

Running Head: BURNOUT TRAJECTORIES OVER TIME

Is burnout static or dynamic? A career transition perspective of employee burnout trajectories

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Benjamin B. Dunford
Krannert School of Management
Purdue University
403 W. State St.
West Lafayette, IN 47907
Email: bdunford@purdue.edu
Phone: (765)496-7877

Abbie J. Shipp
Mays Business School
Texas A&M University
420R Wehner Building
College Station, TX 77843
Email: AShipp@mays.tamu.edu

R. Wayne Boss
Leeds School of Business
University of Colorado at Boulder
Campus Box 419
Boulder, CO 80309
Email: wayne.boss@colorado.edu

Ingo Angermeier
Spartanburg Regional Healthcare System
101 East Wood Street
Spartanburg, SC 29303
Email: iangermeier@srhs.com

Alan D. Boss
University of Washington Bothell
UW1-111
Bothell, WA 98011
Email: aboss@uwb.edu

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Abstract

Despite decades of theory and empirical research on employee burnout, its temporal and developmental aspects are still not fully understood. This lack of understanding is problematic because burnout is a dynamic phenomenon and burnout interventions may be improved by a greater understanding of who is likely to experience changes in burnout and when these changes occur. In this paper, we advance existing burnout theory by articulating how the three burnout dimensions should differ in their pattern of change over time as a result of career transition type: organizational newcomers, internal job changers (e.g., promotions or lateral moves), and organizational insiders (i.e., job incumbents). We tested our model in a broad sample of 2,089 healthcare employees, with five measurement points over a two-year time period. Using random coefficient modeling (RCM), we found that burnout was relatively stable for organizational insiders but slightly dynamic for organizational newcomers and internal job changers. We also found that the dimensions of emotional exhaustion and depersonalization were more sensitive to career transition type than reduced personal accomplishment. Finding some differences among different types of employees as well as the dimensions of burnout may begin to explain longstanding inconsistencies between theory and research regarding the dynamics of burnout, offering directions for future research that address both dynamism and stability.

Keywords: burnout, change, trajectory, career transitions, longitudinal data, time, stability

Employee burnout is a progressive psychological response to chronic work stress involving emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment (Maslach, 1982; Maslach & Jackson, 1981). Burnout is important because it leads to absenteeism, performance, citizenship behaviors, and turnover (e.g., Halbesleben & Buckley, 2004; Lee & Ashforth, 1996; Swider & Zimmerman, 2010; Taris, 2006).

However, despite several decades of progress on burnout research (Crawford, Lepine, & Rich, 2010; Halbesleben, 2006; Shirom, 2003; van Dierendonck, Schaufeli, & Buunk, 2001), little is known about change in individual burnout over time. Theoretically, much of the burnout literature generally suggests that burnout should be progressive and dynamic (Golembiewski, Munzenrider, & Stevenson, 1986; Maslach, 1982; Shirom, 2003), yet most empirical research has focused on explaining and testing the antecedents of static levels of burnout (Cordes & Dougherty, 1993). Static models may explain why some employees may be more burned out than others at a single point in time but they are limited in explaining why burnout may change (e.g., why an idealistic, energetic nurse becomes cynical and exhausted or how a burned out accountant may recover over time). This limitation is problematic because theoretically, the more important aspect of burnout is not its static level but rather the *change* in burnout over time (Ashforth & Lee, 1997; Golembiewski et al., 1986; Shirom, 2003). Indeed, as Mitchell and James (2001) argued, when the complex role of time is not acknowledged in management research, “theory is impoverished.” Knowing for whom burnout changes and when this pattern of change occurs leads to a more realistic view of the dynamism of human experience and better managerial prescriptions for addressing burnout.

In this paper, we argue that current research may be augmented by a new model of burnout change. Accordingly, we make three contributions to burnout research. First, we integrate theory from socialization and career transitions research (Feldman, 1989; Louis, 1980; Nelson, 1987; Wanous, 1991) with existing ideas from burnout theory (Bakker & Demerouti,

2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Maslach & Jackson, 1981; Maslach & Schaufeli, 1993) to propose a new model that explains for whom burnout should change over time. We contend that previous burnout research has overlooked the role of career related transitions, which we define as an individual's status as an organizational newcomer, internal job changer, or organizational insider. *Organizational newcomers* are employees who have been recently hired and are in the process of becoming socialized to their work roles, groups, and the organization (Wanous, 1991). *Internal job changers* are employees who, although previously employed within the organization, make lateral moves or are promoted (Latack, 1984; Pinder & Schroeder, 1987). Internal job changers experience a resocialization process as they learn new tasks, learn new skills, and learn to work with new groups of people, or adjust to the culture of a new department within the firm (Feldman, 1989). In contrast, *organizational insiders* are job incumbents who have been in their jobs for a sufficient amount of time to no longer be in the socialization process, and experience little or no significant job change at work (Wanous, 1991).

Second, we differentiate the effects of career transitions across the three dimensions of burnout over time (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment). Although several models have explored causal ordering among these burnout dimensions (Golembiewski et al., 1986; Lee & Ashforth, 1993; Leiter, 1993; van Dierendonck et al., 2001) these models have not yet considered how the dimensions may differ in their progression over time. The dimensions may not be equal in their progression (Cordes & Dougherty, 1993; Leiter, 1993), thus requiring different treatment or prevention strategies. Our differentiation of dimensions enables organizations to more precisely tailor the timing and target of their burnout prevention and reduction initiatives (Golembiewski et al., 1986), and it enables researchers to develop more fine-grained theory about the different manifestations of burnout.

Finally, we are (to our knowledge) the first to make and test predictions about different types of burnout trajectories, which we define as the functional form of an individual's change in

burnout over time (Bliese, Chan, & Ployhart, 2007; Bliese & Ployhart, 2002; Chan & Schmitt, 2000; Ployhart & Vandenberg, 2010). Burnout may increase or decrease at a constant rate (i.e., a linear form), increase or decrease at a variable rate (i.e., a curvilinear form), or exhibit a combination of rates of change and directions (Mitchell & James, 2001; Singer & Willett, 2003). Such nuances have not been studied in the burnout literature, yet exploring them may advance burnout research with a more realistic view of the dynamism of human experiences.

Current Perspectives on Burnout

In a review of the burnout literature, Maslach and Schaufeli (1993) emphasized that the burnout construct has two defining characteristics: *domain* and *time*. In terms of its domain, burnout is defined as a multi-dimensional construct, involving three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is defined as a feeling of “being over-extended and depleted of one’s emotional resources” in response to “chronic interpersonal stressors on the job” (Maslach, Schaufeli, & Leiter, 2001, p. 399). Depersonalization is defined as a “negative, callous, or detached response to various aspects of the job” (Maslach et al., 2001, p. 399). Reduced personal accomplishment is defined as a “decline in one’s feelings of competence and successful achievement in one’s work” (Maslach, 1993, p. 21). Although there are debates about the causal ordering of the dimensions (Golembiewski et al., 1986; Lee & Ashforth, 1993; Leiter, 1993; van Dierendonck et al., 2001), it is widely acknowledged that the burnout dimensions are distinct, with each having different relationships with outcomes such as performance, citizenship behavior, turnover intentions, and coping behavior (Cordes & Dougherty, 1993; Lee & Ashforth, 1996; Taris, 2006).

A second defining characteristic of burnout is that it changes over time, suggesting a temporal element to its various dimensions (Cherniss, 1980; Edelwich & Brodsky, 1980; Golembiewski et al., 1986; Shirom, 1989). Specifically, burnout is theorized to be a dynamic, unfolding process involving employees’ evolving psychological responses to work stress

(Maslach, 1982). For decades, burnout theorists have argued that burnout varies with changes in job demands and the resources available to help employees cope with those demands¹ (Bakker & Demerouti, 2007; Demerouti et al., 2001; Maslach & Jackson, 1981; Maslach & Schaufeli, 1993). However, we still know very little about which individuals may be more at risk and when such changes in burnout would occur. One reason why these questions remain is that, despite theoretical expectations of dynamism, existing research has found little change in burnout over time (Bakker, Schaufeli, Sixma, Bosveld, & van Dierendonck, 2000; Capel, 1991; Golembiewski et al., 1986; Greenglass & Burke, 1990; Jackson, Schwab, & Schuler, 1986; Schaufeli & Enzmann, 1998). For example, Toppinen-Tanner, Kalimo, and Mutanen (2002) found in a sample of experienced production workers that emotional exhaustion remained relatively stable over two measurements separated by 8 years. Golembiewski, Deckard, and Roundtree (1989) also suggested that burnout scores were largely stable, such that 48% of the sample did not change their burnout score over a 7-week period.

We note two problems with this research. First, the empirical work that has measured burnout on more than one occasion tends to do so with only two measurement periods. That is, burnout may be dynamic within the two periods but without more frequent measurement, such conclusions are prohibited (Mitchell & James, 2001). For example, if an increase is followed by a decrease such as after organizational entry (cf., Boswell, Boudreau, & Tichy, 2005; Boswell, Shipp, Payne, & Culbertson, 2009), measuring only the beginning and ending levels of burnout may lead researchers to inadvertently claim that burnout is stable, committing a “type II” temporal error (McGrath, Arrow, Gruenfeld, Hollingshead, & O'Connor, 1993).

A second problem is that most of the research on burnout has been conducted on samples of employees with substantial work experience (Cordes & Dougherty, 1993; Halbesleben, 2006; Halbesleben & Buckley, 2004; Shirom, 1989; van Dierendonck et al., 2001), which may have

¹ We note that we do not directly test the job demands-resources (JD-R) model of burnout but rather use this logic to make predictions about why burnout should change at certain points in time.

inadvertently selected individuals for whom burnout is relatively stable. For example, drawing from the socialization literature, Ashforth and Lee (1997) argued that burnout should be stable for most employees because “as individuals gain work experience, they tend to develop more or less stable and satisfactory patterns of accommodation with their jobs and organization—or they leave” (p. 705). Further, these authors suggest that changes in burnout may occur only during: a) socialization following entry into an organization, or b) “shocks” or events that change one’s equilibrium (Ashforth and Lee, 1997).

Therefore, we contend that socialization perspectives on stress may offer a more nuanced view of burnout. This research implies that burnout may not *always* be dynamic but that its stability over time depends largely on one’s experience in an organization (Cordes & Dougherty, 1993; Stevens & O’Neill, 1983), namely, whether one is in a different stage of career transition (Brett, 1984; Feldman, 1981). We now review these career transitions and socialization models to develop a model of burnout trajectories for those who experience change (i.e., organizational newcomers and internal job changers) and those who do not (i.e., organizational insiders).

A Multiple Socialization Perspective of Burnout Trajectories

Socialization has been defined as the “process by which newcomers make the transition from being outsiders to being insiders” (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007, p. 707). Multiple socialization models (Brett, 1984; Feldman, 1981) observe that individuals experience socialization in many respects as they pass through career transitions such as being hired into an organization, being promoted, or making lateral moves within an organization. Indeed, after a newcomer becomes socialized to the new job, work group, and organization, subsequent internal job changes (e.g., promotions or transfers) may necessitate a resocialization process to the new tasks, roles, or work units (Feldman & Brett, 1983; Latack, 1984; Pinder & Schroeder, 1987). This multiple socialization perspective suggests that burnout trajectories could differ markedly among organizational newcomers, internal job changers, and insiders.

Organizational Socialization and Newcomer Burnout

Organizational socialization models argue that new hires to an organization transition from newcomer to insider in three stages: the formation of expectations prior to entry or change, adjustment to reality, and eventual accommodation to roles, challenges, and resources (Feldman, 1981; Louis, 1980; Nelson, 1987; Wanous, 1991). With progression through these stages, organizational socialization models argue that newly hired employees experience significant increases in job demands. For example, actual demands for newcomers' time and workload are often greater upon beginning the new job than they had anticipated prior to organizational entry (Feldman, 1989; Louis, 1980; Wanous, 1991), often because newcomers experience ambiguity about their role in the organization (Frese, 1982). Further, task demands such as workload, time pressure, and job scope increase as employees gain experience (Nelson, 1987). Consistent with these findings, researchers have found evidence of an initial "honeymoon" period in job satisfaction the first few months after organizational entry, followed by a "hangover effect" in which job satisfaction declines from the peak of the honeymoon (Boswell et al., 2005; Boswell et al., 2009). Given that satisfaction tends to be negatively related to burnout (Lee & Ashforth, 1996), we may expect a similar progression of burnout following organizational entry. That is, based on previous ideas that organizational newcomers likely experience an increase of burnout when workplace demands initially outpace the development of resources (Ashforth & Saks, 1996; Bauer, Morrison, & Callister, 1998), we posit that burnout for newcomers should initially increase in a positive linear fashion.

However, socialization models also suggest that organizational newcomers gain valuable resources as they transition from being outsiders to insiders. Nelson (1987) argued that friendships and professional relationships with co-workers and supervisors are key resources that enable newcomers to cope with job demands. Organizational newcomers eventually acquire the knowledge and skills necessary to master their jobs (Wanous, 1991) and are given greater control

over their work (Nelson, 1987). Feedback from supervisors and peers enables them to reduce uncertainty about their roles and responsibilities (Ashford & Black, 1996) and learn what behaviors are measured and rewarded by the organization (Jones, 1983). Thus, socialization models suggest a progression in the balance between the job demands and resources that define burnout so that resources may eventually meet or surpass job demands.

Therefore, drawing on socialization models (Feldman, 1981; Louis, 1980; Nelson, 1987; Wanous, 1991) we propose that the initial increase or positive trend in burnout will be followed by a leveling off, evidenced by a significant negative quadratic trend. In other words, burnout will initially increase after organizational entry but then reach a point where it decelerates and levels off (Singer & Willett, 2003). To our knowledge, we are the first to examine such nonlinear trends in the development of burnout dimensions.

Hypothesis 1: Burnout dimensions will be dynamic for organizational newcomers such that they will exhibit a positive linear trend and a negative quadratic trend (i.e., increasing after entry, then leveling off over time).

Resocialization and Internal Job Changer Burnout

The multiple socialization framework (Feldman, 1981) describes a second type of socialization experienced by employees who make job transitions within the firm. Indeed, those who make lateral moves or who are promoted within their current organization experience a *resocialization* process as they learn new tasks and skills, learn to work with new groups of people, or adjust to the culture of a new department (Feldman, 1989; Latack, 1984; Pinder & Schroeder, 1987). In other words, even though they remain in the same organization, they pass through various stages as they transition from being relative “newcomers” to insiders within their new roles (Latack, 1984). As a result, they must adjust to new challenges (Feldman, 1981) and to unmet expectations in their new positions (Webber, 1987).

Resocialization models also suggest that the balance between job demands and resources

fluctuates during the resocialization process. Initially, job demands of internal job changers increase because these changes typically bring adjustments to work procedures and rules (Latack, 1984). However, unlike organizational newcomers who are allowed extra time to get up to speed, internal job changers are often expected to perform right away (Feldman & Brett, 1983). As a result, research shows that internal job changers experience increased role overload and role ambiguity (Werbel, 1983), which likely reflects an assessment that demands are greater than resources after the change. Thus, we expect that burnout should initially increase in a positive linear fashion following an internal job change.

However, employees experiencing internal transitions within the firm already have access to certain resources that buffer increased demands. They may draw upon the social support network they already have in the organization to cope with job demands (Pinder & Schroeder, 1987). Given that they already “know the ropes” and are familiar with the routines, structure, and culture of the organization, these resources may empower them to meet increased job demands (Feldman, 1981). Finally, given their previous experience in the organization, internal job changers typically have greater control in the organization, which enables them to be proactive in coping with job demands (Feldman & Brett, 1983). Therefore, internal job changers should eventually experience a deceleration in burnout followed by leveling off as the balance between job demands and resources reaches equilibrium.

Hypothesis 2a: Burnout dimensions will be dynamic for internal job changers such that they will exhibit a positive linear trend and a negative quadratic trend (i.e., increasing after entry, then leveling off over time).

Career transition models further argue that not all career transitions are equal in intensity or magnitude of change. For example the “additivity hypothesis” argues that the greater the magnitude of change brought by the career transition, the greater the adaptation required and the greater the stress experienced by the employee (Latack, 1984). This reasoning suggests that

stress associated with internal job changes (lateral moves and promotions) should be less intense in magnitude than the stress associated with entry into a new organization (Feldman, 1989; Kasl, 1978; Pinder & Schroeder, 1987). Van Maanen (1984) proposed that in comparison to organizational newcomers, the resocialization process experienced by internal job changers consists of more minor adjustments to behaviors and routine because internal job changers are already socialized to the organization (Latack, 1984). Drawing on these arguments, we propose that burnout should increase less sharply for internal job changers than for newcomers, due to the buffering effects of internal changers' larger pool of resources and smaller increases in job demands as well as their prior organizational socialization.

Hypothesis 2b: The positive linear trend in burnout trajectories will be significantly greater for organizational newcomers than for internal job changers.

Equilibrium and Insider Burnout

In contrast to organizational newcomers and job changers within the organization, many employees experience relatively less change in their demands and resources at work. As noted above, such employees are considered "insiders," job incumbents who have been in their jobs for a sufficient amount of time to no longer be in the socialization process. Leiter (1993) argued that burnout should be relatively stable for insider employees because they have reached a state of "equilibrium," likely because they have learned how to cope with job demands (Nelson, 1987) and typically have lower job stress (Wanous, 1991). This reasoning is consistent with evidence from socialization research that employees either learn to cope with the stressors of their job or withdraw from the organization (Bauer et al., 2007; Nelson, 1987). Further, organizational insiders tend to have critical resources such as strong social support networks (Louis, 1980) and other resources from the organization that signal their acceptance, such as pay raises, proprietary organizational knowledge, special status or privileges, and new job assignments (Wanous, 1991).

These studies suggest that insiders have sufficient resources to help them cope with job

demands and do not experience the increase in demands that internal job changers experience. Further, because of their continued tenure in the job, they may continue to build greater networks and gain additional experience over time. Thus, drawing on socialization models, we reason that organizational insiders' burnout should be relatively stable over time but slightly negative trending as they continue to gain more resources.

Hypothesis 3: Burnout dimensions will be relatively stable for organizational insiders such that the trajectory will be relatively flat but exhibit a slightly negative linear trend.

Burnout Dimensions and Differential Trajectories

As noted earlier, employee burnout is a multi-dimensional construct (Maslach, 1982; Maslach, 1999) comprised of emotional exhaustion, depersonalization, and reduced personal accomplishment. Recent empirical research has revealed evidence of differential relationships across the three dimensions. For example, meta-analyses show that emotional exhaustion and depersonalization are positively related and have common antecedents (e.g., role ambiguity and social support) and outcomes (turnover intention and organizational commitment). However, reduced personal accomplishment is a relatively independent dimension with unique correlates such as control seeking (Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998).

This theoretical separation of reduced personal accomplishment from its counterpart dimensions (Demerouti et al., 2001; Lee & Ashforth, 1996; Leiter, 1993) suggests that career transitions may not affect the trajectories of all burnout dimensions equally. As noted above, socialization models posit that career transitions prompt varying degrees of change in demands and resources (Brett, 1984; Feldman, 1981, 1989; Kasl, 1978; Latack, 1984; Pinder & Schroeder, 1987). Following the argument that the balance between job demands and resources is a key determinant of emotional exhaustion and depersonalization but *not* reduced personal accomplishment (Demerouti et al., 2001), we propose that the influence of career transition type should be much greater for emotional exhaustion and depersonalization than for reduced

personal accomplishment. Conversely, the assertion that reduced personal accomplishment is primarily driven by personality or trait factors (Cordes & Dougherty, 1993; Demerouti et al., 2001; Leiter, 1993; Shirom, 2003), suggests that its pattern over time is less likely to be influenced by transitions such as organizational or job entry. Thus:

Hypothesis 4: Career transition type (newcomer, internal job changer, or insider) will have a significantly greater impact on emotional exhaustion and depersonalization trajectories than it will on the trajectory of reduced personal accomplishment.

Method

Procedure and Sample

Longitudinal data were solicited from all employees of a private healthcare organization. This organization contains a network of hospitals, specialized medical clinics, outpatient surgery centers, and physician offices in the southeastern United States. The organization serves thousands of patients annually and employs approximately 5,000 people. Over the past eight years (including the two-year data collection period for this study), the organization maintained a stable relationship with its employees, with no significant changes to its leadership, organizational structure, human resource practices, or culture.

To gather data for our study, web-based surveys were administered five times to all employees over a two-year period (June 2007 to June 2009) at intervals of approximately 6 months. Employees ranged from office and clerical staff, professional services, technical services, nurses, physicians, managers, and administrators. One week before each survey wave, the researchers sent an email to all employees of the organization encouraging them to participate and guaranteeing that the data would go directly to the researchers. Upon completion of each round of surveys, participants were eligible to win a variety of prizes through a random drawing. To link responses across the five waves of survey data and information in personnel files, participants provided an identification number under the guarantee of strict confidentiality.

We chose six-month time intervals between surveys for three reasons. First, burnout theorists have suggested that time intervals between burnout measures should neither be too short nor too long. Leiter (1993) argued that since burnout is a response to chronic stress, it changes over the course of months, rather than weeks, and that an “excessively short interval between surveys may miss delayed changes” (p. 248). Conversely, excessively lengthy intervals between burnout measures are problematic because they increase the likelihood that subject mortality, role changes, or organizational initiatives and crises obscure changes in burnout (Leiter, 1993). Second, we followed previous longitudinal burnout research using similar time intervals of six (Jackson, Turner, & Brief, 1987; Leiter, 1990) to eight (Lee & Ashforth, 1993) months. Third, our choice was guided by the needs and practical constraints of the employees, executives, and managers at the host organization.

In addition, we followed the respondents over the two-year period to allow sufficient time for capturing changes in burnout. As we just stated, from a theoretical perspective, we had reason to believe that changes in burnout would take several months or more to accumulate (Leiter, 1993). Based on the honeymoon-hangover effect (Boswell et al., 2009), we expected that burnout may peak around the first year, thus requiring at least a year-long study to capture these changes. Further, tests of the quadratic models in some of our hypotheses require at least three points of measurement. As a result, we chose to capture burnout for five measurement periods to cast a wide net for capturing the changes in burnout over time.

As shown in Table 1, response rates were high, ranging from 63-75% in each period. To be included in our study, we only used Time 0² respondents (N = 3,713; 75% response rate at T0). The T0 respondents averaged almost 8 years tenure at the organization (range 0-48 years), were approximately 41 years old (range 18-82 years old), and most (81%) were female.

²The first survey was coded as Time 0 (T0) in our analyses and in our figures so that the intercept would be interpreted as the beginning of the study. The remaining time periods were coded accordingly (i.e., T1, T2, T3, and T4, such that T4 represents the fifth survey).

Approximately 78% of the respondents were Caucasian, 19% were African-American, and the remaining 4% were Asian, Hispanic, Native American, or multicultural.³

Measures

Burnout. We measured burnout at each period with the Maslach Burnout Inventory (Maslach & Jackson, 1981), which contains subscales for emotional exhaustion (9 items), depersonalization (5 items), and reduced personal accomplishment (8 items). Sample items include, “I feel like I’m at the end of my rope” (emotional exhaustion), “I’ve become more calloused towards people since I took this job” (depersonalization), and “I feel I’m positively influencing other people’s lives through my work” (*reverse coded* for reduced personal accomplishment). Employees rated the extent to which these statements applied to them using a 7-point Likert-type scale (1 = “Very much unlike me” to 7 = “Very much like me”). Cronbach’s alpha was acceptable across the five time periods, ranging from .90 to .92 for emotional exhaustion, .71 to .73 for depersonalization, and .77 to .80 for reduced personal accomplishment.

Career-related transitions. Consistent with research on career-related transitions (cf. Feldman & Brett, 1983; Liljegren & Ekberg, 2009; Pinder & Schroeder, 1987; Werbel, 1983), we examined three types of employees. *Organizational newcomers* were those hired no more than three months before the start of our study to account for transitions into the organization (e.g., Haueter, Macan, & Winter, 2003; Hausknecht, Trevor, & Howard, 2009; Payne, Culbertson, Boswell, & Barger, 2008).⁴ Those employees with at least one year of experience by

³ To assess the potential for sampling bias, we compared participants who were included (T0 respondents) to those who were excluded (N = 657, T0 non-respondents who completed at least one other survey). We used ANOVAs to compare group differences for continuous variables and chi-square tests to compare group differences for categorical variables. People who responded to the T0 survey were slightly younger (41.6 vs. 43 years old) and they were more likely to be on the first shift (78.4% vs. 71.9%), Caucasian (77.9% vs. 70.8%), female (83.2% vs. 78.5%) and in management (14.8% vs. 3.9%) as compared to those who didn’t respond to the first survey (all differences significant at $p < .01$). Burnout did not differ much between the two groups until T4 (i.e., the last survey) when the T0 respondents had slightly lower burnout scores than non-T0 respondents (2.54 vs. 2.75 for emotional exhaustion; 1.94 vs. 2.08 for depersonalization; 3.05 vs. 3.83 for reduced personal accomplishment; all $p < .05$).

⁴ To check the robustness of our definition of newcomers (i.e., less than 3 months tenure at T0), we ran alternate analyses with newcomers defined as those with less than 4 months, 6 months, or 12 months of tenure. Only the results for the newcomers with less than 12 months of tenure differed from those with less than 3 months of tenure. The functional form of the curves for the 4-month and 6-month groups were the same as the 3-month newcomer analyses, with the exception that the intercept grew higher and the linear and quadratic functions grew weaker as the

the beginning of our study (i.e., not newcomers) included *internal job changers* who had changed jobs (i.e., lateral move or promotion) within the organization no more than three months before the start of our study and *organizational insiders* who did not change jobs throughout the course of the study. This classification resulted in $N = 152$ for newcomers, $N = 143$ for internal job changers, and $N = 1,794$ for organizational insiders. We used two dummy codes to represent these groups with the reference category being newcomers (i.e., D1 is 1 for internal job changers and 0 for newcomers; D2 is 1 for organizational insiders and 0 for newcomers).

Control variables. In all analyses, we controlled for employees' management status in the organization because it could be related to each of the dimensions of burnout. Management status was coded as "1" if employees held any management position; all non-management positions were coded as "0." In addition, we controlled for organizational tenure to eliminate alternative explanations due to differences in individuals' length of employment.

Analyses

We tested our hypotheses using random coefficient modeling (RCM), following the Bliese and Ployhart (2002) four-step testing sequence, beginning with the level-1 analyses. First, we estimated the intraclass correlation coefficient (ICC1) for each dimension of burnout to establish the amount of between-person variance. The ICC(1) indicates how much of the variability in emotional exhaustion, depersonalization, and reduced personal accomplishment is a result of between-person differences across the five measurement periods. Second, we estimated the form of the trajectories with orthogonal polynomial terms representing linear and quadratic trends over time to account for the proposed increases and leveling out in burnout. Third, we tested whether between-person variability existed in the intercepts and slopes of the models, which allowed these components to have a random effect in addition to the fixed effect. Fourth,

tenure of newcomers was extended. This makes sense given that we expected burnout to increase over time; individuals with greater tenure at T0 may have skewed the data upward. Thus, to focus purely on early experiences upon organizational entry, we retained the definition of newcomers as those with less than 3 months of tenure at T0, which is also consistent with socialization research (e.g., Ashforth & Saks, 1996; Louis, 1980).

we tested several error structures (i.e., autoregressive, unstructured, and autoregressive heterogeneous errors) because we expected that the error terms could be correlated over time given the repeated measures. After establishing the level-1 models for each dimension, we moved to the level-2 models, adding the two career transition dummy codes as level-2 predictors of the intercept, the slope, and the curves of each burnout dimension.

All RCM analyses were conducted using SAS 9.2 statistical software using the PROC MIXED function with the restricted maximum likelihood (REML) estimation method. Because REML estimation allows for missing data in one or more periods, listwise deletion of cases is avoided (DeShon, Ployhart, & Sacco, 1998). Thus, we included all T0 respondents, even if they missed a later survey. Regarding missing data, respondents completed 3.68 on average, with almost half of the sample (i.e., 1,664 out of 3,713 or 44.8%) completing all 5 surveys.⁵

Results

Means, standard deviations, and correlations are shown in Table 2. The overall sample means for emotional stability, depersonalization, and reduced personal accomplishment were relatively stable with only a slight decline from T2 to T4. The repeated measures of each burnout scale were positively correlated across time periods, suggesting that autocorrelation may be present. Additionally, the three different dimensions of burnout were positively correlated within each period. However, the relationships were stronger between emotional exhaustion and depersonalization than either of their relationships with reduced personal accomplishment.

Initial Tests for the Entire Sample

To examine the overall models for emotional exhaustion, depersonalization, and reduced personal accomplishment, we conducted the four-step model testing process for each burnout

⁵ In addition, to further assess the degree of missing data, we used hierarchical regression to predict how many surveys individuals completed based on initial levels of burnout, job satisfaction, and various demographic variables (e.g., age, tenure, shift, education level). We found that individuals reporting lower levels of emotional exhaustion or higher levels of satisfaction at T0 completed more surveys ($b = -.12; p < .01$ and $b = .12; p < .01$, respectively). Individual differences had little effect on the number of surveys completed. Although individuals completed more surveys when they were slightly older ($b = .01; p < .01$) or longer tenured ($b = .02; p < .01$), these effects were small.

dimension (Bliese & Ployhart, 2002). First, for emotional exhaustion, the ICC(1) demonstrated that 61.0% of the variance was due to between-individual factors (i.e., level-2). Second, when testing the fixed effects for the entire sample, we found a slight negative linear trend ($\gamma = -.05$; $p < .01$) but no quadratic trend ($\gamma = -.01$; *ns*). However, based on our theory (Snijders and Bosker, 1999) we kept both the linear and quadratic terms in the subsequent steps so we could test whether there would be differences in the shape of the burnout trajectory for the different groups. Third, when analyzing the variance around the fixed effects, we found that model fit increased with a random intercept and linear term, ($\chi^2_{\text{diff (df=1)}} = 5686.0$, $p < .01$; and $\chi^2_{\text{diff (df=1)}} = 222.9$, $p < .01$, respectively), but did not change with a random quadratic term ($\chi^2_{\text{diff (df=1)}} = 0$, *n.s.*). These results suggest that individuals differed in their level of emotional exhaustion upon entering the study and the rate at which this changed over time, but not the rate of deceleration. Finally, after testing both autoregressive and unstructured error structures, we found that an autoregressive, heterogeneous error structure provided the best fit ($\chi^2_{\text{diff (df=1)}} = 96.1$, $p < .01$). The main model for emotional exhaustion with control variables is in Model 1 of Table 3 (Panel A).

We followed the same testing sequence for depersonalization. First, the ICC(1) demonstrated that 54.3% of the variance was due to between-individual factors. Tests of the fixed effects produced a slight negative linear trend ($\gamma = -.02$; $p < .01$) but no quadratic trend ($\gamma = -.00$; *ns*). Further, model fit increased with a random intercept and linear term, ($\chi^2_{\text{diff (df=1)}} = 4484.9$, $p < .01$; and $\chi^2_{\text{diff (df=1)}} = 52.0$, $p < .01$, respectively), but did not change with a random quadratic term ($\chi^2_{\text{diff (df=1)}} = 0$, *n.s.*). Thus, individuals differed in their level of depersonalization upon entering the study and the rate at which this changed over time but not the rate of deceleration. Finally, similar to emotional exhaustion, we found that there was both significant heterogeneity and auto-regression in the error structure ($\chi^2_{\text{diff (df=1)}} = 37.1$, $p < .01$), so we used an autoregressive, heterogeneous error structure. The main model for depersonalization with controls is in Model 1 of Table 3 (Panel B).

Finally, for reduced personal accomplishment, the ICC(1) demonstrated that 55.6% of the variance was due to between-individual factors. For the fixed effects, we found a slight negative linear trend ($\gamma = -.04$; $p < .01$) but no quadratic trend ($\gamma = -.00$; *ns*). Model fit increased with a random intercept and linear term, ($\chi^2_{\text{diff (df = 1)}} = 4925.2$ $p < .01$; and $\chi^2_{\text{diff (df = 1)}} = 68.4$, $p < .01$, respectively), but did not change with a random quadratic term ($\chi^2_{\text{diff (df = 1)}} = 0$, *n.s.*). Thus, individuals differed in their initial level of reduced personal accomplishment and the rate at which this changed over time but not the rate of deceleration. Finally, we found that there was significant heterogeneity and auto-regression in the error structure ($\chi^2_{\text{diff (df = 1)}} = 64.7$, $p < .01$), so we used an autoregressive, heterogeneous error structure. The main model for reduced personal accomplishment with control variables is in Model 1 of Table 3 (Panel C).

Hypothesis Tests

Returning to our hypothesized predictions, Hypotheses 1 and 2a predicted that the burnout dimensions would be dynamic for organizational newcomers and internal job changers as evidenced by positive linear and negative quadratic trends, whereas Hypothesis 3 predicted that burnout would only exhibit a slightly negative linear trend for organizational insiders. To test these hypotheses, we added two dummy codes to account for career transition type as level-2 predictors. The coefficient on the internal job changer (D1) dummy (and the subsequent interactions in which it is included) represents the test of the difference between internal job changers and newcomers whereas the coefficient on the insider (D2) dummy represents the difference between organizational insiders and newcomers.

Considering first emotional exhaustion, Models 2 and 3 in Table 3 (Panel A) demonstrate that newcomers had lower initial emotional exhaustion ($\gamma = .50$, $p < .01$, and $\gamma = .48$, $p < .01$, respectively) but a stronger increase over time as compared to internal job changers and organizational insiders ($\gamma = -.10$, $p < .05$, and $\gamma = -.16$, $p < .01$, respectively). Further, as shown in Model 4 (Panel A), newcomers and organizational insiders exhibited a different quadratic

curve ($\gamma = .09, p < .01$) whereas the quadratic term was equivalent for newcomers and internal job changers ($\gamma = .04, ns$).⁶ As shown in Figure 1, we plotted the simple slopes finding that newcomers' emotional exhaustion (small dashed line) increased by T2 (i.e., approximately 1 year of tenure) and then began to level off slightly by T4 (i.e., approximately 2 years of tenure). Internal job changers' emotional exhaustion (medium dashed line) showed a similar pattern although they began with a higher level of burnout and the change over time was subtler. Finally, insider burnout (solid line) showed only a small negative trend over time. These results provide initial support for Hypotheses 1, 2a, and 3.

For depersonalization, Models 2 and 3 in Table 3 (Panel B) demonstrate that newcomers had lower initial depersonalization ($\gamma = .29, p < .01$, and $\gamma = .19, p < .01$, respectively) but a stronger increase over time as compared to internal job changers and organizational insiders ($\gamma = -.09, p < .01$, and $\gamma = -.08, p < .01$, respectively). Further, as shown in Model 4 (Panel B), newcomers and organizational insiders exhibited a different quadratic curve ($\gamma = .05, p < .01$) whereas the quadratic term was equivalent for newcomers and internal job changers ($\gamma = .00, ns$). As shown in Figure 2, newcomers' depersonalization (small dashed line) increased by T2 (i.e., approximately 1 year of tenure) and then began to level off slightly by T4 (i.e., approximately 2 years of tenure). Internal job changers' depersonalization (medium dashed line) showed a similar pattern although they began with a higher level of burnout and the change over time was less pronounced. Finally, insider burnout (solid line) showed only a small negative trend over time. Consistent with emotional exhaustion, these results appear to support Hypotheses 1, 2a, and 3.

Finally, for reduced personal accomplishment, Models 2-4 in Table 3 (Panel C) demonstrate that newcomers, internal job changers, and organizational insiders did not differ in terms of initial level, change over time, or the strength of the curve. As shown in Figure 3, the trajectories of reduced personal accomplishment for newcomers (small dashed line), internal job

⁶ Although we did not find significant variation around the quadratic term, it can be appropriate to test such a model based on theory (Snijders & Bosker, 1999).

changers (medium dashed line) and organizational insiders (solid line), were essentially equivalent for reduced personal accomplishment. Therefore, Hypotheses 1, 2a, and 3 are only partially supported given that emotional exhaustion and depersonalization produced results consistent with our predictions.

Hypothesis 2b predicted that the increase in burnout for newcomers would be stronger than the increase in burnout for internal job changers. We tested this hypothesis by calculating confidence intervals around the simple slopes of Model 3 (Panels A-C) in Table 3 to see if the slopes were statistically different for newcomers versus internal job changers (Cohen, Cohen, West, & Aiken, 2003).⁷ For emotional exhaustion, the simple slope for newcomers was .11 (95% CI [.04, .19]), whereas the simple slope for internal job changers was .02 (95% CI [-.05, .08]). Given that these confidence intervals overlap slightly, we cannot say that the slopes for newcomers' and internal job changers' emotional exhaustion differ. Using the same procedure for depersonalization, we found a simple slope for newcomers of .05 (95% CI [.00, .11]) and a simple slope for internal job changers of -.04 (95% CI [-.09, .01]). Again, given the slight overlap of these confidence intervals, the slopes for newcomers' and internal job changers' depersonalization were not significantly different. Finally, for reduced personal accomplishment, the simple slope for newcomers was .00 (95% CI [-.03, .03]) and for internal job changers it was .00 (95% CI [-.06, .05]). Thus, the confidence intervals demonstrate that the slope of reduced personal accomplishment did not differ between newcomers and internal job changers. Collectively, these findings suggest that Hypothesis 2b is not supported.

Finally, Hypothesis 4 predicted that career transition type would have a greater impact on emotional exhaustion and depersonalization than on reduced personal accomplishment. To test these differences, we calculated two models in which the dependent variable was emotional

⁷ We used the equation from Model 3 to estimate the confidence intervals around the slope (i.e., the linear term) given that Model 4 included the higher order quadratic term and we cannot interpret the linear term in a model with the quadratic term. However, to confirm this approach, we also conducted confidence intervals around the slope from Model 4 and our conclusions were consistent with those presented here.

exhaustion or depersonalization minus reduced personal accomplishment from each time period (Edwards, 1995). When the variables are on the same scale and include the same predictors, this is equivalent to subtracting one equation from the other and thus achieving a significance test for the difference between the two curves (J. Edwards, personal communication, July 15, 2010). The results of these analyses (see Table 4) confirmed that both emotional exhaustion and depersonalization were significantly different from reduced personal accomplishment. For emotional exhaustion, the linear and quadratic interaction terms for D2 (the dummy code contrasting organizational insider against newcomers and internal job changers) were both significantly different from zero ($p < .05$), suggesting that the effect of career transition type was stronger on emotional exhaustion than reduced personal accomplishment. Further, for depersonalization, the linear interaction term for D2 was significantly different from reduced personal accomplishment ($p < .05$). Consistent with Figures 1-3, the trajectories of emotional exhaustion and depersonalization were more strongly influenced by career transition type as compared to reduced personal accomplishment. Thus, Hypothesis 4 is supported.

Discussion

Analyzing a sample of employees from a wide variety of jobs, we found that emotional exhaustion and depersonalization initially increased slightly but then leveled off for both organizational newcomers and internal job changers. For both groups, emotional exhaustion and depersonalization increased until approximately the first year after the change and then leveled off by two years into the new position. Yet, the same dimensions of burnout remained relatively constant for insiders, declining only slightly over time.

However, we note that these changes were slight, with more of the variance in burnout being explained by between-person factors than by within-person factors. This suggests that burnout is both stable and dynamic—but the dynamism is slight and only occurs for certain employees. Further, although we confirmed our prediction that reduced personal accomplishment

would react differently than emotional exhaustion or depersonalization to career transition type, we actually found that reduced personal accomplishment was stable for all three types of employees. Even when employees experienced transitions such as entering a new organization or making an internal move, they did not report changes in their feelings of personal accomplishment. Thus, our findings suggest that although some dynamism exists for burnout, it may not be as dramatic as early burnout theory originally suggested.

Theoretical Contributions

This study makes three important theoretical contributions to the burnout literature. First, to our knowledge, we are the first to explore any antecedents of burnout change over time. Although contemporary theoretical perspectives of burnout (Bakker & Demerouti, 2007; Demerouti et al., 2001) explain why burnout exists at a point in time, they do not fully explain why burnout changes over time (e.g., how an engaged employee becomes burned out over time). This is important because burnout changes, rather than static levels of burnout, are thought to cause negative outcomes (Ashforth & Lee, 1997; Golembiewski et al., 1986; Shirom, 2003). Moreover, understanding how and for whom burnout changes enables effective prevention. To that end, we integrated career transitions models from socialization research with the research from burnout to identify career transitions as a key determinant of any burnout change.

By being more theoretically precise about who should experience a change in burnout, our findings provide initial answers to the apparent contradiction between longstanding views that burnout is dynamic and previous empirical evidence that it is stable (Bakker et al., 2000; Schaufeli & Enzmann, 1998; Toppinen-Tanner et al., 2002; van Dierendonck et al., 2001). That is, previous studies may have inadvertently used samples that were more heavily weighted with organizational insiders, which would skew the overall results and conclusions. Indeed, had we only examined the overall results in our study, we would have concluded that none of the burnout dimensions changed over the course of two years. Instead, our results support a nuanced

perspective of burnout change that suggests that burnout is slightly dynamic for newcomers and job changers but rather stable for organizational insiders. Thus, misleading conclusions may be drawn about the stability of burnout if conceptual models do not account for career transitions.

A second theoretical contribution made by our study is that we differentiated the effects of career transitions across the three dimensions of burnout. In contrast to previous theoretical models that assume burnout dimensions may change equally over time, we clarified which types of burnout may be more reactive to career transitions. We found that emotional exhaustion and depersonalization were more likely to change slightly after taking a new job, whether the job changer was an organizational newcomer or an internal job changer. This suggests that future research on burnout must not predict general changes in burnout as a whole but instead should specify the type of burnout that is expected to change.

Finally, we advanced research on burnout by making and testing specific hypotheses about the functional form of the burnout dimensions over time. We predicted that burnout would initially increase after a career transition but then level out over time. Such precision in our theorizing is a necessary step in advancing our understanding of potentially dynamic topics. Further, in tracking employee burnout at five intervals over a two-year period, this study offers significant methodological advancement to the burnout literature. Existing methodological research recommends that to gain insight into non-linear change patterns over time, three or more measurement periods are needed (Mitchell & James, 2001; Ployhart & Vandenberg, 2010; Singer & Willett, 2003). Although this is true, we note that if we had only assessed burnout over the first three periods (i.e., the first year), we would have concluded only that it increased over time. By continuing to follow employees across the second year, we were able to show that this initial increase in emotional exhaustion and depersonalization eventually leveled off to a state of equilibrium. Thus, we can make stronger recommendations about changes over time by including additional measurement periods as appropriate to the specific theoretical domain.

Practical Implications

These findings give rise to practical suggestions that are more precise than those offered in previous studies, which have implied that burnout is dynamic for all employees (Cordes & Dougherty, 1993). First, our results show that when interpreting and designing interventions to minimize employee burnout, managers should consider career transitions. Because burnout should be relatively stable for those experiencing little job change, insiders may not benefit much from burnout interventions. In contrast, newcomers and internal job changers make better candidates for burnout interventions, particularly around the first year after the change when emotional exhaustion and depersonalization are expected to peak. However, it is important to note that even then, burnout levels may be only slightly elevated and this increase is temporary.

Second, with a profile of typical burnout trajectories (i.e., an increase that eventually levels off), organizations may be able to help employees through career transitions by teaching them what changes to expect during the first few years of a job. Armed with such an understanding, new employees who experience a slight increase in burnout may be less likely to question their decision to join the organization or make an internal move. Moreover, if employees' burnout trajectories exhibit an unusual pattern (e.g., a strong peak, particularly during the first few months), it may be a signal that they need extra management support.

Finally, our results suggest that individuals may need approximately two years to reach equilibrium after a job change, even with the slight increases we found. Therefore, promotions or transfers within the organization should be timed so employees have time to adjust before experiencing additional change. In fact, organizations may wait for evidence that adjustment has occurred before reassigning individuals to new positions.

Limitations and Future Research Directions

We note that our study has certain limitations that provide opportunities for future research. First, the trajectories of burnout dimensions may have been influenced by attrition such

that burnout levels may have diminished because highly burned out individuals left the organization. To address this possibility, we used archival turnover data provided by the organization and re-ran all our analyses with a sub-sample of respondents who remained employed through the last survey (i.e., we eliminated responses from participants who quit during our study). We found no substantive differences in the results, suggesting that the changes in burnout over time were not explained by attrition of the most burned out individuals.

Second, we acknowledge that although we used research on the determinants of burnout (cf. Bakker & Demerouti, 2007; Maslach & Schaufeli, 1993) to develop logic for why burnout may change, we did not actually measure demands and resources over time. However, now that we have established that some dynamism in burnout exists, we recommend that future research consider a direct test of the job demands-resources model (Demerouti et al., 2001) to confirm our underlying assumptions. In addition, future research may consider additional triggers for change, such as the experience of a merger or layoff, to further test when and for whom burnout changes. We contend that experience-sampling methods (Beal & Weiss, 2003; Weiss, Nicholas, & Daus, 1999; Wheeler & Reis, 1991) may be especially appropriate, given that it provides a more fine-grained examination of how perceptions of burnout could be dynamic over shorter periods of time.

Finally, to examine first whether burnout is indeed dynamic, we also did not explore outcomes of burnout change. One compelling direction for future research is an analysis of how burnout trajectories impact behavioral outcomes over time. We found that the trajectories of burnout were unchanged when removing the participants who quit but future research may find a more nuanced perspective. For example, voluntary turnover may be triggered by a gradual, prolonged increase in burnout dimensions versus a short, dramatic increase in burnout.

Conclusion

In a large healthcare organization, we found evidence that burnout in the form of

emotional exhaustion and depersonalization was relatively stable for organizational insiders but somewhat dynamic for those experiencing career-related transitions. These findings suggest that burnout may be an important factor to consider during the socialization process as newcomers and internal job changers adjust to their new experiences.

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Table 1

Total Response Rates by Period and for Time 0 Respondents.

Survey	Total headcount	Total respondents	Total response rate	Responses for T0 respondents	Response rate if a T0 respondent ^a
Time 0	4978	3713	74.6%	3713	74.6%
Time 1	4951	3278	66.2%	2589	69.7%
Time 2	4966	3104	62.5%	2326	62.6%
Time 3	5466	3930	71.9%	2518	67.8%
Time 4	5455	4104	75.2%	2509	67.6%

^a Response rates for Time 0 respondents are out of the initial 3,713 individuals who responded to Time 0.

Table 2

Means, Standard Deviations, and Intercorrelations for Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Tenure	7.76	8.12	--																
2 Status†	0.11	0.02	.18**	--															
3 T0 EE	2.71	1.28	.02	-.05**	<i>.90</i>														
4 T0 DP	2.01	1.00	.01	-.04*	.59**	<i>.71</i>													
5 T0 RPA	3.19	1.01	-.06**	-.20**	.28**	.27**	<i>.77</i>												
6 T1 EE	2.73	1.21	-.04	-.08**	.60**	.34**	.25**	<i>.91</i>											
7 T1 DP	2.02	1.00	-.04	-.06**	.39**	.53**	.24**	.57**	<i>.71</i>										
8 T1 PA	3.17	1.00	-.08**	-.24**	.25**	.27**	.53**	.32**	.30**	<i>.78</i>									
9 T2 EE	2.64	1.29	-.06**	-.08**	.56**	.36**	.26**	.69**	.43**	.28**	<i>.92</i>								
10 T2 DP	1.98	1.01	-.06**	-.07**	.39**	.52**	.26**	.41**	.59**	.29**	.61**	<i>.72</i>							
11 T2 PA	3.14	1.01	-.09**	-.24**	.24**	.28**	.52**	.30**	.31**	.60**	.32**	.31**	<i>.79</i>						
12 T3 EE	2.55	1.26	-.08**	-.08**	.50**	.31**	.25**	.59**	.36**	.27**	.67**	.42**	.32**	<i>.91</i>					
13 T3 DP	1.93	0.97	-.07**	-.06**	.36**	.49**	.25**	.39**	.56**	.29**	.46**	.59**	.31**	.59**	<i>.71</i>				
14 T3 RPA	3.05	1.02	-.05*	-.23**	.23**	.27**	.52**	.28**	.28**	.55**	.30**	.30**	.63**	.34**	.32**	<i>.79</i>			
15 T4 EE	2.54	1.28	-.05*	-.01**	.50**	.31**	.23**	.58**	.36**	.27**	.63**	.40**	.31**	.73**	.46**	.34**	<i>.92</i>		
16 T4 DP	1.94	0.98	-.08**	-.09**	.33**	.46**	.22**	.37**	.53**	.26**	.42**	.55**	.31**	.45**	.61**	.33**	.60**	<i>.73</i>	
17 T4 PA	3.05	1.02	-.06**	-.23**	.20**	.25**	.51**	.25**	.27**	.59**	.30**	.30**	.61**	.36**	.31**	.66**	.35**	.34**	<i>.80</i>

Notes: Pairwise N's range from 1,917 to 3,713. Cronbach's alpha values are in italics on the diagonal (N = 3,713). T0 = Time 0, T1 = Time 1, T2 = Time 2, T3 = Time 3, T4 = Time 4, EE = Emotional Exhaustion, DP = Depersonalization, RPA = Reduced Personal Accomplishment. † = Management Status, dummy coded (non-management = 0, management = 1).

** $p < .01$, * $p < .05$.

Table 3

Random Coefficient Models Predicting Emotional Exhaustion, Depersonalization, and Reduced Personal Accomplishment over Time

Effect	γ	SE	t-value	γ	SE	t-value	γ	SE	t-value	γ	SE	t-value
Panel A: Emotional Exhaustion												
	<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>			<u>Model 4</u>		
Intercept	2.75	0.02	123.80**	2.37	0.10	24.31**	2.18	0.11	20.71**	2.10	0.11	19.43**
Linear	0.01	0.02	0.76	-0.03	0.02	-1.62	0.11	0.04	3.04**	0.41	0.09	4.69**
Quadratic	-0.01	0.00	-2.51*	0.00	0.00	-0.22	-0.00	0.01	-0.17	-0.08	0.02	-3.69**
Tenure	0.00	0.00	-1.01	-0.01	0.00	-1.49	-0.01	0.00	-1.47	-0.01	0.00	-1.46
Management Status	-0.27	0.06	-4.70**	-0.36	0.07	-5.24**	-0.36	0.07	-5.26**	-0.36	0.07	-5.26**
D1				0.50	0.14	3.74**	0.61	0.15	4.12**	0.63	0.15	4.13**
D2				0.48	0.10	4.69**	0.69	0.11	6.21**	0.78	0.11	6.94**
Linear*D1							-0.10	0.04	-2.25*	-0.24	0.12	-2.01*
Linear*D2							-0.16	0.03	-4.82**	-0.49	0.09	-5.42**
Quad*D1										0.04	0.03	1.31
Quad*D2										0.09	0.02	3.91**
R ² full model	0.11			0.63			0.65			0.65		
Panel B: Depersonalization												
	<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>			<u>Model 4</u>		
Intercept	2.02	0.02	118.64**	1.84	0.07	25.50**	1.74	0.08	22.16**	1.69	0.08	20.82**
Linear	0.00	0.01	0.06	-0.02	0.02	-1.16	0.05	0.03	1.86	0.23	0.07	3.08**

BURNOUT TRAJECTORIES OVER TIME 39

Quadratic	0.00	0.00	-0.82	0.00	0.01	0.27	0.00	0.00	0.31	-0.04	0.02	-2.41*
Tenure	0.00	0.00	-2.10*	-0.01	0.00	-1.99*	-0.01	0.00	-1.97*	-0.01	0.00	-1.97*
Management Status	-0.15	0.04	-3.48**	-0.16	0.05	-3.12**	-0.16	0.05	-3.13**	-0.16	0.05	-3.14**
D1				0.29	0.10	2.90**	0.42	0.11	3.82**	0.40	0.12	3.47**
D2				0.19	0.08	2.53*	0.30	0.08	3.59**	0.36	0.09	4.20**
Linear*D1							-0.09	0.03	-2.93**	-0.09	0.10	-0.91
Linear*D2							-0.08	0.03	-3.15**	-0.28	0.08	-3.62**
Quad*D1										-0.00	0.02	-0.01
Quad*D2										0.05	0.02	2.75**
R ² full model	0.06			0.68			0.68			0.68		

Panel C: Reduced Personal Accomplishment

	<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>			<u>Model 4</u>		
Intercept	3.27	0.02	193.51**	3.21	0.07	45.21**	3.22	0.08	42.45**	3.19	0.08	40.61**
Linear	-0.01	0.02	-0.75	0.01	0.02	0.33	0.00	0.03	0.01	0.09	0.07	1.24
Quadratic	-0.01	0.00	-1.36	-0.01	0.00	-2.12*	-0.01	0.00	-2.12*	-0.03	0.02	-1.79
Tenure	-0.00	0.04	-1.75	-0.01	0.00	-2.35*	-0.01	0.00	-2.35*	-0.01	0.00	-2.34*
Management Status	-0.66	0.00	-15.60**	-0.68	0.05	-13.65**	-0.68	0.05	-13.65**	-0.68	0.05	-13.65**
D1				-0.05	0.10	-0.46	-0.04	0.11	-0.34	-0.03	0.11	-0.24
D2				0.05	0.07	0.63	0.04	0.08	0.49	0.07	0.08	0.85
Linear*D1							-0.01	0.03	-0.16	-0.06	0.10	-0.55
Linear*D2							0.01	0.03	0.27	-0.09	0.08	-1.23
Quad*D1										0.01	0.02	0.54
Quad*D2										0.03	0.02	1.39
R ² full model	0.10			0.70			0.70			0.70		

Notes: N = 2,089 (N = 152 for Newcomers; N = 143 for Internal job changers; N = 1,794 for Organizational insider). Management Status is dummy coded (non-management = 0, management = 1). Position is dummy coded such that for D1, internal job changers are coded 1, else 0, and for D2 organizational insider are coded 1, else 0. R^2 values were computed by comparing the reduction in the overall variance for each of the models compared to the variance components in the null model; that is, (sum of variance components-null - sum of variance components-model)/sum of variance components-null.

** $p < .01$, * $p < .05$.

Table 4

Comparison of Trajectories of Emotional Exhaustion and Depersonalization with Reduced Personal Accomplishment

Effect	EE-RPA			DP-RPA		
	γ	SE	t-value	γ	SE	t-value
Intercept	-1.09	0.11	-9.83**	-1.50	0.09	-16.06**
Linear	0.32	0.11	2.99**	0.15	0.10	1.47
Quadratic	-0.05	0.03	-1.75	-0.01	0.03	-0.53
Tenure	0.00	0.00	0.27	0.00	0.00	0.34
Management Status	0.32	0.07	4.87**	0.53	0.05	9.86**
D1	0.65	0.16	4.17**	0.42	0.13	3.20**
D2	0.71	0.12	6.11**	0.29	0.10	2.93**
Linear*D1	-0.18	0.14	-1.29	-0.05	0.13	-0.36
Linear*D2	-0.40	0.11	-3.65**	-0.20	0.10	-1.99*
Quad*D1	0.02	0.03	0.69	-0.01	0.03	-0.32
Quad*D2	0.06	0.03	2.25*	0.03	0.03	1.11

Notes: N = 2,089 (N = 152 for Newcomers; N = 143 for Internal job changers; N = 1,794 for Organizational insider). EE: Emotional Exhaustion, DP: Depersonalization; RPA: Reduced Personal Accomplishment. EE-RPA is an equation based on the difference score between emotional exhaustion and reduced personal accomplishment over time. DP-RPA is an equation based on the difference score between depersonalization and reduced personal accomplishment over time. Management Status is dummy coded (non-management = 0, management = 1). Position is dummy coded such that for D1, Internal job changers are coded 1, else 0, and for D2 Organizational insider are coded 1, else 0.

** $p < .01$, * $p < .05$.

Figure 1. Trajectories of emotional exhaustion for organizational insiders, newcomers, and internal job changers

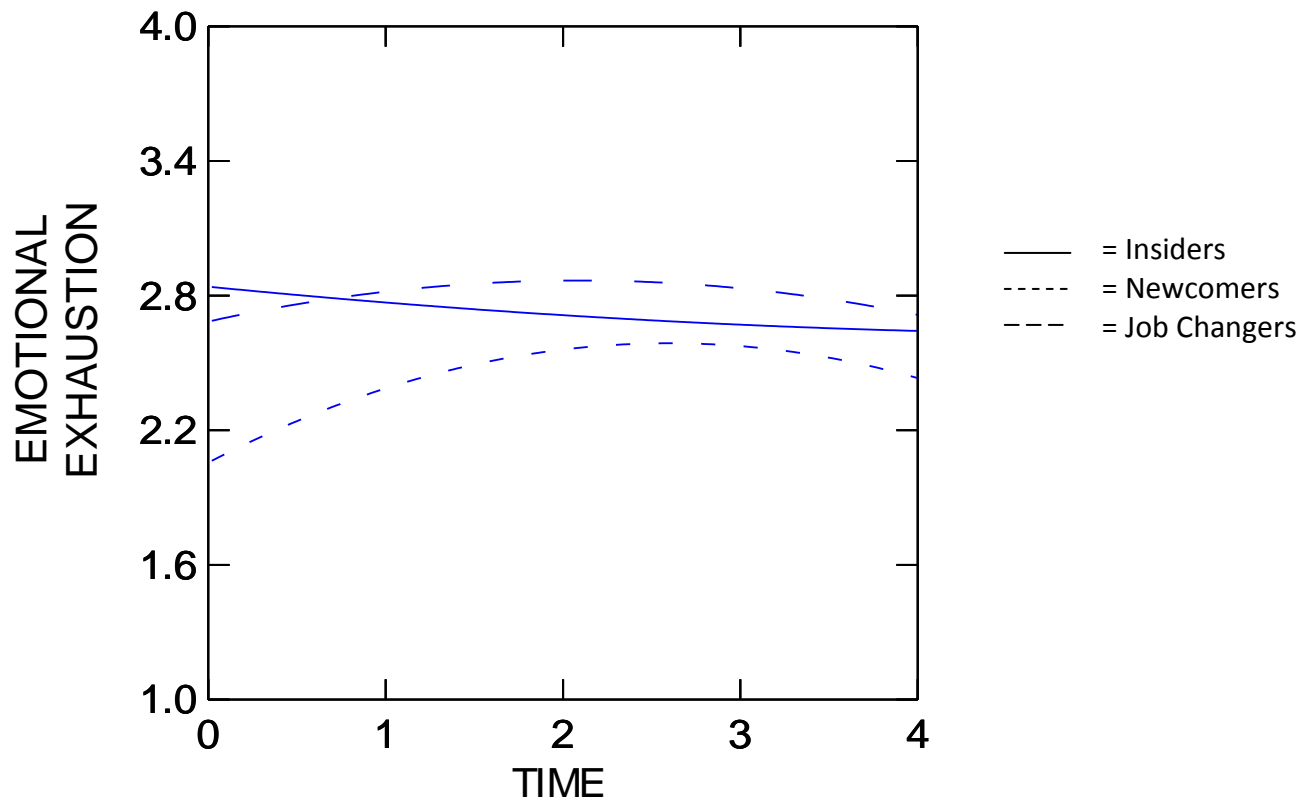


Figure 2. Trajectories of depersonalization for organizational insiders, newcomers, and internal job changers

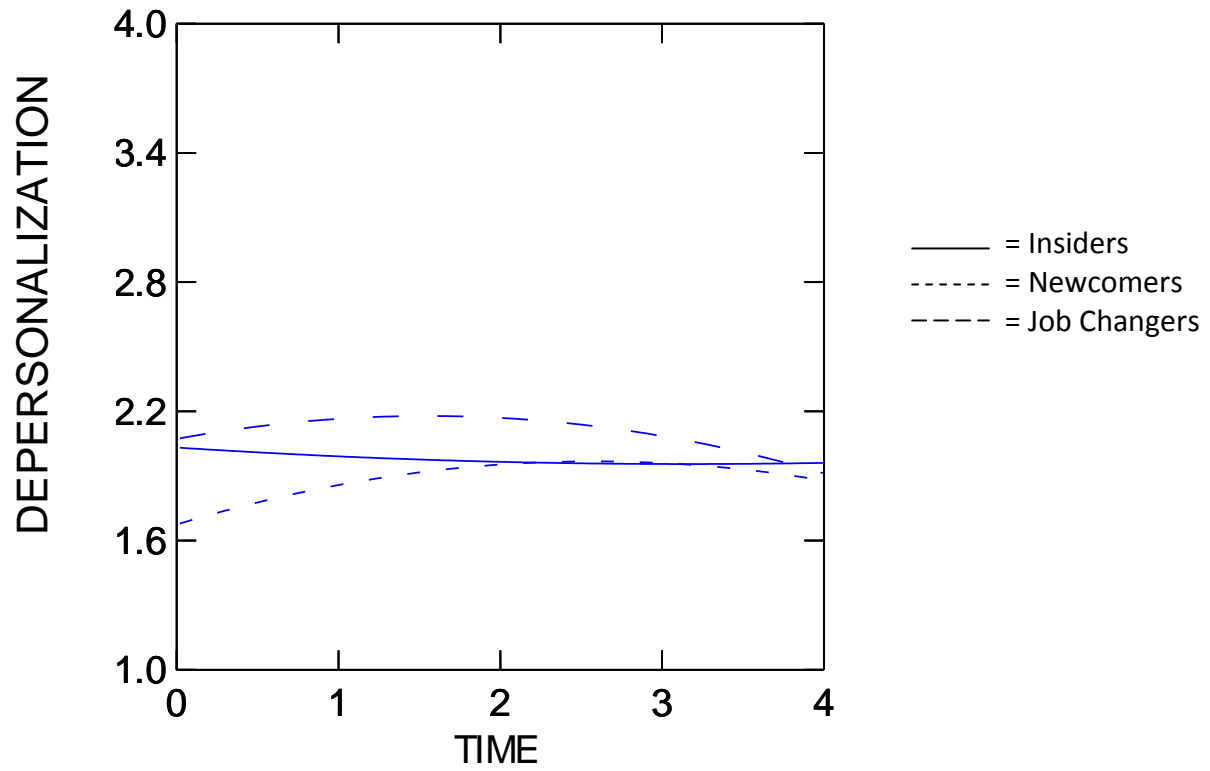


Figure 3. Trajectories of reduced personal accomplishment for organizational insiders, newcomers, and internal job changers

