SHOCKS AS CAUSES OF TURNOVER: WHAT THEY ARE AND HOW ORGANIZATIONS CAN MANAGE THEM

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Voluntary employee turnover is expensive. Companies that successfully retain the best and brightest employees save money and protect their intellectual capital. Traditional approaches to understanding turnover place accumulated job dissatisfaction as the primary antecedent to voluntary turnover. However, we show that precipitating events, or shocks, more often are the immediate cause of turnover. Using data from more than 1,200 "leavers," we describe the nature, content, and role of shocks in turnover decisions. We then provide strategies to help organizations manage shocks, and thereby control turnover. © *2005 Wiley Periodicals, Inc.*

Introduction

Contrary to conventional wisdom, accumulated job dissatisfaction is not the immediate cause of most voluntary turnover. Job dissatisfaction is a factor, but to focus on it as the dominant cause of most turnover is incomplete and limited. Instead, we argue that turnover often is triggered by a precipitating event (e.g., a fight with the boss or an unexpected job offer) that we call a "shock" to the system. We use this learning forum to discuss and extend recent research on shock-induced turnover and to offer recommendations for using this new knowledge to improve employee retention. Mounting evidence demonstrates that the most powerful source of long-term competitive advantage is human and social capital (Becker, Huselid, & Ulrich, 2001; Pfeffer, 1995). Firms that attract, develop, and retain top talent will thrive; those that do not will face significant struggles. All firms will be challenged to find the right people and keep them. As noted by Fishman (1998), "The search for the best and the brightest will become a constant, costly battle, a fight with no final victory. Not only will companies have to devise more imaginative hiring practices; they will also have to work harder to keep their best people."

The message for organizational leaders is that they must develop clear strategies for attracting and retaining good employees. However, these plans must move beyond methods to combat job dissatisfaction if they expect to be effective. They also must

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Human Resource Management, Fall 2005, Vol. 44, No. 3, Pp. 337–352

DOI: 10.1002/hrm.20074

systematically address shocks and the critical role of these shocks in the voluntary turnover process.

All Turnover Is Not Equal

***The Food Marketing Institute estimates that grocers in the U.S. experience $5.8 billion in turnover costs annually*—a number roughly 41% greater than the industry's net profit of $4.1 billion.**

Let us be clear—not all turnover is bad. Researchers long have distinguished between functional and dysfunctional turnover (Maertz & Campion, 1998). However, conversations with practicing human resource professionals indicate that most organizations routinely track and report turnover on an aggregate basis only. In a recent interview, a senior vice president of human resources told one of the authors that the prior year's turnover in the sales and marketing department was 35%. The SVP then asked, "What can be done to change this?" This author's reply, "Did you lose high performers or low performers?"

The SVP has cause for alarm if the answer to this question is "high performers." On the other hand, how should the SVP respond to turnover if low performers are the primary leavers? Perhaps the SVP should be grateful. Too often, organizational leaders are unable to answer to this basic question. The bottom line—all turnover is not equal.

We also want to make explicit the point that very few organizations can reduce their turnover rate to zero (the issuance of a "Stop Loss Order" in the U.S. military is a notable exception, but even that may just delay turnover). Organizations must distinguish between avoidable and unavoidable turnover. For example, why spend money and time trying to retain people who leave for reasons outside the organization's control? Such efforts are highly unlikely to yield positive results. In other cases, there may be much the organization can do to retain a valued employee. In sum, the optimal level of turnover within organizations is not zero. Our aim is to help human resource professionals better analyze turnover so that they can proactively address avoidable, dysfunctional turnover.

The Cost of Turnover

Recent research on the impact of voluntary employee turnover in health care organizations highlights the significant price firms pay for it—often without even knowing. Waldman, Kelly, Arora, and Smith (2004) suggest a conservative estimate of these costs is between 3.4% and 5.8% of the overall annual operating budget for an entire medical center. This equates to a turnover cost of $17–$29 million on a $500 million base. The largest cost driver was the loss and necessary replacement of nurses. The authors calculated that it would be revenue-neutral to offer each departing nurse a *staying* bonus equal to 86 percent of his/her annual salary. In short, even a small increase in employee retention can have a major positive financial impact.

Health care organizations are not alone in this struggle. Agilent Technologies calculates that the costs incurred when a software engineer leaves are $250,000 (Joinson, 2000). The accounting firm KPMG recently estimated costs at $100,000 for replacing a departed employee (Emid, 2002). The problem is not isolated to high-skill industries. The Food Marketing Institute estimates that grocers in the U.S. experience $5.8 billion in turnover costs annually—*a number roughly 41% greater than the industry's net profit of $4.1 billion* (Joinson, 2000).

In contrast, companies in *Fortune*'s 2002 "100 Best Organizations to Work For" report much lower annual turnover rates (12.6% to 26%) than comparable companies in their industry (Cascio, 2002). The same study further reports that the top 100 firms have significantly "higher average stock returns, higher operating performance, higher return on assets and higher returns on capital employed." Reduced turnover is a major cause of these differences (Cascio, 2002).

Separate from the organizational expenses, individuals incur significant costs when they leave a job. If people go voluntarily, at that moment they believe that leaving their job is the right thing to do. However, transitioning to another job or situation (e.g., stay-at-home parent or additional education) can take a personal toll. A new job can be stressful and may entail considerable uncertainty and ambiguity. The employee and his/her family members must make numerous adjustments, especially if relocation is

involved. New living accommodations, new schools for children, friends left behind, and spousal re-employment are just some of the possible hurdles. Some people estimate it takes as long as a year for adjustments to be made and a career to get back on track. The evidence is very clear that the cost of turnover is high for both individuals and organizations (Glebbeek & Bax, 2004). Therefore, organizations should reduce it—paying special attention to avoidable, dysfunctional turnover.

Why People Leave

Over the past ten years, we have generated theoretical explanations for why people leave and have tested these explanations (Lee & Mitchell, 1994; Lee, Mitchell, Holtom, McDaniel, & Hill, 1999; Lee, Mitchell, Wise, & Fireman, 1996). Published reviews of this work are available (Mitchell, Holtom, & Lee, 2001; Mitchell & Lee, 2001). What we found is surprising but critical to understanding the turnover problem—*precipitating events, or shocks, cause voluntary departure more often than accumulated job dissatisfaction*. Shocks not only are powerful antecedents (or drivers) of voluntary turnover, but they also require employee turnover to be managed in a very different manner. We review briefly the origins of the voluntary turnover research and present the "Unfolding Model." We include considerable detail about the types of shocks that cause people to leave. We describe these shocks in terms of abstract dimensions (e.g., positive versus negative events) and in terms of their substantive content (e.g., how many of them concern financial issues such as pay or benefits). We then report data from more than 1,200 leavers. The diversity of organizations and jobs represented in the collective sample provides a broad perspective on shocks and the frequency of their influence on the turnover process.

The intellectual roots for most of the current theory and research on voluntary turnover grew from March and Simon's (1958) ideas about the perceived ease and desirability of movement. Since then, researchers typically operationalize perceived ease of movement as the perceived number and type of job alternatives. Perceived desirability of movement has generally been measured as an individual's level of job satisfaction. A large body of empirical evidence does demonstrate a modest relationship between dissatisfaction and turnover. However, the relationship between perceived alternatives and turnover remains inconsistent.

These data suggest that a vast amount of the variance in turnover is still unexplained. More importantly, this research also suggests that concepts (or tools) beyond job dissatisfaction are needed to better manage the turnover process.

For over four decades, theory and research on turnover have focused on job-dissatisfaction-induced turnover, with the intention to leave as its immediate antecedent. Meta-analyses indicate, for instance, that the proportion of shared variance between levels of satisfaction and turnover is 3.6% and the proportion shared between intention to leave and leaving is 12% (Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995). These data suggest that a vast amount of the variance in turnover is still unexplained. More importantly, this research also suggests that concepts (or tools) beyond job dissatisfaction are needed to better manage the turnover process.

Several years ago, we (Lee & Mitchell, 1994) argued that an alternative theory was needed to explain how and why people leave organizations. Based on interviews with people who had left their jobs and a comprehensive review of the turnover research, we proposed the unfolding model of voluntary turnover. Although individuals experience unique circumstances when they leave organizations, people appear to follow one of four psychological and behavioral *paths* when quitting. In published tests of the unfolding model (Lee et al., 1996, 1999), we demonstrated that these four paths did an excellent job of describing up to 90% of the people in these samples. For three of these paths, 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.

The Unfolding Model's Major Components and Paths

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. A shock can be positive, neutral, or negative; expected or unexpected; and internal or external to the person. Examples of shocks include unsolicited job offers, changes in marital status, transfers, or mergers. Shocks and their surrounding circumstances are compared to an individual's images (i.e., values, goals, and plans for goal attainment; see Beach, 1997), and if incompatible, thoughts of leaving occur. 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/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.

Table I depicts the unfolding model's four theorized paths. 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.* Your spouse, for example, gets a job in Washington, DC. You have been hoping to move there, so you pick up and go.

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, she leaves without a search for alternatives. For instance, a person gets passed over for promotion and, after thinking about it, decides to quit. Note that job satisfaction can be high before the shock but fall directly after; the shock itself has changed satisfaction levels. 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. Suppose you receive an unexpected job offer from one of *Fortune*'s "100 Best Places to Work For." After thinking about it and comparing other options, you decide to take the job. Note that you still leave even though you may be satisfied with your current job.

With Path 4, lower levels of job satisfaction are the precipitating state, instead of a shock. The person realizes she is dissatisfied and leaves, with or without searching for alternatives.

Shocks

Because shocks play a critical role in the turnover process, it is important to explain them in greater detail and to report what is known about them from prior research. From the outset, we must emphasize that shocks are a conceptual addition to conven-

TABLE I **The Unfolding Model Paths**

	Path				
Attribute	*1*	*2*	*3*	*4A*	*4B*
Initiating event	Shock	Shock	Shock	Job dissatisfaction	Job dissatisfaction
Script/plan	Yes	No	No	No	No
Image violation	Irrelevant	Yes	Yes	Yes	Yes
Relative job dissatisfaction	Irrelevant	Irrelevant	Yes	Yes	Yes
Alternative search	No	No	Yes	No	Yes
Offer or likely offer	No	No	Yes	No	Yes
Time	Very short	Short	Long	Medium	Long

tional ideas about dissatisfaction-induced turnover. Shocks advance, rather than replace, existing theory and empirical knowledge of employee turnover.

A shock to the system is theorized to be a distinguishable event that *jars* an employee toward deliberate judgments about his/her job and may lead the employee to voluntarily quit. A shock is an event that generates information or provides meaning about a person's job, and then is interpreted and integrated into the person's system of beliefs and images. As such, it is sufficiently jarring that it cannot be ignored. Note that not all events are shocks. Unless an event produces job-related deliberations that involve the prospect of leaving the job (defined in various ways in Paths 1, 2, and 3), it is not a shock.

Much like a disturbance in time-series analysis, a shock to the system need not surprise an employee; a shock can be any expected or unexpected change to an ongoing social system that shakes an employee out of a steady state or challenges the status quo with respect to his/her thinking about the job. The jarring event holds a person's attention but does not necessarily create negative emotions. Some shocks are entirely neutral. Others may involve some positive, neutral, and negative aspects; when combined, however, it is still possible for their composite to be neutral.

An employee's interpretation of the shock depends on the social and cognitive context that surrounds the shock experience. This context provides a frame of reference, or decision frame, within which an employee interprets the shock. The first interpretation is shaped by the general context of the employee's knowledge of the organizational culture (Schneider, 1990). The employee then considers the shock along key dimensions (e.g., novelty, favorability, threat, or anticipation). A second process, one that is more personal, is whether the shock can be responded to easily and in an appropriate manner. Of special interest is whether an obvious response (script) comes to mind in the form of past actions or rules the employee has generated from observing others or from knowledge he/she has acquired in other ways. In the unfolding model, the experienced shock to the system and the general and personal decision frames prompt the onset of a specific decision path.

A shock to the system is theorized to be a distinguishable event that* jars *an employee toward deliberate judgments about his or her job and may lead the employee to voluntarily quit.

Types of shocks. Categorizing types of shocks is helpful for organizations trying to mitigate their effects. Shocks either can be personal events that are external to the job or events that are job-related or organizational in nature. The first category might include winning the lottery, having a spouse transferred, being elected a church officer, losing a loved one, or adopting an infant. The second category includes events such as being passed over for promotion, receiving a job offer/inquiry, having an argument with the boss, becoming vested, or earning a large bonus. This category also would include corporate takeovers, scandals, diversification, or downsizing. Note again that the shocks described in both of these categories may be positive, neutral, or negative and they may or may not be expected. For example, shocks such as a company takeover, being passed over for promotion, or an unsolicited job offer often are unexpected. Expected shocks might be events such as a planned birth of a child, a previously discussed merger, or a logical and anticipated promotion.

We have found that different types of shocks occur with varying frequency, and that they differentially affect the specific decision path followed by the employee along with his/her eventual decision to stay or to leave. We, therefore, believe that it is critical to document the types of shocks that people report and their substantive content. See Table II for examples of shocks.

Study Findings

Overview of Shock Data Collection

There are two primary ways to obtain information about shocks: (1) interview people who are exiting organizations and (2) administer surveys to large numbers of people who have left organizations previously.

Exit interviews are valuable sources of information about organization-induced

TABLE II **Shock Examples**

Shock	*Sample*	*Shock (direct quote): Was there an event that caused you to start thinking about leaving?*
Job offer	GMAT	"Received an offer for a better job"
Job offer-learning	GMAT	"Received a better offer with a company that offered opportunity for advancement"
Job offer-money	Accounting	"Received an unsolicited job offer from a client for a large increase in pay"
Fight (disagreement with boss, coworker)	Accounting	"Clash with a coworker over business ethics"
Performance (encouraged to leave, passed over for promotion)	Accounting	"I was passed over for promotion"
Merger (or reorganization, layoff of coworkers)	Local bank	"My firm got bought out; didn't like new company philosophy"
Spouse employment	GMAT	"Relocated because of spouse's job"
Family issue	International bank	"Had a baby"
Significant illness	International bank	"My father became very ill; we moved to be near him"
School	GMAT	"I enrolled in law school"
Start own business	GMAT	"To start own consulting practice"
Other	Corrections	"I was scheduled for 3rd shift and assigned to a new department"

shocks. They also provide insight into how the organization might respond to future personal or organizational shocks. Though some researchers have questioned the value of exit interviews, the general consensus is that they are useful tools for managers (Feldman & Klaas, 1999; Steel, Griffeth, & Hom, 2002). We conducted face-to-face or phone-based exit interviews with 219 people in diverse roles across four organizations.

Large-scale surveys administered to employees inquiring about previous turnover experiences allow researchers and managers to identify industry-specific shocks and to estimate base rates for the frequency of diverse types of shocks. Large data samples collected across organizations minimize the effects of idiosyncratic organizational or managerial issues. We accessed two large databases containing information about shocks. One is industry-specific, while the other spans multiple industries. Both samples contain educated, managerial-level employees.

Although information from the exit interviews or surveys can suffer from retrospective or social-desirability bias, empirical evidence suggests that critical events such as organizational departure create strong images that are *less* likely to decay than other memories (Symons & Johnson, 1997; Wheeler, Stuss, & Tulving, 1997).

Research Settings

We gathered data from six separate sets of data that measure and describe shocks. The sample from each data set is described briefly below, with additional details provided in Appendix A.

Nursing. In Lee et al. (1996), 44 nurses who left eight hospitals in a large metropolitan area were interviewed.

Accounting. In Lee et al. (1999), 229 accountants who voluntarily quit Big 4 accounting firms were surveyed.

International Bank. In Lee, Mitchell, Sablynski, Burton, and Holtom (2004), surveys were distributed to 1,650 employees across five separate organizational units of a large international bank. We interviewed 105 of the respondents who left during the year following the survey.

Local Bank. In another sample (unpublished), we distributed surveys to nearly 500 employees of a community-based bank located in the midwestern region of the United States. We interviewed 49 of the respondents who left during the year following the survey.

Corrections. In an additional sample (unpublished), a study was carried out with the assistance and support of the Department of Corrections of a southern U.S. state. We drew a random sample of 1,035 individuals who received the questionnaire. We interviewed 21 of the respondents who left during the year following the survey.

GMAT. In the final data set (Holtom & Inderrieden, 2003), a large-scale survey sample is drawn from the Graduate Management Admission Test (GMAT) Registrant Survey. The survey was composed of four separate waves of data. Approximately 250,000 individuals register to take the GMAT every year. Based on a stratified random sample, questionnaires were sent to 7,006 individuals. Completed questionnaires were received from 5,790 individuals. Given our interest in shocks and voluntary turnover, we analyzed individuals working full-time when the Wave III questionnaire was distributed (1994) and who voluntarily left that employment by the time of their Wave IV responses (1998). Their responses to Wave IV provide the basis for our analysis.

In the comments that follow, we refer to these samples as the Nursing, Accounting, Local Bank, International Bank, Corrections, and GMAT studies.

Measures

Post-turnover interviews (available from Nursing, International Bank, Local Bank, and Corrections). After collecting survey data from more than 1,000 respondents at the above-mentioned organizations, we received the names and contact information for all respondents who voluntary left the firms within 12 months of the survey. We attempted to contact all voluntary leavers and ultimately conducted more than 200 interviews. The initial focus of the interview was on what initiated their thoughts about leaving (i.e., some particular event or job dissatisfaction). The interview protocol was modeled after an industry-standard exit interview. After the interviews were completed, four judges responded to the following question to assess the characteristics of the reasons/event(s) described in the interviews: Was it a "particular, jarring event that initiated the psychological analyses involved in quitting a job?" If no, then no shock is present. If yes, the following questions were asked to identify the characteristics of the shock: (a) Was the event expected or unexpected? (b) Would you characterize the event as positive, negative, or neither positive nor negative? (c) Did the event that occurred involve personal issues, company issues, or was it a combination of the two? (d) Was an unsolicited job offer or inquiry the event that first led to thinking about leaving? The judges initially agreed on 94.1% of the decisions about shock characteristics. After brief clarification and discussion, 100% agreement was achieved among the four judges.

Was it a "particular, jarring event that initiated the psychological analyses involved in quitting a job?" If no, then no shock is present.

Post-turnover large-scale surveys (available from Accounting and GMAT). In order to assess shocks, we evaluated via survey the reasons why individuals left their organizations. All 229 accountants recently left jobs in Big 4 accounting firms. GMAT survey respondents were asked (referring to the job they held at the prior survey date), "Are you still employed by the same organization?" If the answer was "no," respondents were asked, "What is the main reason you left this job? Please briefly describe the main reason you left this job." Using predefined decision rules, four judges classified the reasons for leaving from 906 respondents who changed jobs from Wave III to Wave IV. First, judges assessed whether or not the turnover was vol-

untary or involuntary. Eighty-seven of the cases were deemed to be involuntary; because we are interested in voluntary turnover, we subsequently dropped all cases of involuntary turnover from our analysis. The same inter-rater methodology used in the exit interviews to assess shocks was used to rate the events reported on the surveys. The judges initially agreed on 95.2% of the decisions. After clarification and further discussion, 100% agreement was achieved among the four judges.

These analyses provided us with information on the distribution of paths, frequency counts of shock attributes (i.e., expected/unexpected; positive/neutral/negative), and shock content (e.g., financial concerns). It is important to note that although some data from these organizations have been presented in other published research, the data and analyses presented in this article are all new.

Results

As observed in Table III, 64% of all leavers in the studies of individual organizations experienced shocks, while 58% of leavers in the GMAT sample experienced shocks. More specifically, the paths initiated by shocks constitute a majority of the paths reported for voluntary turnover. Further, Path 3 is most frequently reported among those paths initiated by a shock. This frequency occurs in both the aggregate (83% of the shock-initiated paths as noted in Table IV) and for each of the three samples (Accounting, International Bank, and Nursing).

As can be observed in Table IV, Path 1 leavers experienced shocks that were primarily personal (88%), positive (62%), and expected (69%). In contrast, Path 2 leavers experienced predominantly unexpected shocks (89%). The majority of these shocks were classified as organizational (58%) and negative (58%). A large percentage of Path 3 leavers experienced unexpected shocks (91%). The shocks were balanced in valence (an even mix of positive, neutral, and negative) as well as across personal (53%) and organizational (47%) issues.

Our overall analysis of shock content indicates that only 14% of people mentioned money as a reason for leaving in the GMAT sample (Table V). In the aggregate across the other samples, only 9% mentioned money as the shock or a component of the shock.

As can be seen in Table V, nearly half of the Path 3, leavers received outside job offers (Accounting). While this finding may be unique to the accounting profession, it clearly is a frequently occurring shock in other fields as well. For example, 280 of 475 (59%) shock-induced leavers in the GMAT sample left because they received outside job offers.

Chi-square tests looking across all available data reveal significant differences among organizations and professions with respect to types of organizational shocks ($\chi^2 = 38.51$, df = 8, $p < .00$) and personal shocks ($\chi^2 = 38.80$, df = 24, $p < .03$). However, there were no statistically significant differences across types of external shocks ($\chi^2 = 7.16$, df = 8, $p < .47$), suggesting that diverse employ-

TABLE III **Shock Characteristics**

	Leavers		*Foreseen*		*Nature*		*Valence*		
	No Shock	*Shock*	*Expected*	*Unexpected*	*Personal*	*Organizational*	*Positive*	*Neutral*	*Negative*
Nursing	18	26	9	17	17	9	12	3	11
Accounting	65	164	18	146	98	66	88	14	62
International Bank	40	29	5	24	9	20	7	0	22
Local Bank	22	27	12	15	6	21	4	3	20
Corrections	5	16	8	8	5	11	5	1	10
Total	150	262	52	210	135	127	116	21	125
Percent	36%	64%	20%	80%	52%	48%	44%	8%	48%
GMAT	344	475	381	94	157	318	359	39	77
Percent	42%	58%	80%	20%	33%	67%	76%	8%	16%

TABLE IV **Shock Characteristics by Decision Paths**

	Foreseen		Nature		Valence			Total
	Expected	*Unexpected*	*Personal*	*Organizational*	*Positive*	*Neutral*	*Negative*	*Shocks*
Path 1								
Accounting	3	3	5	1	5	1	0	6
Int'l Banking	3	1	3	1	3	0	1	4
Nursing	5	1	6	0	2	2	2	6
TOTAL	11	5	14	2	10	3	3	16
Percent	69%	31%	88%	12%	62%	19%	19%	8%
Path 2								
Accounting	1	6	2	5	1	1	5	7
Int'l Banking	0	6	3	3	0	0	6	6
Nursing	1	5	3	3	6	0	0	6
TOTAL	2	17	8	11	7	1	11	19
Percent	11%	89%	42%	58%	37%	5%	58%	9%
Path 3								
Accounting	11	125	78	58	71	12	53	136
Int'l Banking	2	17	3	16	4	0	15	19
Nursing	3	11	8	6	4	1	9	14
TOTAL	16	153	89	80	79	13	77	169
Percent	9%	91%	53%	47%	47%	8%	45%	83%

ers experience similar types of external shocks such as outside offers, opportunities for further learning, and money issues.

One interesting result captured in Table V is the proportion of leavers who cited merger and acquisition activity as the shock motivating their departure. Across the individual studies, 13% of employees mentioned merger or acquisition activity by their employer as a shock prompting them to reconsider their attachment. Nine percent of people in the GMAT sample reported shocks relating to mergers. Table V provides additional detail regarding the types of shocks experienced and the relative frequency across organizations.

Discussion

Conventional wisdom holds that job dissatisfaction is the main antecedent to employee turnover; therefore, managers are advised to monitor job satisfaction on a regular basis. While a necessary action, it is unlikely to completely address turnover. From this study, we learn that shocks precipitate a majority of the employees' quitting. This relatively new insight expands the literature on employee turnover and offers meaningful implications for managing and understanding employee retention. Our study finds support for these implications across multiple samples and occupations using both survey and interview data. Thus, it is critical also for organizations to investigate, anticipate, and mitigate the effects of shocks.

While shocks may precipitate leaving more often than accumulated job dissatisfaction, we wish to make it clear that these results do *not* suggest that employers should disregard job dissatisfaction as an antecedent of employee turnover. Dissatisfaction-induced leaving is an empirical fact (Griffeth, Hom, & Gaertner, 2000). Also, as noted in Table I, while Path 3 is initiated by a shock, it also includes relative dissatisfaction. Further, monitoring job satisfaction offers intrinsic and applied values beyond managing employee retention. Our contention is that *shocks offer additional insights for those managers concerned about employee retention.* Moreover, because managers are so well trained and socialized to think about dissatisfaction-induced turnover, it is essential that the role of shocks be given specific emphasis in leadership training regarding employee retention.

TABLE V **Shock Types**

		External		*Organizational*							*Personal*			
	Job Offer	*Learning Opportunities*	*Money*	*Fight with Boss or Coworker*	*Performance Issues*	*Merger or Acquisition*	*Spouse Employment*	*Family Issues*	*Illness*	*Moved*	*School*	*Own Business*	*Other*	*TOTAL*
Reason for leaving:														
Accounting	75	10	15	10	19	29	3	10	1	6	2	4	5	164
International Bank	3	0	0	7	10	0	1	4	2	0	0	0	2	29
Local Bank	9	0	5	6	5	1	0	0	2	2	0	0	2	27
Corrections	4	0	1	4	2	0	0	1	1	0	2	0	2	16
Total of individual studies	91	10	21	27	36	30	4	15	6	8	4	4	11	236
Percent	39%	4%	9%	11%	15%	13%	2%	6%	3%	3%	2%	2%	5%	
GMAT	280	51	68	12	13	42	12	26	5	42	16	14	13	475
Percent	59%	11%	14%	3%	3%	9%	3%	5%	1%	9%	3%	3%	3%	

Specifically, it is critical for managers to understand two unambiguous findings from a large body of research. First, meta-analytic studies summarizing the results of hundreds of studies analyzing job satisfaction and job performance demonstrate a modest, positive linear relationship between them (Judge, Thoresen, Bono, & Patton, 2001). In other words, employees satisfied with their jobs are more likely to perform well than employees who are not. Second, meta-analytic studies looking at job performance and turnover report a modest, negative relationship (Salamin & Hom, in press; Trevor, Gerhart, & Boudreau, 1997, though these authors present preliminary evidence that may move our knowledge beyond simple negative linear relationships). Put succinctly, these studies indicate that better performers are more likely to stay.

When combined, these key findings have two important implications. First, people who leave because they are less satisfied also are likely to be lower performers in the organization. Second, better performers who leave are more likely to be job-satisfied. Thus, if only satisfaction is monitored, it will be difficult to anticipate the leaving of high performers. Shocks may offer a more precise tool to anticipate when these better performers might leave. In other words, dysfunctional turnover is more likely to result from shocks than from job dissatisfaction. Thus, it is imperative that organizational leaders rework their mental models to include the concept of shocks.

Integrating Shocks into Organizational Retention Plans

Organizations that seek to understand the shocks their people experience can do as we have done: conduct exit interviews and administer broad-based surveys. Both approaches have advantages and disadvantages. In the case of exit interviews, information is obtained "after the fact," when typically it is too late for the organization to intervene and keep the employee in the job. However, collecting this information can help the organization proactively address systemic or recurring issues. Table VI outlines ways shock information can be developed and used to increase employee retention.

Broad-based surveys have the advantage of providing insight into why current employees have considered leaving their organization, and why they have left other organizations in the past. The information can address organizational issues raised by incumbents and thereby increase the probability of their staying. This information also can be used in developing recruiting and selection procedures to reduce the likelihood of hiring people with a high probability of leaving the organization. In short, organizations concerned about dysfunctional turnover should conduct research to better understand the types of shocks most likely to prompt their employees to consider leaving.

Such information would also help managers anticipate when employee expectations might be violated (unexpected, job-based

TABLE VI **Incorporating "Shocks" in Retention Plans**

Stage	*Action Steps*
Part 1: Gather Data	1. Analyze exit interview data to assess the shocks that caused good people to leave your organization. 2. Conduct surveys of current employees to better understand: A. Shocks they have experienced during employment with your organization and B. Shocks that prompted them to leave prior organizations
Part 2: Develop Plans	3. On the basis of knowledge gained from Steps 1 and 2 above, develop plans to specifically address shocks as they occur. Different types of shocks will require different interventions.
Part 3: Implement Plans	4. Train and encourage line managers to intervene with the appropriate plan as soon as possible after learning that a good employee has experienced a shock. 5. Measure the success of the interventions and revise the plans as necessary. 6. Proactively envision possible future shocks (e.g., mergers, etc.).

shocks). Such events might include performance appraisal, salary decisions, and promotion activities. Managers should receive training to help coach their people throughout the year, as well as training on how to deliver this type of information so as to reduce the probability of their employees experiencing shocks. Additionally, such information should emphasize the importance of frequent communication between organizational leaders and employees. If communication lines are open, leaders can foresee potential shocks and be among the first to know when shocks do occur. This knowledge will give leaders more time to anticipate and respond to shocks.

Shock attributes also appear to vary by organization and profession. Thus, appropriate responses will vary across contexts and organizations.

From this study, we also learn that the shock-induced Path 3 depicts the most common mode of employee turnover. Understanding based on decades of research supports the contention that organizations should routinely monitor levels of employee satisfaction. When satisfaction levels are low, quitting is often anticipated; in response, proactive managers attempt to alleviate the sources of the dissatisfaction. However, from our prior research, we know that in Path 3, job satisfaction may be a less important antecedent or determinant of quitting than conventional wisdom suggests. In Lee et al. (1996, 1999), we have documented that many job-satisfied people voluntarily quit. For some, they leave the current satisfying job for a potentially more satisfying one. For others, job dissatisfaction is not even present until a shock leads the person to consider other, possibly better, jobs. If managers only monitor job satisfaction, many Path 3 departures will be missed and an opportunity lost for intervention. By monitoring satisfaction *and* shocks, and by intervening when necessary, employee retention can be enhanced.

Knowledge about shocks and their attributes may provide guidance as to how quitting unfolds over time, and how a manager may best respond to enhance the likelihood of retention. For instance, an expected, nonjob shock (e.g., spouse's transfer) may precipitate Path 1 leaving. Offering changes to the employee's job tasks may be an ineffective attempt to encourage retention. However, efforts to place the employee within the firm in a new location close to his/her spouse may be highly rewarding (assuming the firm has multiple locations).

Job-based, negative shocks frequently prompted Path 2 quitting. Efforts aimed at reducing turnover should focus directly on that negative event. For example, if a valued employee is not promoted when expected (e.g., a promotion and hiring freeze is in place), organizational leaders should anticipate an employee's response and be prepared to offer job enlargement, rotation, or other challenges to keep the employee engaged.

From this study, we see that job-based shocks—particularly unsolicited job offers—frequently led to Path 3 quitting. Extending counter-offers or professional development opportunities or making the nonfinancial attributes of the job more salient (e.g., focusing on what the employee would give up by leaving) may be effective responses. Since financial shocks appear far less prevalent than commonly thought, they may therefore, be less potent, indicating that there is value in highlighting a job's desirable but nonfinancial attributes.

Finally, shock attributes also appear to vary by organization and profession. Thus, appropriate responses will vary across contexts and organizations. As examples of this variation, please consider the following scenarios.

Example 1. Suppose that Path 1 and 2 leaving is common in one's industry and company. Please recall that leaving in Path 1 and 2 occurs very quickly and that a manager's opportunity to react is quite limited. It may be more efficient to focus on the effect of shocks than on satisfaction (which is typically unimportant in these two paths) and to monitor for shocks that commonly occur within a given industry, occupation, or profession. For instance, shocks that prompt leaving for a knowledge worker in a high-technology firm may be quite different than that of a seasonal snowboarding instructor working at a major destination resort. More specifically, shock attributes (e.g., expected versus unexpected, personal versus organizational, monetary ver-

sus nonmonetary) could be assessed via surveys, exit interviews, and/or management by wandering around. In turn, managers might then devise ways to deal proactively with these anticipated shock types. For instance, job-based shocks might be addressed via realistic job previews; abhorrent event–based shocks might be prevented by clear and meaningful whistle-blowing policies; and the effect of career-based shocks might be lessened with career counseling and training as well as clear paths for career progression.

Example 2. Suppose that Path 3 leaving is most common in one's industry and firm (as it is for nurses and accountants). For Path 3, unsolicited-job-offer shocks cause comparison of the current job with the new job. When the satisfaction perceived in the offered job exceeds that of the current job, turnover typically follows. Put differently, we believe that relative job satisfaction mediates the effects of shocks on leaving. Unlike Paths 1 and 2, Path 3 leaving unfolds much more slowly. As such, a manager has a longer opportunity to respond to the shock's effect. For some employees, and in some situations, for instance, increased compensation may be the main response to an unsolicited job offer. A counter-offer, salary increase, or immediate promotion are some of the viable responses. For many people, however, nonfinancial reasons often prompt leaving. Hence, additional training, new assignments and responsibilities, or challenging tasks may be factors that deflect leaving.

Limitations

This study presents a large body of data accumulated over the past decade. Much of the data was gathered using research procedures carefully designed to assess shocks and their consequences. However, not all of the data sets were designed for this explicit purpose. Notwithstanding the strengths of the GMAT data set (e.g., a large sample with respondents from many job types and industries), it was not specifically designed to assess shocks. The "reasons for leaving" a job were provided, but as researchers we had to carefully code these reasons to assess the presence or absence of shocks. A second limitation is the time lag that exists between when a person leaves his/her job and survey completion. In this case, the lag may have been up to two years. This time lag may introduce the potential for recall bias that arises with a retrospective design. Though this potential exists, research suggests that such retrospective designs are not necessarily biased and remain a viable research strategy (Miller, Cardinal, & Glick, 1997).

Accumulating evidence indicates the importance of organizations carefully analyzing and monitoring shocks. Possessing this knowledge, managers then can make evidence-based decisions regarding when to focus on shocks or satisfaction, or both.

Conclusion

Over the course of the past decade, as we have sought to better understand shocks and their role in the turnover process, we have been regularly reminded that organizational life is complex and evolving. The concept of shocks does not replace job satisfaction as a predictor of voluntary turnover, but instead is a complementary construct that allows researchers to model more of the complexity experienced by individuals who simultaneously manage careers and juggle numerous nonwork issues. The workplace has changed significantly in the 40 years since the early investigation of job-satisfaction-based turnover models. For example, the proliferation of dual-career and single-parent families, the increased frequency of mergers and acquisitions, and the decline of "jobs for life" have resulted in employees looking at organizational attachment from a different perspective. Changing jobs no longer is viewed as an impediment to one's career; in fact, staying with a single employer now is viewed as the exception. While job satisfaction remains an important predictor of voluntary turnover, it is imperative to recognize that other factors are equally important.

All in all, shocks do matter. Our study documents the diverse nature of shocks and how different shocks affect voluntary turnover. More importantly, it extends our current knowledge for managing employee retention. Accumulating evidence indicates the importance of organizations carefully analyzing and monitoring shocks. Possessing this knowledge, managers then can

make evidence-based decisions regarding when to focus on shocks or satisfaction, or both. Finally, they will be armed to anticipate shocks and proactively defuse their effects, thereby stemming the tide of dysfunctional turnover.

Acknowledgment

The authors would like to thank Dr. James Burton, Dr. Chris Sablynski, Sarah Willems, and Juliet Rackl for their valuable assistance in gathering and analyzing the data.

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Appendix A

Detailed Description of Research Settings

Nursing. In Lee et al. (1996), 44 nurses who left eight hospitals in a large metropolitan area were interviewed. The average age of respondents was 37.57 years (SD = 11 years), and all but one nurse was female. They had average job tenure of 45 months (SD = 46 months).

Accounting. In Lee et al. (1999), 229 accountants who voluntarily quit Big 4 accounting firms were surveyed. The average age of respondents was 39.93 years (SD = 7.19); 69% were male, and 44.1% had advanced degrees (all others had at least a bachelor's degree).

International Bank. Lee et al., (2004), surveys were distributed to 1,650 employees across five separate organizational units of a large international bank. Of the 1,650 surveys, 829 (50%) usable surveys were returned. Within our sample, 75.3% were women, the overall average age was 34.2 years (SD = 9.9), and average tenure with the organization was 6.6 years (SD = 5.1). The majority of respondents had "some college" (48.3%) or a "BA/BS" degree (25.1%). We interviewed 105 of the respondents who left during the year following the survey.

Local Bank. In the fourth sample (unpublished), surveys were distributed to all employees of a community-based bank located in the midwestern region of the United States. Completed surveys were returned by 364 of 478 employees—a 78% response rate. Of the 58 voluntary leavers in the year following survey administration, 49 were interviewed.

Corrections. In a fifth sample (unpublished), a study was carried out with the assistance and support of the Department of Corrections of a southern U.S. state. At the time of the study, the state correctional system consisted of 12 facilities with a total staff of 3,028. We obtained a list of all current employees, from which we drew a random sample of 1,035 individuals (34%). These employees received the questionnaire. A total of 769 surveys were returned to the authors, representing a response rate of 74%. We interviewed 21 of the respondents who left during the year following the survey.

GMAT. In an eighth data set (unpublished), a large-scale survey sample is drawn from the Graduate Management Admission Test Registrant Survey initiated in 1989. The survey was composed of four separate waves of data collection starting in 1990 and ending in 1998. Approximately 250,000 individuals register to take the GMAT every year. Based on a stratified random sample of approximately 250,000 test registrants, questionnaires were sent to 7,006 individuals who signed up to take the test between June 1990 and March 1991. Completed questionnaires were received from 5,790 individuals (82.6% response rate). The current investigation focused on Waves III and IV collected in 1994 and 1998, respectively. Given our interest in shocks and voluntary turnover, we looked at individuals who were working full-time when the Wave III questionnaire was distributed. While 4,533 individuals completed the Wave III questionnaire and respondents for Wave IV numbered 3,769, the final sample of 1,898 included only those individuals who reported in Wave III they were working full-time, and had attended a graduate management school. Respondents who were either fired or whose jobs were eliminated were not included in the final analyses. For the final sample, the average age of survey respondents was 35 years; 58% were men, 72.5% were married, and respondents had worked in their current organization for an average of 5.5 years at the time the Wave III questionnaire was completed.