the importance of demographic fit (Figure 5.3; Box 6). During this time period, researchers also attempted to identify the consequences of turnover (Figure 5.3; Box 13). These early studies primarily focused on increased costs and organizational performance decrements following turnover (e.g., Dalton & Todor, 1979; Mirvis & Lawler, 1977; Mobley, 1982; Price, 1977; Staw, 1980). This research horizontally stretched the criteria presented in the traditional turnover models. Special attention was also attributed to the relationship between individual performance and

turnover with the majority of the empirical results confirming a negative linear relationship (e.g., Jackofsky, 1984) (Figure 5.3; Box 11).

In summary, building on the foundation set by March and Simon (1958), the period prior to 1985 is characterized by considerable progress towards answering research questions focused at the individual-level of analysis. A number of influential models were developed with the intent of explaining the process a person goes through in leaving an organization.

Turnover Research from 1985 to 1995

While the early turnover models have mainly focused on the traditional attitudes of satisfaction and commitment and distal turnover antecedents such as individual differences and the nature of the job, the period from 1985 to 1995 was characterized by a significant increase in consideration of contextual variables and other, mainly negative, personal conditions such as exhaustion and stress. The contextual variables may further be broken down into two groups: (1) organization/macro-level variables (e.g., organizational culture) (Figure 5.4; Box 5); and (2) person–context interface variables with an emphasis on employees' relations with their environment (e.g., perceived supervisor support) (Figure 5.4; Box 6). This focus on variables at other levels, or outside the individual, was a major contribution. Figure 5.4 provides a graphical summary of the main variables introduced during this period.

While early turnover models have considered different level variables such as company and work-unit size (March & Simon, 1958; Price & Mueller, 1986), from 1985 to 1995 we saw a shift towards more complex organizational and group level concepts such as organizational culture, group cohesion, organizational reward systems, gender composition, and demography (Figure 5.4; Box 5). For example, organizational culture was proposed to influence turnover through the development of a unique turnover culture in which employees engage in sense-making and social information processes that trigger withdrawal cognitions (Abelson, 1993). In another exemplary study, pay dispersion, defined as the amount of pay inequality within an organization's pay system, predicted turnover among university administrators such that turnover was lower at institutions with more compressed pay structures (Pfeffer & Davis-Blake, 1992). At the group level, heterogeneity in tenure was found to lead to lower levels of group social integration, which subsequently influenced individual turnover (O'Reilly, Caldwell, & Barnett, 1989). This increased macro-level perspective was in line with Abelson and Baysinger's (1984) call for more organization-level variables in turnover research and Katz and Kahn's (1978) recommendation to consider the context in organizational studies.

Besides the increased attention to macro-level contextual variables such as organizational culture and pay systems, turnover research also started to incorporate an increased number of variables that consider employees'

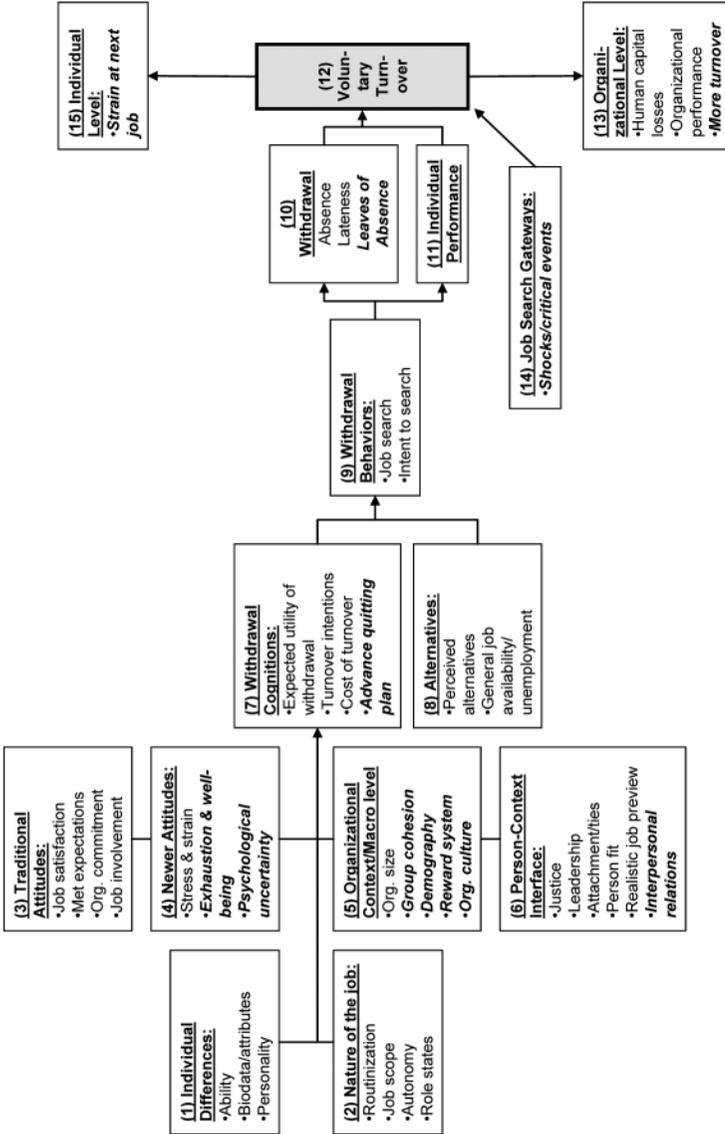


Figure 5.4 Turnover Model from 1985 to 1995.

relationships with their environment (e.g., with the organization, supervisor, co-workers, etc.) (Box 6). These variables included, among others, person-organization fit, mentoring, and network centrality. In 1991, O'Reilly, Chatman, and Caldwell found that employees whose individual values did not match with the organization's values (low person-organization fit) were more likely to turn over after 20 months of tenure. In 1996, Kristof presented a comprehensive definition and conceptual model of person-organization (P-O) fit that incorporates supplementary as well as complementary perspectives on fit. P-O fit was distinguished from other forms of environmental compatibility, such as person-group and person-vocation fit. Further, the establishment of mentoring relationships was shown to reduce protégés' turnover intentions (Viator & Scandura, 1991; Payne & Huffman, 2005). Taking a social network perspective, McPherson, Popielarz, and Drobnic (1992) found that individuals with more ties within an organization's social network were less likely to turn over.

Another important development was the three-facet conceptualization of organizational commitment put forward by Meyer and Allen (1991). Considerable empirical testing of the refined conceptualization confirmed the independent contribution of each of the three facets to understanding of turnover and related withdrawal attitudes and behaviors (e.g., Meyer, Allen & Smith, 1993).

Going above and beyond the traditional job attitudes of satisfaction and commitment, researchers incorporated a new set of attitudes into turnover research, primarily related to stress, well-being and uncertainty (Figure 5.4; Box 4). For example, emotional exhaustion and job insecurity were found to be positively related to turnover intentions (Jackson, Schwab, & Schuler, 1986; Ashford, Lee, & Bobko, 1989).

Besides the consideration of additional antecedents to employee turnover, the end of the 1985-1995 time period also saw the introduction of a new theory regarding the turnover process with Lee and Mitchell's (1994) unfolding model of turnover (Figure 5.4; Box 14). Drawing from image theory, Lee and Mitchell proposed that turnover decisions are not always the result of accumulated job dissatisfaction and may sometimes occur without much deliberation at all. They suggested five decision paths that employees may follow prior to actual turnover. Path #1 deviates most radically from past turnover models because it commences with an environmental event (shock), rather than dissatisfaction, that causes the enactment of a quitting script with little rational deliberation. A shock was defined as a jarring event that triggers the psychological analyses involved in quitting a job. Two of the other paths are initiated by shocks while two are more traditional paths driven by accumulated job dissatisfaction. In general, the model emphasizes the complexity and dynamics of the turnover process and suggests that future turnover research needs to take into account *how* people leave their jobs.

An interesting approach to turnover research was also forwarded by Hulin's (1991) integrative adaptation and withdrawal model, which was intended as a heuristic framework summarizing empirical results and suggesting new hypotheses. The model assumes that dissatisfaction with the job in general or with specific facets of the job trigger a sequence of behavioral and cognitive responses that lead to adaptive behaviors. Psychological and behavioral job withdrawal are only part of an overarching set of adaptive behaviors, which also include change behaviors and attempts to increase job outcomes. Actual turnover behavior is only a subset of the withdrawal construct, which also incorporates alternative actions such as lateness, absenteeism, and retirement. Hulin (1991) argued that all withdrawal behaviors are necessarily related and that withdrawal should be considered as "a general construct encompassing many different behaviors". Hence, he rejected the notion that behaviors such as turnover and lateness should be examined separately—an argument that contradicted the majority of empirical turnover studies conducted up until this point. So, while Hulin (1991) expanded the criterion of interest, all the variables were still conceptualized at the individual level.

Finally, researchers also broadened their perspective on the consequences of turnover (a horizontal stretch) by examining individual-level consequences such as strain at the next job (Newton & Keenan, 1990) (Figure 5.4; Box 15) and organization-level consequences such as increased turnover among remaining employees (Mueller & Price, 1989; Price, 1989) (Figure 5.4; Box 13).

Turnover Research from 1995 until the Present

In the past 10 years, turnover research has experienced considerable theoretical expansion. Specifically, the last decade was marked by seven major trends: (1) new individual difference predictions of turnover; (2) a continued focus on stress- and change-related attitudes (e.g., change acceptance); (3) empirical research on the unfolding model; (4) an increased focus on contextual variables with an emphasis on interpersonal relationships (e.g., interpersonal citizenship behaviors); (5) an enhanced focus on factors looking specifically at staying (e.g., organizational commitment and job embeddedness); (6) a dynamic modeling of turnover processes with the consideration of time (e.g., changes in job satisfaction); and (7) expansion of our understanding of previously identified relationships. Interestingly, though there are more theoretical constructs to help explain turnover, there is less theoretical consensus and still a relatively small amount of overall variance in turnover explained. The result we believe is that the field of study is richer, but perhaps farther from a unified view of the turnover process than ever before.

In the following sections each trend will be reviewed in more detail. Figure 5.5 provides a summary of the major additions to the conceptual framework for understanding turnover. Please note that the clock symbol is placed in boxes where researchers have integrated temporal elements into turnover theory.

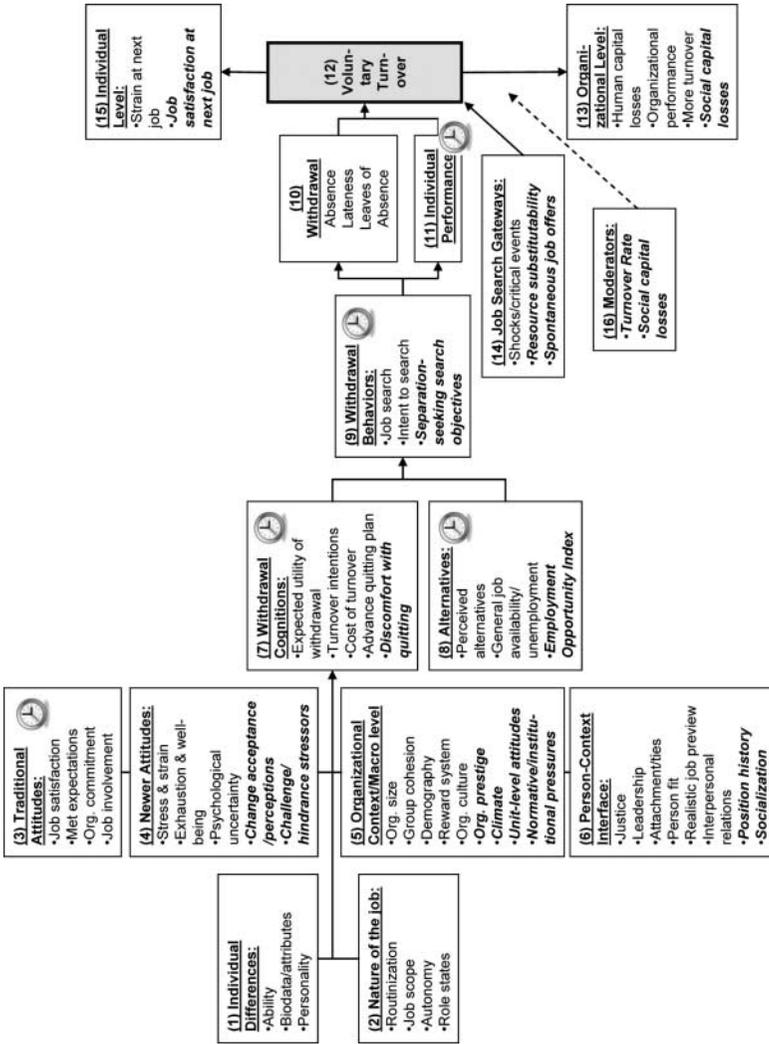


Figure 5.5 Turnover Model from 1995 to present.

Trend 1: Individual Differences

Some studies have investigated distal, individual difference predictors of turnover. These studies have looked at both direct effects and moderators. First, some research suggests that personality may be operating directly on whether one leaves his or her job. Barrick and Zimmerman (2005), for example, demonstrated that self-confidence and decisiveness combined with biodata (e.g., ties to the organization, time at prior employer) measured during the recruitment process were negatively associated with turnover. Barrick and Mount (1996) showed that the Big 5 personality construct, conscientiousness, negatively relates to turnover. Articles by Pelled and Xin (1999) and Thoresen, Kaplan and Barsky (2003) suggest that negative affectivity (measured as a state or as a trait) is likely to result in higher intentions to leave and actual turnover. Second, other data point to the moderating influences of individual differences. For example, Allen, Moffit and Weeks (2005) found that low self-monitors and employees with low risk aversion were more likely to translate their intentions to leave into actual turnover.

In an important stream of research aimed at unifying the many disparate theoretical approaches, Maertz and Campion (2004) combined content and process models of turnover by showing that their previously developed eight turnover motive forces (affective, calculative, contractual, behavioral, alternative, normative, moral, and constituent forces; see also Maertz & Griffeth, 2004) are systematically related to four turnover decision types (impulsive, comparison, preplanned and conditional quitters) such that different groups of quitters are motivated by different forces. They argue that they have identified the eight proximal causes of turnover cognitions and thereby the best predictors of turnover behavior. They also suggest that these causes mediate the effects of all other main constructs in the literature. One of the key findings of their empirical test is that those who quit with no job alternative had more negative affect than users of other decision types, suggesting affect-driven, impulsive quitting.

In an exemplary longitudinal study, Bauer, Erdogan, Liden, and Wayne (2006) report on the moderating role of extraversion on the leader-member exchange (LMX), turnover relationship during new executive development. Specifically, LMX predicted executives' actual leaving. The negative relationship between LMX and executive leaving was significant for those with low extraversion but not significant for high in extraversion. Thus, executives who have low LMX and who are low in extraversion are likely to leave.

Efforts such as those of Maertz and colleagues to provide a unifying theoretical framework to orient the many individual constructs demonstrated to influence turnover are clearly valuable to the field. It is highly likely that further insights into the role of individual differences will emerge; thus, having an agreed-upon framework to provide perspective on how they relate to other factors is useful.

Trend 2: Stress- and Change-related Attitudes (Figure 5.5; Box 4)

With an increased theoretical and applied emphasis on organizational change and employee adaptation to increasingly dynamic environments, stress- and change-related attitudes have come to the forefront of attitude research in relationship to turnover. For example, change acceptance was found to be positively related to job satisfaction and negatively related to work irritation and turnover intentions, which in turn predicted actual turnover (Wanberg & Banas, 2000). Psychological uncertainty, previously established as a predictor of turnover (Ashford et al., 1989), was found to be positively related to turnover intentions and influenced by frequency of change, planning involved in change, and transformational change (Rafferty & Griffin, 2006). Transformational change also had a direct positive effect on turnover, emphasizing the importance of employee retention management during times of radical organizational change.

Although stress had previously been considered in turnover models (e.g., Sheridan & Abelson, 1983), recent research investigated the potential beneficial effects of certain types of stressors. Consistent with prior stress research, hindrance stressors (e.g., organizational politics, hassles, situational constraints, role conflict, role overload) were found to lead to lower job satisfaction, lower organizational commitment, more withdrawal behaviors, higher turnover intentions, and higher turnover (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Podsakoff, LePine, & LePine, 2007). However, challenge stressors (e.g., time urgency, pressure to complete tasks) showed differential relationships and exhibited positive effects on job attitudes and negative effects on withdrawal cognitions resulting in less turnover (Podsakoff et al., 2007).

Stressful events have also been studied. Iverson and Pullman (2000) reported that lay-offs and voluntary turnover have different antecedents following downsizing after a merger. Specifically, lay-offs are predicted by age (+), full time status (versus part time; +), absenteeism (-), coworker support (-), work overload (-) and a shock (-), whereas voluntary turnover was predicted by age (-), blue-collar status (versus white collar; -), intent to leave (+), and a shock (+). Tepper (2000) reported that the positive relationship between abusive supervision and voluntary turnover was mediated by organizational justice perceptions and moderated by perceived mobility such that the effect was stronger for those employees who perceived less mobility. Finally, Sims, Drasgow, and Fitzgerald (2005) showed that experiences with sexual harassment had a direct positive effect on turnover over and above satisfaction.

Because of the increased dynamism and stress in modern organizational life, the studies summarized in Trend 2 are valuable contributions to the literature. Providing additional clarity on the contextual variables that influence individual turnover decisions is clearly desirable.

Trend 3: Studies on the Unfolding Model (Figure 5.5; Box 14)

In 1994, Lee and Mitchell argued that an alternative theory was needed to explain how and why people leave organizations. The major components of the unfolding model include shocks, scripts, image violations, job satisfaction and job search. First, a shock is a particular, jarring event that initiates the psychological analyses involved in quitting. Second, a script is a pre-existing plan of action—a plan for leaving. Third, image violations occur when an individual's values, goals and strategies for goal attainment do not fit with those of the organization or those reflected in the shock. Fourth, lower levels of job satisfaction occur when a person, over time, comes to feel that his or her job no longer provides the intellectual, emotional, or financial benefits desired. Fifth, search includes those activities involved with looking for alternatives and the evaluation of those alternatives. The components unfold over time and combine to form five distinct exit paths for individuals.

In Path 1, a shock triggers the enactment of a pre-existing action plan or script. A person leaves without considering his current attachment to the organization and without considering alternatives. Moreover, levels of job satisfaction are essentially irrelevant in Path 1. In Path 2, a shock (usually negative) prompts a person to reconsider her attachment to the organization due to image violations. After completing these relatively brief deliberations, s/he leaves without a search for alternatives. Also note that in this path, people leave without searching for alternatives. In Path 3, a shock produces image violations that, in turn, initiate a comparison of the current job with various alternatives. Leaving typically includes search, offers, and alternative evaluation. With Path 4, lower levels of job satisfaction are the precipitating state, instead of a shock. The person realizes s/he is dissatisfied and leaves, with (Path 4b) or without (Path 4a) searching for alternatives.

In published tests of the unfolding model, Lee, Mitchell and colleagues (Lee, Mitchell, Wise & Fireman, 1996; Lee et al., 1999) demonstrated that people appear to follow one of these five psychological and behavioral paths when quitting. The unfolding model described up to 91% of the people in the samples. For three of these paths (Paths 1, 2 and 3) a shock was the event that signaled the initiation of the leaving process; as such, shocks represent an important new tool for understanding and managing turnover. Paths 4a and 4b were initiated by job dissatisfaction. A recently published study reported that precipitating events, or shocks, more often are the immediate cause of turnover than job dissatisfaction (Holtom, Mitchell, Lee & Inderrieden, 2005). Specifically, across six independent samples and 1200 "leavers" (e.g., nurses, accountants, international bank employees, retail bank employees, prison guards, Graduate Management Admission Test (GMAT) takers who came from a variety of backgrounds), Holtom et al. (2005) reported that 60% reported the effects of a shock as a precipitating event to turnover, whereas 40% reported no shock; 59% of the shocks

were expected versus 41% that were unexpected; 40% were personal (versus 60% organizational); 64% were positive, 8% neutral and 27% negative.

In an independent replication and extension of the initial tests on the unfolding model, Donnelly and Quinn (2006) reported successful classification of 86% of their sample of public accountants who left their organizations. In addition, they reported that (1) economic consequences are more important to path 3 and 4b leavers than leavers in the other paths; (2) 33% of the leavers indicated economic considerations are important to their decision to quit, but 83% of the stayers indicated that economic considerations are important to their staying. Finally, women experience more shocks than men; consequently, women follow paths 1, 2 and 3 more than men. Among nurses in Great Britain, moreover, Morrell, Loan-Clarke, Arnold, and Wilkinson (2008) reported a somewhat lower classification rate of 77%.

Also from Great Britain, Morrell, Loan-Clarke and Wilkinson (2004) reported that 44.3% of the nurses reported that shocks have a substantial influence on the decision to leave with most calling it a main or “overwhelming influence” on leaving. Key findings indicate that: (1) shocks that are expected are more likely to be positive, personal, and lead to unavoidable leaving; (2) shocks that are negative are more likely to be work related, associated with dissatisfaction, affect others and lead to avoidable leaving; (3) shocks that are more work related are less potent, associated with dissatisfaction and search for alternatives and lead to avoidable leaving; and (4) shocks tend to cluster into work and non-work domains. In another study, Morrell (2005) reported three clusters of leavers from a cluster analysis. Cluster 1 ($n=103$) leavers had a work-related shock that was unexpected, negative and affected other workers. Cluster 2 ($n=50$) leavers had a personal shock that was expected, positive and private. Cluster 3 ($n=196$) leavers had no shock and followed a more traditional dissatisfaction induced process.

In summary, there is accumulating evidence supporting key elements of the unfolding model—particularly the shock concept. Further, this evidence comes from numerous samples, though all studies come from Western societies. We note that tests regarding the applicability of the unfolding model (or its key parts) in non-Western samples are much needed.

Trend 4: Contextual Considerations (Figure 5.5; Box 5)

Organizational context/macro level. A consideration of additional organizational context variables also exemplified this past decade. Particularly salient was the emergence of unit-level attitudes and perceptions such as unit-level satisfaction and engagement as well as climate perceptions. For example, employee satisfaction and engagement aggregated to the business-unit level were found to be negatively related to turnover (Harter, Schmidt, & Hayes, 2002). Further, McElroy, Morrow and Rude (2001) reported that voluntary, involuntary (e.g., firing) and reduction-in-force (e.g. lay-offs) turnover rates

negatively predicted unit performance. When controlling for the other two forms, each form of turnover had negative effects, though with varying effects. Thus, separation of these effects on unit performance can be justified. Koys (2001) reported that unit-level satisfaction and citizenship behaviors from year 1 positively predicted customer satisfaction and unit profit in year 2, while turnover (which combined voluntary and involuntary leaving) from year 1 negatively predicted these year-2 outcomes. Further, Kacmar et al. (2006) reported that turnover at the unit level (both voluntary and involuntary turnover) was negatively related to unit performance and that this relationship was mediated by unit efficiency. They conclude that workforce stability is needed for efficiency to occur.

In concert with the trend towards a more diverse workforce, researchers continued to investigate the influence of signs and signals of organizational diversity on turnover. In a more focused study of the effects of gender composition, Elvira and Cohen (2001) found that the proportion of employees of one's own sex at various levels of the organization (e.g., at the same job level, at the job level immediately above, at the executive level) is critical in determining the effects of gender diversity on employee turnover. For example, the proportion of employees of one's own gender at the same job level was negatively related to turnover for women, but had no effect on men. Further, Greenhaus, Collins, Singh and Parasuraman (1997) report that women female certified public accountants were more likely to leave public accounting than men—not because of family pressures but because of less motivation to be promoted to partner. In contrast, Lyness and Judiesch (2001) found that female financial managers were less likely to leave than their male counterparts, particularly when a prior promotion occurred within the last 11 months. Sacco and Schmitt (2005) reported that demographic “misfit” within workgroups was associated with a higher turnover hazard. Further, diversity climate perceptions were negatively related to turnover intentions among all racial subgroups with the strongest effect for African Americans (McKay et al., 2007). In a comprehensive and rigorous study of 20 US corporations with more than 450,000 professionals and managers, Hom et al. (2007) found that incumbents of jobs that are typically held by a greater number of African Americans and Hispanics were at a higher risk of turning over.

Other organizational variables also appeared in the literature. Bloom and Michel (2002) found that a firm's pay distribution affects turnover as well. Outstanding employees may leave a company where there is low pay differentiation. And Eisenberger, Stinglhamber, Vandenberghe, Sucharski and Rhoades (2002) found that perceived organizational support (POS) mediated the negative effect of perceived supervisory support on turnover. However, a subsequent test by Maertz, Griffeth, Campbell and Allen (2007) showed that perceived supervisor support had independent effects on turnover cognitions not mediated through POS. Their tests also indicated that POS had significant

effects on turnover mediated through normative commitment as well as affective organizational commitment.

Person–context interface. These new perspectives on macro-level turnover influences were supplemented by an extensive focus on interpersonal relations and the interface between employees and their environments (Figure 5.5; Box 6). Although prior turnover models have included relational aspects such as attachment and exchange, most empirical research up until the late 1990s had ignored these variables (Mossholder et al., 2005). In recent years, however, turnover has increasingly been examined from a relational perspective, both theoretically and empirically, and we will point out a few exemplary studies.

In line with increased diversity research, Friedman and Holtom (2002) examined the effects of minority network groups on minority turnover. Their study supported the importance of social embeddedness as defined by access to mentoring and social inclusion in predicting turnover. Joining a minority network group negatively predicted turnover intentions for higher-level employees and for employees in groups with more top managers, and these relationships were partially mediated by social embeddedness.

Another perspective suggests that overall justice perceptions, including procedural, interactional and distributive elements, are important for understanding satisfaction and commitment as well as the reaction to alternatives and withdrawal behaviors (Colquitt, Conlon, Wesson, Porter & Ng, 2001; Hendrix, Robbins, Miller & Summers, 1998; Tekleab, Takeuchi & Taylor, 2005). In 2003, Simons and Roberson reported evidence of significant and sequential linkages from procedural and interactional justice to employee commitment to intention to remain and turnover.

We mentioned that LMX, an interpersonal relationship construct, was related to turnover and moderated by extroversion (Bauer et al., 2006). Arthur, Bell, Doverspike and Villado (2006) reported a meta-analysis, with somewhat limited data, on fit variables. They found that P–O fit predicts turnover but is partially mediated by job attitudes and cognitions. The direct effect drops from .24 to .12 when the mediators are added. Wright and Bonnett (2007) reported that psychological well-being (including some social variables) moderated the satisfaction–turnover relationship such that the negative satisfaction–turnover relationship held for those with low personal well-being but the relationship appears non-significant for those with high personal well-being.

The idea of fit between employees and the organization was also extended to work-scheduling practices, showing that congruence between an employee's scheduling preferences and the policies offered by the employer was negatively related to turnover (Holtom, Lee, & Tidd, 2002). Leader influence during socialization and perceived supervisor support were also negatively related to turnover (Eisenberger et al., 2002; Kammeyer-Mueller & Wanberg, 2003), as were interpersonal citizenship behaviors (Mossholder et al., 2005). Interest-

ingly, another study found that employees who exhibited lower levels of supervisor-rated organizational citizenship behaviors were more likely to quit (Chen, Hui & Segó, 1998). Finally, a unique perspective on the contextual influences on turnover was provided by Burton and Beckman (2007) who found that position imprinting (e.g., the experiences of position creators) and external pressures (e.g., normative expectations regarding typical experiences for the position) predicted turnover propensities. For example, employees who were different from their position's creator were more likely to turn over than employees who were similar to the creators.

Alternatives. In addition, some research has focused on the “alternatives” side as well (Figure 5.5; Box 8). Bartol and Martin (1998) found that the difference between actual changes in one's wage relative to one's expected changes in wages at other jobs affected turnover. Bretz, Boudreau and Judge (1994) found that job search is frequently unsuccessful. Thus, even though one may have negative attitudes (e.g., lower levels of satisfaction, commitment, involvement, support, etc.), the step between intent to leave and actual departure is clearly complex, involving perceptions of alternatives, search activities and (presumably) a successful search. In 2005, Griffith, Steel, Allen and Bryan developed a valuable five-dimensional scale for job market cognitions—the Employment Opportunity Index—and found that these dimensions explained turnover variance over and beyond satisfaction.

Organization-level consequences. With regards to organizational consequences of turnover (both horizontal and vertical stretching) (Figure 5.5; Boxes 13 & 16), Shaw and colleagues advanced a social capital perspective, and suggested that performance erosion as a consequence of turnover may be more complex than the cost-benefit or human capital approaches may suggest (Dess & Shaw, 2001). They showed that organizational social capital losses as a result of turnover were negatively and curvilinearly related to productivity, and this relationship was moderated by organizational turnover level (Shaw, Duffy, Johnson, & Lockhart, 2005). Specifically, the relationship was strongly negative at low turnover levels, but it is attenuated at higher loss levels. This suggests that organizations with lower turnover levels struggle with the associated social capital losses, but that organizations with higher turnover have adopted and found ways to cope with the network disruptions. Further, Shaw, Gupta et al. (2005) reported that for unit turnover in two studies, the effects of turnover on workforce performance are curvilinear, such that the negative effects are strong when turnover is low but weaken as turnover increases. Also, there was modest evidence that workforce performance mediates the effect of turnover on financial performance.

Among the most important aspects of Trend 4 are the macro-micro linkages. Research addressing unit-level attitudes and perceptions such as unit-level satisfaction, engagement, or climate holds particular promise.

Further, in examining the organizational consequences of turnover, recent findings indicate there is an impact on organizational performance. This area of inquiry merits further investigation—not only to clarify the process by which this occurs but also to increase the impact management research has on practice.

Trend 5: Focus on Staying, not Leaving

In 2001, Mitchell et al. introduced the job embeddedness construct, which is focused on the broad array of factors that influence a person's staying in a job. The critical aspects of job embeddedness are the links an employee has to other people or the community, how he or she fits in the organization or community and, lastly, what the employee would sacrifice upon leaving the organization, both on and off the job. These three dimensions are called links, fit and sacrifice; they are relevant in both the organization and the community. Job embeddedness is a composite construct formed from the six sub-dimensions that result from the 3×2 matrix suggested previously.

With a sample of retail employees and another sample of hospital employees, Mitchell et al. (2001) reported the following. First, job embeddedness was reliably measured as an aggregated score across items for each dimension. Second, aggregated job embeddedness was negatively correlated with intention to leave and predicted subsequent voluntary turnover. Third, job embeddedness significantly predicted subsequent voluntary turnover after controlling for gender, job satisfaction, organizational commitment, job search and perceived alternatives. A subsequent study (Lee, Mitchell, Sablinski, Burton, & Holtom, 2004) extended the theory and research on job embeddedness. One contribution was to disaggregate job embeddedness into its two major sub-dimensions. Using a large sample of bank employees, regression analyses revealed that off-the-job embeddedness was significantly predictive of subsequent voluntary employee turnover and volitional absences, whereas on-the-job embeddedness was non-significant. Job embeddedness theory was further examined to assess whether there are significant differences between Hispanics and Caucasians with respect to job embeddedness and voluntary turnover (Mallol, Holtom & Lee, 2007). The findings suggest that while job embeddedness may vary in strength across different demographic groups, it is nonetheless a robust predictor of employee retention.

Recently, Allen (2006) found that an organization's socialization tactics enable the organization to actively embed new employees. Specifically, collective, fixed and investiture tactics were positively related to on-the-job embeddedness. Further, on-the-job embeddedness mediated the relationship between some socialization tactics and turnover. Mossholder et al. (2005) also built on the logic advanced in the job embeddedness concept to examine the effect of relationships on turnover. They found that network centrality and interpersonal citizenship behavior were negatively related to turnover. Also,

Zatzick and Iverson (2006) found that off-the-job embeddedness decreases turnover, especially among women.

In a re-conceptualization of job embeddedness from a formative to reflective construct, Crossley, Bennett, Jex and Burnfield (2007) tested how “general” (i.e., a reflective form of the construct) and “composite” (i.e., the formative notion) job embeddedness integrated into Mobley-type turnover variables. In particular, general job embeddedness significantly related to the intention to search, intention to quit and turnover. In contrast, composite job embeddedness only significantly related to intention to search and intention to quit, but not to turnover. Nonetheless, there may be some question as to whether the same constructs are assessed.

A large-scale study recently published (Holtom & Inderrieden, 2006) attempts to integrate elements of job embeddedness theory and the unfolding model. The empirical results from a national study of stayers and leavers across hundreds of employers indicate that job stayers were found to have the highest levels of job embeddedness, with shock-induced leavers exhibiting the next highest levels and non-shock-induced leavers having the lowest levels. The findings indicate support for the buffering role of job embeddedness when employees experience shocks.

Other advances in staying have also emerged in the past few years. One example is the work of Allen, Shore and Griffeth (2003) who found that perceptions of supportive human resource practices (participation in decision making, fairness of rewards, and growth opportunities) contribute to the development of POS, which is negatively related to withdrawal.

Given that employers are looking to increase the probability that valuable employees stay and less valuable employees leave, systematic investigations into the process of staying seem especially promising. The above-mentioned research points to differences between examining staying versus the traditional research focus on leaving.

Trend 6: Dynamic Modeling of the Turnover Process

Mobley (1982) and Dickter, Roznowski and Harrison (1996) called for more research and theory pertaining to how the turnover process occurs over time. The last decade has seen the initiation of a variety of interesting and rigorous studies that account for some of the complex and dynamic nature of the turnover process. For example, three studies incorporated attitudinal and/or behavioral changes over time to better predict turnover. Sturman and Trevor (2001) found that quitters' performance over time did not significantly change while stayers' performance slope was positive. In addition, performance trends over two months and all prior months included in the study were negatively related to turnover, and these relationships were moderated by current performance such that they were strong at low levels, but negligible at high levels of performance.

In 2002, Steel proposed an *evolutionary* search model of turnover, including three distinct job-search phases (passive scanning, focused search, and contacting prospective employers), and two job-search gateways (financial considerations and spontaneous job offers) with attitudinal and job-search processes as linked but separate subsystems. A fundamental underpinning of his arguments is the importance of knowledge acquisition in the job-search process. Put differently, because dynamic learning processes should sharpen and focus individuals' employment market understanding, individuals nearer the decision to quit should, in a relative sense, have better information at their disposal than individuals far removed from such a decision. Thus, the relationship between perceived job opportunities and actual leaving will be quite different from those people who choose to stay or who are not as advanced in the job-search process. The implications for research here are significant—researchers must employ designs that include repeated or episodic measures to scrutinize the cognitive changes individuals undergo as they go through the process of exploring the job market.

Importantly, a number of researchers have recently employed repeated-measures designs. Bentein, Vandenberg, Vandenberghe, and Stinglhamber (2005) showed that changes in affective and normative commitment were related to changes in turnover intentions over a six-month period, and that changes in turnover intentions were related to actual turnover three months later. In a clever and meticulous study, Kammeyer-Mueller, Wanberg, Glomb, and Ahlburg (2005) directly compared a static turnover model with measures from only one time period to a dynamic model, which incorporated measurements over multiple time points. The dynamic model fit the data better than the static model. Specifically, they found that leavers became less committed and less satisfied over time and had increased levels of work withdrawal and search for alternatives. In combination, these studies suggest that we may significantly improve our understanding of the turnover process by investigating attitudinal, behavioral, and contextual antecedents and outcomes over time.

Further, Kammeyer-Mueller et al. (2005) and Iverson and Pullman (2000) report that critical events also predicted turnover in a manner distinct from the operation of attitudes, which is consistent with the notion of shocks advanced by the unfolding model (Lee & Mitchell, 1994). Weller (2006) pushed the horizontal predictor set even farther back in time. He demonstrated that critical search strategies (before one takes a job) combine with subsequent job satisfaction to predict eventual turnover. When investigating hazard models he found that people who used a personal search strategy (friends, networks) were less likely to subsequently leave than those who used formal search strategies (ads, agencies). Yet those who used personal strategies and subsequently were dissatisfied were most likely to leave. Thus, the initial information people acquire *before* they enter the organization can be an important indicator of later turnover.

In a unique within-individual study of job change, Boswell et al. (2005) found support for a honeymoon-hangover effect such that job satisfaction was lower for individuals who would leave their job within the next year, higher for individuals who had changed their jobs within the last year, and tapered off in subsequent years with no additional job change.

All these studies briefly outlined previously point to the importance of considering the dynamics of the turnover process. The studies by Kammeyer-Mueller et al. (2005) and Bentein et al. (2005) point to the rich explanatory power of dynamic models. Subsequent empirical studies of the unfolding model of turnover have also shown that quitters may pursue one of multiple decision paths (Lee et al., 1999) that take different amounts of time. We believe that the increase in temporal theorizing in turnover study is promising and clearly one of the most fertile areas for future research.

Trend 7: Expansion of Previous Work

Research expanding our understanding of the relationships between job satisfaction and turnover and commitment and turnover has continued. Applying meta-analysis, Meyer, Stanley, Herscovitch and Topolnysky (2002) reported the weighted average correlations between turnover, and affective commitment (-.17), normative commitment (-.16), and continuance commitment (-.10). Furthermore, Vandenberghe, Bentein, and Stinglhamber (2004) reported that affective commitment to the supervisor and group predicted affective commitment to the organization; in turn, affective commitment to the organization predicted intention to quit, which predicted in sequence actual turnover.

The past decade has also seen an increased consideration of moderators in the turnover process as a result of often small correlations between turnover and its antecedents and outcomes. For example, it was shown that the performance–turnover relationship was curvilinear such that low and high performers were more likely to turn over (Salamin & Hom, 2005). This relationship is moderated by salary growth and promotions such that it is more pronounced for employees with lower salary growth and employees with promotions (Trevor, Gerhart, & Boudreau, 1997).

Drawing from March and Simon's (1958) original work, Trevor (2001) found that general job availability, movement capital and job satisfaction interacted with each other simultaneously to affect turnover. The relationship between turnover intentions and turnover was moderated by various personality traits such that the relationship was stronger for employees with low self-monitoring, low risk aversion, and an internal locus of control (Allen et al., 2005). Moreover, Allen and Griffeth (2001) reported that reward contingencies moderated the job performance–job satisfaction–turnover linkages such that the performance–satisfaction link was positive for high rewards and negative for low rewards.

Further expanding our understanding of general withdrawal, Morrow, McElroy, Laczniaik and Fenton (1999) reported significant associations between prior absences and performance, and subsequent turnover. Finally, Harrison et al. (2006) draw on the compatibility principle in attitude theory to propose that “overall job attitude” (job satisfaction and organizational commitment) predicts an integrated behavioral criterion (focal performance, contextual performance, lateness, absence, and turnover combined). Because meta-analyses have generally reported relatively low estimates of the relationship between job satisfaction and performance or organizational commitment and performance with only slightly higher estimates for these attitudes with turnover, the results are surprising. These authors found a large meta-analytic correlation ($r = .59$) between overall job attitudes and a higher-order behavioral criterion construct. In addition, the study found support for the withdrawal progression hypothesis indicating that lateness precedes absenteeism, which precedes turnover.

In summary, the recent research has greatly expanded our perspectives on turnover in a variety of ways beyond the long-held conventional wisdom that dissatisfied employees with viable alternatives are more likely to quit. Individual differences in personality- and change-related attitudes have pushed our analysis to more distal causes of leaving a job while research on the consequences of turnover has looked at more distal effects. We have examined variables at the individual, group and organization level as well as the individual interface with contextual characteristics. By describing the moderators of established relationships, we have deepened our understanding and control of variance in the turnover criterion. Researchers have also turned the question from why do people *leave* to why do they *stay*. In addition, we have investigated more thoroughly how the process of leaving is a time-sensitive process where precipitative events often initiate thoughts of leaving. We now have a more complex and dynamic view of why people leave their jobs.

A Venture into the Future: New Research Questions

Our review of the turnover literature has illustrated many new developments. We have noted how turnover researchers have significantly advanced the field over the past few years. This thoughtful research has created new questions and possibilities that we hope will energize and engage scholars. On the basis of a series of meetings and conversations over the past year as a research team as well as with other influential scholars in this field, we have sought to summarize what we believe are the most promising directions for future research. What follow are the broad themes we identified in conjunction with associated questions we believe need to be answered.

Social Networks

In general, we believe that a continued focus on interpersonal, relational, social, and team dynamics may aid significantly in understanding employee turnover

decisions (Rollag, Parise, & Cross, 2005). Drawing from a social network perspective, we need to develop models that capture the importance of interpersonal ties. Specifically, with regard to job embeddedness, there are interesting avenues for future research regarding links. Researchers have so far failed to examine the quality of links (e.g., affect) and how high-quality and low-quality links may interact with each other. Does the quality of the ties determine which ones will be more important in making a quitting decision or is it simply an additive process? Furthermore, besides looking at links to the community and links to the organization, there may be other sets of ties that are an important consideration in employees' turnover decisions. For example, sales people may have special ties to their customers or social workers may have special ties to their clients. Understanding these external ties and how they may interact with organization and community ties could shed some additional light on the importance of job embeddedness in driving employee turnover decisions.

Another potentially valuable research direction may be to consider inferences from social networks theory (c.f., Burt, 2004; Burt, 2007) *and* job embeddedness on voluntary turnover. A social network can be seen as similar to Lewin's field forces that enmesh employees. More specifically, these networks are clusters of linked employees. When there are many links among employees within a cluster, "closure" is defined as high. When there are few ties (or connections) across these clusters, social holes are defined as many; when there are many ties across clusters, social holes are defined as few. These ideas might help to clarify more precisely how the links described in social networks influence one's propensity to stay on their job perhaps through a process of job embeddedness.

International Focus

Most of the turnover research that we have reviewed for this chapter has been conducted in the USA, with a few studies based in Australia and the UK. However, there are a few notable exceptions. In a qualitative study, Maertz, Stevens, and Champion's (2003) research with maquiladoras workers in Mexico discovered that US-based turnover models may not be readily applied to different cultures and their sample revealed new findings and turnover dynamics.

Another study (Tanova & Holtom, in press) based on a large European dataset that contains information about a wide variety of variables that have been shown to influence voluntary turnover, indicates that the traditional turnover model, where ease of movement and desirability of movement are regarded as important predictors of turnover, receives support. Importantly, the study also shows that job embeddedness explains a significant amount of variance above and beyond the role of demographic and traditional variables.

Further, forecasts indicate that by 2020 Hispanic presence will increase 60% nationwide. Given these trends, it is critical that management scholars

examine the impact of Hispanic cultural factors on important organizational outcomes such as voluntary turnover. Mallol et al. (2007) demonstrate that there are significant differences between Hispanics and Caucasians with respect to job embeddedness and voluntary turnover. Yet, the findings suggest that job embeddedness is a robust predictor of employee retention across diverse populations.

There is also evidence that our frequently found relationships may vary across cultures. For example, a number of studies have shown that culture moderates the relationships between job satisfaction and withdrawal behaviors; the relationship is typically stronger in individualistic cultures compared with collectivist cultures (Thomas and Au, 2002).

Further work examining international comparisons is clearly needed. One could argue that many of the relationships linking turnover to its antecedents and outcomes may be moderated by the cultural and national context (Gelfand, Erez and Aycan, 2007). For example, given the importance of ties in collectivistic cultures, the social nature of staying or leaving may be particularly salient therein. Or, given extensive national protection of workers' rights and national health insurance provisions in many European countries, such as Germany and Sweden, considerations of continuance commitment may be less important in turnover decisions. The turnover field would benefit greatly from expanding to an international level by looking at the generalizability of the existing turnover models to other cultures.

Temporal Elements

Our review of the turnover research, especially of the past 10 years, has shown that it is essential to consider time in the turnover process. However, when things develop over time, the way they are demonstrated in the research literature may not reflect the way the turnover decision actually progressed in the mind of the employees. For example, at what point in the process does job availability really become important? Does it enter the decision sequence at different steps and at multiple times, or is it only considered once in the sequence, or is ignored later? In addition, moderating effects may occur at different times within the decision process. For example, locus of control may not only moderate the relationship between turnover intentions and turnover (Allen et al., 2005), but also the relationship between, for example, job satisfaction and turnover intentions as employees with a high internal locus of control may perceive that they have control over their own fate and may influence certain facets of their job to increase satisfaction. No research so far has been done to track when exactly the different variables come into play, how the turnover decision exactly proceeds and what considerations take precedence at what times. We believe that an extensive, long-term study combining empirical with qualitative research should be conducted where researchers follow certain individuals from the time they enter the organization until they

leave. In such a study, employees would need to be interviewed at regular intervals to find out how they are feeling and what they are thinking about and how these thoughts and feelings evolve over time to eventually predict turnover. Technological advances (e.g., Web-enabled personal digital assistants or phones) make such an extensive study more feasible than ever before. For example, Web-based surveys could allow for large data collection efforts and repeated measures approaches (e.g., Bentein et al., 2005). Additionally, sophisticated human resources information systems can easily capture variables of interest in the overall turnover framework more readily than in the past (e.g., recruitment source, selection scores, socialization activities experienced, performance appraisals, training and development experiences), which allows a greater number of related variables to be modeled simultaneously to tease out their effects. This would shed additional light on the intricacies of the turnover process and help us in understanding why some of the turnover decisions seem to be event-driven (e.g., shocks such as a merit pay decision) while some evolve slowly over time (e.g., slowly decreasing job satisfaction).

With regards to time, it may also be important to examine the role of met expectations (e.g., what do employees expect from the company in the future?) in turnover, because such future expectations and anticipations drive current behavior. Drawing from Mobley et al.'s (1979) amelioration construct, Aquino, Griffeth, Allen, and Hom (1997) investigated employees' perceived probability of improvement in the future with regards to justice and found that such perceptions had a direct negative influence on withdrawal cognitions. We could increase our understanding by considering met expectations over time. What happens when expectations are not met? What happens when expectations are met, but employees overestimated the resulting satisfaction (e.g., due to the durability bias in affective forecasting, Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998)?

Early Turnover

While the long-term studies suggested previously would help us understand the turnover decisions of employees that remain with the organization for a relatively long period of time, it is equally important to identify the underlying mechanisms that drive many employees to quit their job within the first few months, weeks, or even days. Research has identified that turnover often occurs early on in an employee's tenure (Hom & Griffeth, 1995; Hom et al., 2008). Such early turnover may be particularly detrimental to organizational performance, as investments in recruiting, training, and socialization do not provide any immediate returns. For example, both Lee and Mitchell (1994) and Maertz and Campion (2004) suggested that certain individuals have advance quitting plans which are implemented when a certain event happens (e.g., the completion of training program with an associated training bonus). To explore the turnover decision processes during early employment,

researchers need to capture these early quitters prior to or immediately after organizational entry. Such efforts may ultimately benefit from and extend Barrick and Zimmerman's (2005) approach to predicting turnover during the recruitment process, which may have important managerial implications. If the recruitment process can directly or indirectly influence intentions to quit, organizations may not only be able to reduce turnover by selecting employees that do not explicitly plan on leaving, but organizations may also be able to directly reduce applicants' intentions to quit through the recruitment process. Thus, greater integration of recruitment and turnover research is needed.

Unfolding Model

While the unfolding model of turnover helped in identifying the dynamics of the turnover process, open questions remain regarding the timing and impact of shocks. For example, a shock that an employee experiences at the beginning of employment may not be perceived as a shock at a later point in time. This idea is based on the consistency principle, which has shown that people use their own behavior to inform them of what they like (Bem, 1972; Vallacher & Wegner, 1985). Cialdini (2001) concluded that "the more effort that goes into a commitment, the greater is its ability to influence the attitudes of the person who made it". When applying this principle to the unfolding model, we may argue that an employee who has experienced shocks, but remained with the organization nonetheless, may conclude that he or she must be really committed to the organization and experience future shocks differently (e.g., not experience a certain event as a shock). Over time, an employee may also become more socialized and embedded (Allen, 2006) and therefore develop some sort of coping or buffering mechanisms against future shocks (Holtom & Inderrieden, 2006). Originally, Lee and Mitchell (1994) conceptualized shocks by three different dimensions: (1) expected versus unexpected; (2) positive versus neutral versus negative; and (3) internal versus external. Empirical research so far has ignored these dimensions, but we believe it would be important to address this conceptualization to examine how different shocks (e.g., positive and negative) interact with each other, and whether certain types (or certain combinations) of shocks are particularly influential in the turnover decision process. In short, this suggests that the timing, frequency, valence and salience of shocks may be an important area for future research.

It would also be interesting to integrate the Maertz and Campion (2004) model of turnover with the unfolding model. Maertz and Campion (2004) discuss the different motives people have for leaving and tie some of these motives to certain types of shocks. Since the unfolding model has not explored in depth the content and effect of shocks, this examination of how exactly events influence motives and subsequent decisions is important. In addition, Maertz and Campion (2004) label their decision types (e.g. impulsive, preplanned

comparison) which provides more understanding of the process involved than simply assigning a number to a path. More research is clearly needed to understand the different ways that people initiate and enact the process of leaving.

Job Level and Type

We believe that future turnover research may also benefit from considerations of job level and job type. Past studies have drawn from a variety of different samples including, for example, managers/executives (e.g., Boswell, Boudreau, & Dunford, 2004; Cavanaugh et al., 2000; Lyness & Judiesch, 2001), social welfare workers (e.g., Wright & Cropanzano, 1998), medical field employees (Allen & Griffeth, 2001; Aquino et al., 1997; Holtom et al., 2002; Mitchell et al., 2001), public service employees (e.g., Payne & Huffman, 2005; Sims et al., 2005), university employees (e.g., Tekleab et al., 2005), restaurant service employees (e.g., Koys, 2001; Sacco & Schmitt, 2005), truck drivers (e.g., De Croon, Sluiter, Blonk, Broersen, & Frings-Dresen, 2004), etc. The selection of samples may be driven by practical issues such as accessibility and the research question itself.

However, there is a lack of research that systematically links job type and level to the turnover decision. Therefore, it would be beneficial to study differences between the job types and investigate how these differences may influence the turnover process. For example, one may imagine that a restaurant employee is less influenced by off-the-job concerns than a judge, because the restaurant employee is more likely to find a different job in the same city than a judge, who may need to move his or her family when switching jobs. Related to the unfolding model (Lee & Mitchell, 1994), employees in a certain job category may be more likely to pursue one of the decision paths over the others. A systematic investigation of job type may also help in explaining patterns of early turnover. For example, in low complexity jobs which require no extensive training, employees can decide fairly quickly whether they enjoy the job or not. Thus, job complexity may be an important consideration in explaining early turnover.

Consequences of Turnover

As indicated in our review, increased research attention has been paid to the consequences of turnover for the individual (e.g., at the next job [Boswell et al., 2005; De Croon et al., 2004]) and for the organization, especially organizational performance (e.g., Dess & Shaw, 2001; Kacmar et al., 2006; Koys, 2001; Shaw et al., 2005; McElroy et al., 2001). More theoretical and empirical work is needed to identify the mediating mechanisms between turnover and organizational performance. Such research could be tied in with work on the collective mind (Weick & Roberts, 1993) and transactive memory and mental models in the groups literature (for a review, see Ilgen, Hollenbeck, Johnson & Jundt, 2005). Group-member turnover may disrupt these cognitive emergent states

and thus help explain the negative turnover–performance relationship. Turnover effects on the individual employees left behind would also be a fruitful area to explore. For example, coworker turnover may be a “shock” to the remaining employees and/or significantly reduce their job embeddedness, thus triggering thoughts of quitting in them (e.g., “turnover contagion”). Such research may extend Abelson’s (1993) work on turnover culture and sense-making processes. Finally, building on Shaw and colleagues’ recent work (Shaw et al., 2005), researchers should explore how the negative effects of social capital losses may be attenuated through, for example, human resources practices such as training and job rotation.

Multi-Level Investigation of Turnover

Further, analysis of turnover data at multiple levels (individual, department and firm) needs to be done. For example, the study of the impact of employee affect (e.g., job satisfaction, organizational commitment) on turnover would be enriched by building on the extensive work that has been done at the individual level to assess simultaneously the impact of collective employee affect at the department level (e.g., production, maintenance, administrative) or location level (e.g., store, plant). The results of such a study would inform leaders regarding the utility of efforts to improve such affect across the organization. These types of investigations are more possible today, using tools like hierarchical linear modeling (HLM). We have described how numerous authors have enhanced our understanding of turnover by investigation of constructs at the group or organization level. More research is needed that incorporates individual, group and organizational factors and analyzes their impact simultaneously.

Other Types of Withdrawal

Given the multiplicity of career paths, should turnover decisions be understood within the broader context of career trajectories? In 1998, Hanisch, Hulin and Roznowski expanded Hulin’s general framework for studying multiple antecedents and multiple behaviors in the employee withdrawal area. Two of the most prominent withdrawal manifestations are quitting a job and retiring early. In many cases, retiring can only take place after a years-of-service threshold has been crossed. Many military personnel, for example, retire after 20 years of service and since many of these people are in their early 40s or even younger, they pursue a second career. Thus, these different types of withdrawal behaviors have somewhat different parameters and merit specific attention rather than combining them in the measurement of turnover as is the typical case (e.g., Dupre & Day, 2007; Hindelang, Schwerin & Farmer, 2004; Huffman, Adler, Dolan & Castro, 2005). With an aging workforce, people working longer into retirement years and certain sectors facing massive retirements (e.g., approximately 50% of US Federal Government employees are eligible to retire in the next five years [Wiener, 2004]), there is a keen need to understand how

and when people make the retirement decision. Turnover researchers need to do much more to connect to the limited research in this area.

Similarly, we may be able to make more precise predictions regarding turnover if we distinguish between occupational and organizational turnover. Blau (2007) shows that work exhaustion, occupational satisfaction, and intent to leave the occupation significantly predict occupational turnover. In a study with Dutch truck drivers, inter-occupational changers showed a significant reduction in psychological strain while no change was found for intra-occupational job changers (DeCroon et al., 2004). This suggests that stress-related variables, previously shown to predict organizational turnover (e.g., Wright & Cropanzano, 1998), may be particularly potent predictors of occupational turnover. Further, given the tremendous shift in global human resource sourcing that is occurring (e.g., from developed nations towards Brazil, China, India), it is also timely to assess how the stability of a workforce may be influenced by social class considerations. More research is clearly needed to advance our understanding of the relationship between occupational and organizational turnover (Blau, 2007).

Impact on Managerial Practice

Given that the study of turnover is a phenomenon-driven research domain, it seems reasonable to assume that this would be one area where the impact of research on managerial practice would be high. However, there is no evidence that this is the case. In general, it is clear that very few managers read academic publications (Rynes, Colbert & Brown, 2002). This may be true because business school research is too concerned with theory development at the expense of practical utility (e.g., Hambrick, 2007; Pfeffer, 2007) or because by emphasizing research and theory over implementation, theory and research themselves suffer (Latham, 2001). Whatever the reason, few innovations in managerial practice have come from management researchers (Pfeffer & Fong, 2002).

In light of the low bar that has been set in the past, improvement in informing managers how to reduce avoidable, dysfunctional turnover is both feasible and desirable. Specific efforts to integrate research and practice such as the Society for Industrial and Organizational Psychology (SIOP)-Sponsored "Leading Edge Consortium" (started in 2005 to bring together prominent researchers and practice professionals) should be evaluated for their effectiveness and, if successful, emulated by other research-oriented associations. Recent emphasis on and recommendations to the field for tackling the great divide (e.g., Editors' forum on the research-practice gap in human resource management, October 2007, *Academy of Management Journal*, 50(5)) will assist in this regard. Nonetheless, there are specific things that researchers can do to help promote application of their ideas. As just one example, Lawler (2007) recommends that management researchers quantify the impact of the practices they advocate so that they will

merit the same attention received by marketing and finance research. Obviously, many other efforts will be needed to make an impact on practice.

Final Musings

At this late stage of our review chapter, we would like to pause a moment and reflect on the vast scope of what has been learned about voluntary employee turnover. During the decade of the 1980s, for example, turnover was clearly and easily envisioned; in other words, it was pretty clear what it meant to leave a company. During the decade of the 1990s, things changed. For instance, the dotcoms and the sequential nature of careers became more salient features in business. In a sense, we moved from an image of one long duration or spell within a “big company” to many shorter spells in several companies (e.g., the “organizational man” concept gave way to the “free agent” notion and a clear responsibility to manage one’s career actively). Given organizational imperatives to acquire talent quickly and then hold on to it during a period that was characterized by a “war for talent”, studying voluntary turnover became “sexy” during the 1990s. In the early 2000s, however, the dotcom bust and offshoring rendered voluntary turnover less worrisome to some organizations. Yet, as the decade has developed, business leaders have recognized the value of the retention of talented knowledge workers, especially in an era of extensive globalization.

Over the decades, the notion or image of an organization has also become more ill-defined. Charles Handy, for instance, may have been first to notice these changes back in the 1980s with his “Shamrock Organization”. In turn, our ideas about psychological linkages (or connections) to organizations correspondingly changed. Does it mean the same thing, for example, to leave IBM or Microsoft after 15 years as it does to leave a floundering dotcom or one’s own small retail business after 15 months?

Where does this musing lead? First, it seems to us that voluntary turnover and the severing of psychological linkages with organizations are pretty well studied. In contrast, it is less clear *what* it is that people actually leave. We posit that the psychology of voluntary turnover may mean very different things at different kinds of organizations. Future scholarship may be well advised to focus more attention on *what* it is that people are in fact leaving and *what* people are choosing to stay with. In the language of the unfolding model, we speculate that different decision paths may apply to different kinds of organizations. And, perhaps, and in the language of job embeddedness, different embedding factors apply across kinds of organizations.

Conclusion

Our goal in this view of the future is to encourage precision in measuring and modeling both the independent and dependent variables to deepen our understanding of withdrawal behaviors. Most studies of voluntary turnover have one

or two independent variables with voluntary turnover as the dependent variable. With multiple predictors and multiple criteria we will need to present more specific and precise hypotheses about which variables will predict which criteria. Over 40 years ago, Platt (1964) suggested that more precise hypotheses promote “strong inference” whereby we can hopefully confirm and disconfirm different hypotheses about a phenomenon. Van de Ven and Johnson (2006), in reviewing the progress of examining alternative explanations as a critical research process suggest that “one has a much greater likelihood of making important knowledge advances to theory and practice if the study is designed so that it juxtaposes and compares competing plausible explanations of the phenomena being investigated” (p. 814). While expanding the turnover landscape has been fruitful and insightful we must be vigilant in pruning the forest as well.

This review clearly indicates that the theory and research on turnover is cumulative. Over time, we have accumulated substantial evidence on the weighted-average effect sizes for our more frequently studied predictors. One way to increase the rigor of our research is by making point or range predictions of our better-studied results rather than testing them again against the null hypotheses. For instance, most turnover studies include job satisfaction, organizational commitment or some similar attitude; rather than test these variables against the null “one more time”, instead we should predict significant ranges (e.g., the null hypothesis is that satisfaction correlates less than .20 with turnover, whereas the alternative hypothesis is that satisfaction correlates more than .20 with turnover; the null hypothesis is that intention to leave correlates less than .30 with turnover, whereas the alternative hypothesis is that intention correlates more than .30 with turnover). On the face of it, turnover researchers seem well placed to respond to the long-stand call to move beyond null hypothesis testing (though we do *not* advocate elimination of null hypothesis testing for less-well-studied relationships).

This review of the state of turnover research has revealed some excellent theoretical developments and triggered new research questions. While we have made significant progress in understanding why employees leave and how the decision-making process unfolds, there is much yet to be learned. Since the process occurs over time and involves constructs at multiple levels, the methodological and technological advances of the past few years may aid our efforts in further disentangling the complexity of this research domain. We hope that this chapter can provide a stepping stone for further developments and that the next decade will be as fruitful as the last.

References

- Abelson, M.A. (1993). Turnover cultures. *Research in Personnel and Human Resource Management, 11*, 339–376.
- Abelson, M.A., & Baysinger, B.D. (1984). Optimal and dysfunctional turnover: Toward an organizational level model. *Academy of Management Journal, 9*, 331–341.

- Allen, D.G. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? *Journal of Management*, 32, 237–257.
- Allen, D.G., & Griffeth, R.W. (2001). Test of a mediated performance turnover relationship highlighted the moderating rules of visibility and reward contingencies. *Journal of Applied Psychology*, 86, 1014–1021.
- Allen, D.G., Moffit, K.R., & Weeks, K.P. (2005). Turnover intentions and voluntary turnover: The moderating roles of self-monitoring, locus of control, proactive personality, and risk aversion. *Journal of Applied Psychology*, 90, 980–990.
- Allen, D.G., Shore, L.M., Griffeth, R.W., (2003). The role of perceived organizational support and supportive human resources practices in the turnover process. *Journal of Management*, 29, 99–118.
- Aquino, K., Griffeth, R.W., Allen, D.G., & Hom, P.W. (1997). Integrating justice constructs into the turnover process: A test of a referent cognitions model. *Academy of Management Journal*, 5, 1208–1227.
- Arthur, W., Bell, S., Doverspike, D., & Villado, A. (2006). The use of person–organization fit in employment decision making: An assessment of its criterion related validity. *Journal of Applied Psychology*, 91, 786–801.
- Ashford, S.J., Lee, C., & Bobko, P. (1989). Contention, causes, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32, 803–829.
- Barrick, M.K., & Mount, M.K. (1996). Effects of impression management and self-deception on the predictive validity of personality constructs. *Journal of Applied Psychology*, 81, 261–272.
- Barrick, M.R., & Zimmerman, R.D. (2005). Reducing voluntary turnover, avoidable turnover through selection. *Journal of Applied Psychology*, 90, 159–166.
- Bartol, K.M., & Martin, D.C. (1998). Applicant information at hiring interview and subsequent turnover among part time workers. *Journal of Vocational Behavior*, 53, 334–352.
- Bauer, T., Erdogan, B., Liden, R., & Wayne, S. (2006). A longitudinal study of the moderating role of extraversion: Leader–member exchange, performance, and turnover during new executive development. *Journal of Applied Psychology*, 91, 298–310.
- Beatty, R.W., Huselid, M.A., & Schneier, C.E. (2003). Scoring on the balanced scorecard. *Organizational Dynamics*, 32, 107–121.
- Bem, D.J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.
- Bentein, K., Vandenberg, R., Vandenberghe, C., & Stinglhamber, F. (2005). The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology*, 90, 468–482.
- Blau, G. (2007). Does a corresponding set of variables for explaining voluntary organizational turnover transfer to explaining voluntary occupational turnover. *Journal of Vocational Behavior*, 70, 135–148.
- Bloom, M., & Michel, J.G. (2002). The relationship among organizational context, pay dispersion and managerial turnover. *Academy of Management Journal*, 45, 33–42.
- Boswell, W.E., Boudreau, J.W., & Dunford, B.B. (2004). The outcomes and correlates of job search objectives: Searching to leave or searching for leverage? *Journal of Applied Psychology*, 89, 1083–1091.

- Boswell, W.R., Boudreau, J.W., & Tichy, J. (2005). The relationship between employee job change and job satisfaction: The honeymoon-hangover effect. *Journal of Applied Psychology, 90*, 882–892.
- Bretz, R.D., Boudreau, J.W., & Judge, T.A. (1994). Job search behavior of employed managers. *Personnel Psychology, 47*, 275–301.
- Burt, R.S. (2004). Structural holes and good ideas. *American Journal of Sociology, 110*, 349–99.
- Burt, R.S. (2007). Secondhand brokerage: Evidence on the importance of local structure for managers, bankers, and analysts. *Academy of Management Journal, 50*, 119–48.
- Burton, M.D., & Beckman, C.M. (2007). Leaving a legacy: Position imprints and successor turnover in young firms. *American Sociological Review, 72*, 239–266.
- Carsten, J.M., & Spector, P.E. (1987). Unemployment, job satisfaction and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology, 72*, 374–381.
- Cavanaugh, M.A., Boswell, W.R., Roehling, M.V., & Boudreau, J.W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology, 85*, 65–74.
- Chen, X., Hui, C., & Segó, D.J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology, 83*, 922–931.
- Cialdini, R.B. (2001). *Influence: Science and practice* (4th edn.). Boston, MA: Allyn & Bacon.
- Collins, C.J., & Clark, K.D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal, 46*, 740–751.
- Colquitt, J.A., Conlon, D.E., Wesson, M.J., Porter, C., Ng, K.Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*, 425–445.
- Cotton, J., & Tuttle, J.M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of Management Review, 11*, 55–70.
- Crossley, C.D., Bennett, R.J., Jex, S.M., Burnfield, J.L. (2007). Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. *Journal of Applied Psychology, 92*, 1031–1042.
- Dalton, D.R., & Todor, W.D. (1979). Turnover turned over: An expanded and positive perspective. *Academy of Management Review, 4*, 225–235.
- De Croon, E.M., Sluiter, J.K., Blonk, R.W.B., Broersen, J.P.J., Frings-Dresen, M.H.W. (2004). Stressful work, psychological job strain, and turnover: A 2-year prospective cohort study of truck drivers. *Journal of Applied Psychology, 89*, 442–454.
- Dess, G.G., & Shaw, J.D. (2001). Voluntary turnover, social capital, and organizational performance. *Academy of Management Review, 26*, 446–456.
- Dickter, D.N., Roznowski, M. and Harrison, D.A. (1996). Temporal tempering: An event history analysis of the process of voluntary turnover. *Journal of Applied Psychology, 81*, 707–716.
- Donnelly, D.P., & Quinn, J.J. (2006). An extension of Lee and Mitchell's unfolding model of voluntary turnover. *Journal of Organizational Behavior, 27*, 59–77.

- Dupre, K.E., & Day, A.L. (2007). The effects of supportive management and job quality on the turnover intentions and health of military personnel. *Human Resource Management, 46*, 185–201.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., & Sucharski, I.L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology, 87*, 565–573.
- Elvira, M.M., & Cohen, L.E. (2001). Location matters: A cross-level analysis of the effects of organizational sex composition on turnover. *Academy of Management Journal, 44*, 591–605.
- Friedman, R.A., & Holtom, B.C. (2002). The effects of network groups on minority employee turnover intentions. *Human Resource Management, 41*, 405–421.
- Fulmer, I.S., Gerhart, B., & Scott, K.S. (2003). Are the 100 best better? An empirical investigation of the relationship between being a “Great place to work” and firm performance. *Personnel Psychology, 56*, 965–993.
- Gelfand, M.J., Erez, M. And Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology, 58*, 479–514.
- Gilbert, D.T., Pines, E.C., Wilson, T.D., Blumberg, S.J., & Wheatley, T.P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology, 75*, 617–638.
- Glebbeek, A.C., & Bax, E.H. (2004). Is high employee turnover really harmful? An empirical test using company records. *Academy of Management Journal, 47*, 277–286.
- Graen, G.B., Liden, R., & Hoel, W. (1982). Role of leadership in the employee withdrawal process. *Journal of Applied Psychology, 67*, 868–872.
- Greenhaus, J.H., Collings, K.M., Singh, R., & Parasuraman, S. (1997). Work family interference on departure from public accounting. *Journal of Vocational Behavior, 50*, 249–270.
- Griffeth, R.W., Hom, P.W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the millennium. *Journal of Management, 26*, 463–488.
- Griffeth, R., Steel, R., Allen, D., & Bryan, N. (2005). The development of a multidimensional measure of job market cognitions: the employment opportunity index (EOI). *Journal of Applied Psychology, 90*, 335–349.
- Hambrick, D. (2007). The field of management’s devotion to theory: Too much of a good thing? *Academy of Management Journal, 50*, 1346–1352.
- Hanisch, K.A., Hulin, C.L., & Roznowski, M. (1998). The importance of individuals’ repertoires of behaviors: The scientific appropriateness of studying multiple behaviors and general attitudes. *Journal of Organizational Behavior, 19*, 463–480.
- Harrison, D.A., Newman, D.A., & Roth, P.L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal, 49*, 305–325.
- Harter, J.K., Schmidt, F.L., & Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*, 268–279.
- Hatch, N.W., & Dyer, J.H. (2004). Human capital & learning as a source of sustainable competitive advantage. *Strategic Management Journal, 25*, 1155–1178.
- Hendrix, W.H., Robbins, T., Miller, J., & Summers, T.P. (1998). Effects of procedural and distributive justice on factors predictive of turnover. *Journal of Social Behavior and Personality, 13*, 1–21.

- Hindelang, R.L., Schwerin, M.J., & Farmer, W.L. (2004). Quality of life (QOL) in the US Marine Corps: The validation of a QOL model for predicting reenlistment intentions. *Military Psychology, 16*, 115–134.
- Hinkin, T.R., & Tracey, J.B. (2000). The cost of turnover: Putting a price on the learning curve. *Cornell Hotel and Restaurant Administration Quarterly, 41*, 14–21.
- Holtom, B.C., & Inderrieden, E. (2006). Integrating the unfolding model and job embeddedness to better understand voluntary turnover. *Journal of Managerial Issues, 18*, 435–452.
- Holtom, B.C., Lee, T.W., & Tidd, S.T. (2002). The relationship between work status congruence and work-related attitudes and behaviors. *Journal of Applied Psychology, 87*, 903–915.
- Holtom, B.C., Mitchell, T., Lee, T., & Inderrieden, E. (2005). Shocks as causes of turnover: What they are and how organizations can manage them. *Human Resource Management, 44*, 337–352.
- Hom, P.W., Griffeth, R.W. (1995). *Employee turnover*. Cincinnati, OH: South-Western College Publishing.
- Hom, P.W., Griffeth, R.W., & Sellaro, C.L. (1984). The validity of Mobley's 1977 model of employee turnover. *Organizational Behavior and Human Performance, 34*, 141–174.
- Hom, P.W., Roberson, L., & Ellis, A.D. (2008). Challenging conventional wisdom about who quits: Revelations from corporate America. *Journal of Applied Psychology, 93*, 1–34.
- Huffman, A.H., Adler, A.B., Dolan, C.A., & Castro, C.A. (2005). The impact of operations tempo on turnover intentions of army personnel. *Military Psychology, 17*, 175–202.
- Hulin, C.L. (1991). Adaptation, persistence and commitment in organizations. In M. Dunnette and L. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd edn., pp. 445–507). Palo Alto, CA: Consulting Psychologists Press.
- Hulin, C.L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychology Bulletin, 97*, 223–250.
- Ilgen, D.R., Hollenbeck, J.R., Johnson, M., Jundt, D. (2005). Teams in organizations: From input-process-output models to IMO models. *Annual Review of Psychology, 56*, 517–543.
- Iverson, R.D., & Pullman, J.A. (2000). Determinants of voluntary turnover and layoffs in an environment of repeated downsizing following a merger: an event history analysis. *Journal of Management, 26*, 997–1003.
- Jackofsky, E.F. (1984). Turnover and job performance: An integrated process model. *Academy of Management Review, 9*, 74–83.
- Jackson, S.E., Schwab, R.L., & Schuler, R.S. (1986). Toward an understanding of the burnout phenomenon. *Journal of Applied Psychology, 71*, 630–640.
- Kacmar, K.M., Andrews, M.C., Van Rooy, D.L., Steilberg, R.C., & Cerrone, S. (2006). Sure everyone can be replaced... but at what cost? Turnover as a predictor of unit-level performance. *Academy of Management Journal, 49*, 133–144.
- Kammeyer-Mueller, J.D., & Wanberg, C.R. (2003). Unwrapping the organizational entry process: Disentangling multiple antecedents and their pathways to adjustment. *Journal of Applied Psychology, 88*, 779–794.

- Kammeyer-Mueller, J.D., Wanberg, C.R., Glomb, T.M., & Ahlburg, D. (2005). The role of temporal shifts in turnover processes: It's about time. *Journal of Applied Psychology, 90*, 644–658.
- Katz, D., & Kahn, R.L. (1978). *The social psychology of organizations* (2nd edn.). New York: John Wiley.
- Kristof, A.L. (1996). Person–organization fit: An integrative review of its conceptualizations, measurement and implications. *Personnel Psychology, 49*, 1–49.
- Koys, D.J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology, 54*, 101–114.
- Latham, G.P. (2001). The reciprocal effects of science on practice: Insights from the practice and science of goal setting. *Canadian Psychology, 42*, 1–11.
- Lawler, E.E. (2007). Why HR practices are not evidence based. *Academy of Management Journal, 50*, 1033–1036.
- Lee, T.W., & Mitchell, T.R. (1994). An alternative approach: The unfolding model of voluntary employee turnover. *Academy of Management Review, 19*, 51–89.
- Lee, T.W., Mitchell, T.R., Holtom, B.C., McDaniel, L.S., & Hill, J.W. (1999). The unfolding model of voluntary turnover: A replication and extension. *Academy of Management Journal, 42*, 450–462.
- Lee, T.W., Mitchell, T.R., Sablinski, C.J., Burton, J.P., & Holtom, B.C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal, 47*, 711–722.
- Lee, T.W., Mitchell, T.R., Wise, L., & Fireman, S. (1996). An unfolding model of voluntary employee turnover. *Academy of Management Journal, 39*, 5–36.
- Lyness, K.S., & Judiesch, M.K. (2001). Are female managers quitters? The relationships of gender, promotions, and family leaves of absence to voluntary turnover. *Journal of Applied Psychology, 86*, 1167–1178.
- Maertz, C.P., & Campion, M.A. (1998). 25 years of voluntary turnover research: A review and critique. *International review of industrial and organizational psychology, 13*, 49–81.
- Maertz, C.P., & Campion, M.A. (2004). Profiles in quitting: Integrating process and content turnover theory. *Academy of Management Journal, 47*, 566–582.
- Maertz, C.P., & Griffeth, R.W. (2004). Eight motivational forces and voluntary turnover: A theoretical synthesis with implications for research. *Journal of Management, 30*, 667–683.
- Maertz, C.P., Griffeth, R.W., Campbell, N., & Allen, D.G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior, 28*, 1059–1075.
- Maertz, C.P., Stevens, M.J., & Campion, M.A. (2003). A turnover model for the Mexican maquiladoras. *Journal of Vocational Behavior, 63*, 111–135.
- Mallol, C., Holtom, B.C., & Lee, T.W. (2007). Job embeddedness in a culturally diverse environment. *Journal of Business & Psychology, 22*, 35–44.
- March, J.G., & Simon, H.A. (1958). *Organizations*. New York: John Wiley.
- McElroy, J., Morrow, P., & Rude, S. (2001). Turnover and organizational performance: a comparative analysis of the effects of voluntary, involuntary, and reduction-in-force turnover. *Journal of Applied Psychology, 86*, 1294–1299.

- McKay, P.F., Avery, D.R., Tonidandel, S., Morris, M.A., Hernandez, M., & Hebl, M.R. (2007). Racial differences in employee retention: Are diversity climate perceptions the key? *Personnel Psychology*, *60*, 35–62.
- McPherson, J.M., Popielarz, P.A., & Drobnic, S. (1992). Social networks and organizational dynamics. *American Sociological Review*, *57*, 153–170.
- Meyer, J.P., & Allen, N.J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, *1*, 61–89.
- Meyer J.P., Allen N.J., & Smith C.A. (1993). Commitment to organizations and occupations: extension and test of a three-component conceptualization. *Journal of Applied Psychology*, *78*, 538–551.
- Meyer, J.P., Stanley, D.J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, *61*, 20–52.
- Michaels, E., Handfield-Jones, H., & Axelrod, B. (2001). *The war for talent*. Boston, MA: Harvard Business School Press.
- Mirvis, P.H., & Lawler, E.E. (1977). Measuring the financial impact of employee attitudes. *Journal of Applied Psychology*, *62*, 1–8.
- Mitchell, T.R., Holtom, B.C., Lee, T.W., Sablynski, C., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, *44*, 1102–1121.
- Mobley, W.H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, *62*, 237–240.
- Mobley, W.H. (1982). *Employee turnover: Causes, consequences, and control*. Reading, MT: Addison-Wesley.
- Mobley, W.H., Griffeth, R.W., Hand, H.H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, *86*, 493–522.
- Morrell, K. (2005). Towards a typology of nursing turnover: the role of shocks in nurses' decision to leave. *Journal of Advanced Nursing*, *49*, 315–322.
- Morrell, K., Loan-Clarke, J., Arnold, J., & Wilkinson, A. (2008). Mapping the decision to quit: A refinement and test of the unfolding model of voluntary turnover. *Applied Psychology: An International Review*, *57*, 128–150.
- Morrell, K., Loan-Clarke J., & Wilkinson, A. (2004). The role of shocks in employee turnover. *British Journal of Management*, *15*, 335–349.
- Morrow, P.C., McElroy, J.C., Laczniak, K.S., & Fenton, J.B. (1999). Using absenteeism and performance to predict employee turnover: early detection through company records. *Journal of Vocational Behavior*, *55*, 358–374.
- Mossholder, K.W., Settoon, R.P., & Henagan, S.C. (2005). A relational perspective on turnover: Examining structural, attitudinal, and behavioral predictors. *Academy of Management Journal*, *48*, 607–618.
- Mueller, C.W., & Price, J.L. (1989). Some consequences of turnover: A work unit analysis. *Human Relations*, *42*, 389–402.
- Newton, T.J., & Keenan, A. (1990). Consequences of changing employers among amongst young engineers. *Journal of Occupational Psychology*, *63*, 113–127.
- O'Reilly, C.A., Caldwell, D.F., & Barnett, W.P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, *34*, 21–37.

- O'Reilly, C.A., Chatman, J., & Caldwell, D.F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, *34*, 487-516.
- Payne, S.C., & Huffman, A.H. (2005). A longitudinal examination of the influence of mentoring on organizational commitment and turnover. *Academy of Management Journal*, *48*, 158-168.
- Pelled, L.H. and Xin, K.R. (1999). Down and out: An investigation of the relationship between mood and employee withdrawal behavior. *Journal of Management*, *25*, 875-895.
- Pfeffer, J. (1983). Organizational demography. *Research in Organizational Behavior*, *5*, 299-357.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the workforce*. Boston, MA: Harvard Business School Press.
- Pfeffer, J. (2005). Changing mental models: HR's most important task. *Human Resource Management*, *44*, 123-128.
- Pfeffer, J. (2007). A modest proposal: How we might change the process and product of managerial research. *Academy of Management Journal*, *50*, 1334-1345.
- Pfeffer, J., & Davis-Blake, D. (1992). Salary dispersion, location in the salary distribution, and turnover among college administrators. *Industrial & Labor Relations Review*, *45*, 753-763.
- Pfeffer, J., & Fong, C. (2002). The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, *1*, 78-95.
- Platt, J.R. (1964). Strong inference. *Science*, *146*, 347-353.
- Podsakoff, N.P., LePine, J.A., & LePine, M.A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, *92*, 438-454.
- Porter, L.W., & Steers, R.M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, *80*, 151-176.
- Price, J.L. (1977). *The study of turnover*. Ames, IA: Iowa State University Press.
- Price, J.L. (1989). The impact of turnover on the organization. *Work and Occupations*, *16*, 461-473.
- Price, J.L., & Mueller, C.W. (1981). A causal model of turnover for nurses. *Academy of Management Journal*, *24*, 543-565.
- Price, J.L., & Mueller, C.W. (1986). *Absenteeism and turnover of hospital employees*. Greenwich, CT: JAI Press.
- Rafferty, A.E., & Griffin, M.A. (2006). Perceptions of organizational change: A stress and coping perspective. *Journal of Applied Psychology*, *91*, 1154-1162.
- Rollag, K., Parise, S., & Cross, R. (2005). Getting new hires up to speed quickly. *MIT Sloan Management Review*, Winter, 35-41.
- Rynes, S.L., Colbert, A.E., & Brown, K.G. (2002). HR professionals' beliefs about effective human resource practices: Correspondence between research and practice. *Human Resource Management*, *41*, 149-174.
- Sacco, J.M., & Schmitt, N. (2005). A dynamic multilevel model of demographic diversity and misfit effects. *Journal of Applied Psychology*, *90*, 203-231.
- Salamin, A., & Hom, P.W. (2005). In search of the elusive U-shaped performance-turnover relationship: are high performing Swiss bankers more liable to quit? *Journal of Applied Psychology*, *90*, 1204-1216.

- Schervish, P.G. (1983). *The structural determinants of unemployment, vulnerability and power in market relations*. New York: Academic Press.
- Shaw, J.D., Duffy, M.K., Johnson, J.L., & Lockhart, D.E. (2005). Turnover, social capital losses, and performance. *Academy of Management Journal*, 48, 594–606.
- Shaw, J.D., Gupta, N., & Delery, J.E. (2005). Alternative conceptualizations of the relationship between voluntary turnover and organizational performance. *Academy of Management Journal*, 48, 50–68.
- Sheridan, J.E., & Abelson, M.A. (1983). Cusp catastrophe model of employee turnover. *Academy of Management Journal*, 26, 418–436.
- Sims, C.S., Drasgow, F., & Fitzgerald, L.F. (2005). The effects of sexual harassment on turnover in the military: Time-dependent modeling. *Journal of Applied Psychology*, 90, 1141–1152.
- Simons, T., & Roberson, Q. (2003). Why managers should care about fairness: The effects of aggregated justice perceptions on organizational outcomes. *Journal of Applied Psychology*, 88, 432–443.
- Staw, B.M. (1980). The consequences of turnover. *Journal of Occupational Behavior*, 1, 253–273.
- Steel, R.P. (2002). Turnover theory at the empirical interface: Problems of fit and function. *Academy of Management Review*, 27, 346–360.
- Steers, R.M., & Mowday, R.T. (1981). Employee turnover and post-decision justification. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior* (Vol. 3, pp. 235–282). Greenwich, CT: JAI Press.
- Sturman, M.C., & Trevor, C.O., (2001). The implications of linking the dynamic performance and turnover literatures. *Journal of Applied Psychology*, 86, 684–696.
- Tanova, C., & Holtom, B.C. (In press). Using job embeddedness factors to explain voluntary turnover in 4 European countries, *International Journal of Human Resource Management*.
- Tekleab, A.G., Takeuchi, R., & Taylor, M.S. (2005). Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal*, 48, 146–157.
- Tepper, B. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43, 178–190.
- Terborg, J.R., & Lee, T.W. (1984). A predictive study of organizational tenure rates. *Academy of Management Journal*, 27, 793–810.
- Thomas, D.C., & Au, K. (2002). The effect of cultural differences on behavioral responses to low job satisfaction. *Journal of International Business Studies*, 33, 309–326.
- Thoresen, C.J., Kaplan, S.A., & Barsky, A.P. (2003). The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration. *Psychological Bulletin*, 129, 914–945.
- Trevor, C.O. (2001). Interactions among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management Journal*, 44, 621–638.
- Trevor, C.O., Gerhart, B., & Boudreau, J.W. (1997). Voluntary turnover and job performance: Curvilinearity and the moderating influences of salary growth and promotions. *Journal of Applied Psychology*, 82, 44–61.

- Ulrich, D., & Smallwood, N. (2005). HR's new ROI: Return on Intangibles. *Human Resource Management, 44*, 137–142.
- US Department of Labor, Bureau of Labor Statistics. *Job Openings and Labor Turnover Survey*. Retrieved December 7, 2007, from <http://www.bls.gov/jlt/>
- Vallacher, R.R., & Wegner, D.M. (1985). *A theory of action identification*. Hillsdale, NJ: Lawrence Erlbaum.
- Vandenbergh, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of Vocational Behavior, 64*, 47–71.
- Van de Ven, A.H., & Johnson, P.E. (2006). Knowledge for theory and practice. *Academy of Management Review, 31*, 802–821.
- Viator, R.E., & Scandura, T.A. (1991). A study of mentor–protégé relationships in large public accounting firms. *Accounting Horizons, 5*, 20–30.
- Wanberg, C.R., & Banas, J.T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology, 85*, 132–142.
- Weick, K.E., & Roberts, K.H. (1993). Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly, 38*, 357–381.
- Weller, I. (2006, August). *Job search strategies, job satisfaction, and job survival. Exploring the temporal dimension*. Paper presented at the Annual Meetings of the Academy of Management. Atlanta, GA.
- Wiener, L. (2004, November 14). Brain drain: Half of all federal workers can retire in five years. Will government be able to replace them? *US News & World Report*, pp. 87–92.
- Wright, T.A., & Bonnett, D.G. (2007). Job satisfaction and psychological well-being as non-additive predictors of workplace turnover. *Journal of Management, 33*, 141–160.
- Wright, T.A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 3*, 486–493.
- Zatzick, C.D., & Iverson, R.D. (2006). High-involvement management and workforce reduction: Competitive advantage or disadvantage? *Academy of Management Journal, 49*, 999–1015.
- Zedeck, S. and Mosier, K.L. (1990). Work in the family and employing organization. *American Psychologist, 45*, 240–251.