

## Is the past prologue for some more than others? The hobo syndrome and job complexity

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### ABSTRACT

The current study examines the relationship between an individual's history of changing jobs and future turnover (the so-called "hobo syndrome"). Relying on self-consistency theory, it was hypothesized that the relationship between job mobility history and turnover is moderated by job complexity. Using a sample of 393 employees from two healthcare organizations, multiple methods were used to assess the variables of interest. Job mobility history was assessed with a biodata questionnaire collected before employees were hired. Job complexity was measured objectively by a job complexity index calculated from O\*NET data. Turnover was assessed with actual turnover data collected over an 18-month post-hire period. Consistent with our hypothesis, results using event history analyses revealed that previous job changes were positively related to turnover likelihood. Additionally, job complexity moderated the relationship between previous job changes and turnover likelihood, such that previous job changes were more positively related to turnover in complex jobs. Implications for future research and practice are discussed.

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The topic of turnover is nearly as old as industrial–organizational (I–O) psychology itself. Turnover became a prominent topic after World War I (e.g., Mayo, 1923; Scott & Clothier, 1923; Slichter, 1919; Snow, 1923), and has remained a popular area in personnel psychology research and practice. Much has been learned about turnover in the past century—more than 300 articles have been published on turnover in *Personnel Psychology* and *Journal of Applied Psychology* since 1917. Like many areas of psychology, the study of turnover often proceeds from a person (dispositional traits cause employees to quit), situational (employees leave work because of social or environmental factors), or interactional (person × situation) perspective. Ghiselli (1974) provides one of the more prominent and interesting dispositional explanations of turnover. Specifically, Ghiselli hypothesized that the "hobo syndrome," the tendency to migrate from job to job, arose from some inherent dispositional characteristics (e.g., traits, preferences, or instincts) that predisposed individuals to change jobs frequently. Other researchers have made similar suggestions (e.g., Hulin, 1991; Veiga, 1981). However, little empirical research has addressed this relationship specifically. There are two noteworthy exceptions.

Using event history analysis on a national sample of employees over a nine-year period, Judge and Watanabe (1995) found that individuals who left many jobs were strongly predisposed toward future turnover behavior, even when controlling for human capital, job and labor market, and industry characteristics that might have affected past and present behavior. Munasinghe and Sigman (2004) replicated and extended Judge and Watanabe's results. Their replication found that a history of frequent job changes predicts future turnover even after accounting for a host of statistical and substantive explanations, and that the link was stronger for experienced workers. While these studies consider job context variables that might better elucidate the hobo syndrome, the results and conclusions were somewhat contradictory. Indeed, while Munasinghe and Sigman (2004) replicated

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Judge and Watanabe (1995), they disagreed on the interpretation of the effect. According to Judge and Watanabe, the direct effect of job hopping suggests that employees move from position to position as a result of these dispositional characteristics, regardless of other background or job-related factors. Yet, Munasinghe and Sigman note that because past job mobility better predicts future mobility for experienced workers, this result casts some doubt on this interpretation.

The purpose of the present study is to focus on a critical job-context variable—job complexity—that we argue is particularly relevant to the hobo syndrome. Our main thesis is that the characteristics of the employee's position, specifically the level of stimulating and challenging demands associated with a particular job (i.e. job complexity), are likely to have a significant influence on whether they engage in job hopping. In the next section of the paper, we discuss theory and research on job mobility, the hobo syndrome, and then present hypotheses linking the core study variables (past job mobility, job complexity, and turnover). Using the experiential model of job learning and performance, self-consistency theory, and image theory, we attempt to explain the interplay among job mobility, job complexity, and subsequent turnover.

## 1. Theory and hypotheses

An employee's propensity to job hop (which we label, going forward, as their degree of job mobility) can have a particularly detrimental effect on an organization's success through increased turnover and in some instances a loss of organizational or tacit knowledge. Combined with the degree of job complexity associated with that employee's position, job mobility can exacerbate these effects. Past literature addressing these two components provide some evidence for these conclusions.

### 1.1. Job mobility

Changing jobs is a normal part of work life, and many terms have been used to describe this process including turnover and job mobility, with many studies using these terms interchangeably (e.g., Van Vianen, Feij, Krausz, & Taris, 2003). However, while the constructs of job mobility and turnover are related, they are distinct in how they are related to employee behavior. Job mobility refers to patterns of intra- and inter-organizational transitions over the history of a person's career (Hall, 1996; Sullivan, 1999), essentially a reflection of a person's history of changing jobs. Conversely, turnover refers to voluntary or involuntary permanent withdrawal from a single organization (Robbins & Judge, 2009). In other words, while turnover refers to a person leaving a single job or position, job mobility refers to the intra- and inter-organizational transitions over the course of a person's career.

Although turnover has received ample attention by researchers, in comparison, job mobility remains underexplored in management research. While job mobility research has delved into mobility typology (e.g., Doering & Rhodes, 1996; Louis, 1980b; Nicholson & West, 1988), antecedents (e.g., Finney & Kohlhouse, 2008; Ng, Sorensen, Eby, & Feldman, 2007; Sturges, Guest, Conway, & Davey, 2002; Van Ham, Mulder, & Hooimeijer, 2001; Wilk & Sackett, 1996), and outcomes (e.g., Barnett & Miner, 1992; Keith & McWilliams, 1997; Liljegren & Ekberg, 2009; Rosenfeld, 1992; Swaen, Kant, van Amelsvoort, & Beurskens, 2002), job mobility has received considerably less attention in the literature when contrasted against the turnover literature. This relative paucity of research on job mobility is interesting because statistics indicate that changing jobs is a very common practice among employees. For example, American workers have an average of 10.5 jobs over their career (U.S. Bureau of Labor Statistics, 2006), and evidence suggests that this practice is increasing in other industrialized countries (Ng et al., 2007). This statistic is intriguing given that research has linked individuals' past job mobility to their likelihood of leaving their existing employment situation. Accordingly, we will next review the literature concerning this relationship.

### 1.2. Relationship between job mobility and turnover (hobo syndrome)

The idea that a history of job hopping is related to future turnover is not new. This relationship was first suggested in the literature when Ghiselli (1974) defined the hobo syndrome as “the periodic itch to move from a job in one place to some other job in some other place” (p. 81). The hobo syndrome has been theorized to be dispositional in nature and analogous to the raw, innate migratory impulses of birds (Ghiselli, 1974). In essence, some individuals feel the urge to change jobs after a certain amount of time on a job, often without understanding why themselves. While personal characteristics are thought to play a role in the hobo syndrome, it has been suggested that structural factors also may play a significant role in the hobo syndrome (Judge & Watanabe, 1995). Regardless of the hobo syndrome's causes, applicants who frequently change jobs are viewed negatively by organizations, with most organizations preferring to “screen out” applicants who have changed jobs frequently in the past in order to have a stable workforce (Griffeth & Hom, 2001).

Although the hobo syndrome was conceptualized more than 35 years ago, only two studies—the aforementioned Judge and Watanabe (1995) and Munasinghe and Sigman (2004) studies—have directly investigated the issue. Despite their differences, both studies supported a link between past job mobility and turnover. Additionally, Cheramie, Sturman, and Walsh (2007) found that a history of job movements was positively related to job changes in executives. Moreover, other empirical research, though not directly testing Ghiselli's hypothesis, has lent support to the underlying relationship. Several studies have demonstrated the linkage between turnover history and turnover or turnover intentions (Griffeth, Hom, & Gaertner, 2000; Judge & Locke, 1993; Price & Mueller, 1986). For example, Wernimont and Campbell (1968) proposed an employee selection strategy that emphasized an assessment of previous behavior as similar to the actual criterion as possible. Calling this approach the behavioral consistency model, Wernimont and Campbell (1968) advocated that the best predictor of future behavior is past behavior. Taking a similar approach, the employee selection model proposed by Asher and Sciarrino (1974), which they called the “point-to-point theory,”

rested on the rationale that the more points in common between the predictor and criterion space, the greater the predictive validity. Furthermore, relying on the behavioral consistency principle, many biodata instruments and weighted application blanks contain questions pertaining to the number of jobs an applicant has held in the past with the thought that job hopping in the past is a good predictor of whether the applicant will leave an organization in the future if they are hired. These approaches have yielded some of the most accurate predictions of turnover in the literature (Becton, Matthews, Hartley, & Whitaker, 2009; Bernardin, 1987; Cascio, 1979; Cotton & Tuttle, 1986; Schmitt, Gooding, Noe, & Kirsch, 1984). In order to establish the basic link shown in prior work between job mobility and turnover, the following is hypothesized:

**Hypothesis 1.** Past job mobility will be positively associated with higher future turnover.

### 1.3. Job complexity as a moderator of the link between past job mobility and future turnover

Job complexity has typically been viewed as a positive job characteristic and central to the concept of job enrichment (Pearce & Dunham, 1976). Certainly, evidence exists linking job complexity to positive organizational and individual outcomes such as job satisfaction, affective commitment, psychological health, and intentions to quit (Clegg & Wall, 1990; Grebner et al., 2003). However, evidence exists that job complexity can have a negative effect on employees as well. For example, Champoux (1980) found an inverted – U relationship between job complexity and general satisfaction, internal work motivation, and growth satisfaction. Furthermore, job complexity has been shown to be associated with emotional exhaustion and job-related anxiety (De Jonge & Schaufeli, 1998; Jia Lin & Johns, 1995).

While research has studied the main effect of job complexity on numerous individual outcomes, job complexity moderates many relationships as well. Job complexity also has been studied as a moderator of the relationships between work hours and satisfaction with work–family balance (Valcour, 2007), age and job performance (Hardigree, Beier, & Beal (2006), general mental ability and job performance (Schmidt & Hunter, 2004), and job experience and supervisory performance evaluations (Farrell & McDaniel, 2001; Gutenberg, Arvey, Osburn, & Jeanneret, 1983; Keil & Cortina, 2001; McDaniel, Schmidt, & Hunter, 1988; Sturman, 2003). Most interestingly, Chung-Yan (2010) found that job complexity interacts with job autonomy to affect job satisfaction, turnover intentions, and psychological wellbeing, thereby revealing that job complexity is not uniformly a motivator or a stressor. Rather, its effects are dependent on the level of job autonomy (i.e., how much discretion workers have over work processes and scheduling). Specifically, Chung-Yan (2010) found that at low levels of job autonomy, job complexity was positively related to turnover intentions.

In the context of the current study, we believe that job complexity moderates the relationship between job mobility and turnover such that the correlation between job mobility and turnover increases as job complexity increases. We propose that this effect is the result of the interplay between an individual's predisposition to job hop, their self-perceptions/expectations, and the difficulty associated with becoming competent at complex jobs. We provide support for this effect based on two theoretical arguments: an experiential model of job learning and performance, and the self-consistency theory.

#### 1.3.1. Experiential model of job learning and performance

According to Murphy's (1989) model of job performance, a person's experience within an organization includes two distinct stages: transition stage and maintenance stage. During the transition stage, the employee is new to the job or has experienced a change in duties or responsibilities which requires him or her to learn new tasks and solve new problems rather than relying on previous job experience. Once individuals learn the job, they enter the maintenance stage where performance is based on recently gained experience and executing well-learned, routine processes.

The duration of each stage and the frequency with which individuals enter the transition stage are a function of both the individual and the job (Murphy, 1989). In jobs with greater job complexity, individuals are thought to spend more time in the transition phase because they must acquire more and more varied skills since job duties, procedures, and methods of operation with complex jobs are unpredictable or undefined. More complex jobs are characterized by the constant need to learn new material and make difficult decisions (Murphy, 1989). In other words, greater levels of job complexity make the acquisition of requisite skills more difficult (Sturman, 2003), resulting in longer transition periods. The frequency and duration of transition stages increase as job complexity increases (Murphy, 1989). At one end of the extreme are jobs in which the work required is relatively simple and does not change substantially over time. In this case, the transition phase is relatively short; and after the employee masters the components of the job, performance simply involves executing well-learned, routine tasks. At the opposite end of the spectrum are jobs that change so quickly and so often that workers are constantly in a stage of transition (Murphy, 1989). Furthermore, Murphy (1989) suggested that the transition stages for an individual worker are affected by dispositional variables, and it is possible that different personality or motivational variables are important at different stages of skill acquisition (Dweck, 1986).

Additionally, in lower complexity jobs, early gains in experience and skills have more significant effects on individuals' job performance, and they quickly move into the maintenance stage. Furthermore, research has indicated that job change to a job with lower job complexity is most likely when an individual's ability is less than required by the current level of job complexity (Wilk & Sackett, 1996). In other words, it takes individuals in highly complex jobs longer to become proficient or competent at their jobs, and we believe this difficulty and required focus should be especially salient for (and therefore unlikely to be borne by) those with past job hopping behavior. Ghiselli (1974) likened the hobo syndrome to raw, surging, internal impulses, similar to those that cause birds to migrate. After a certain amount of time in one job, some individuals are compelled to move on to another job, often

without logical explanations. If an individual is predisposed to such impulses, these impulses are intensified as job complexity increases due to frustration or discomfort associated with longer transition periods.

### 1.3.2. Self-consistency theory

The moderating effect of job complexity on the job mobility – turnover relationship also can be viewed through the lens of the self-consistency model of dissonance (e.g., Aronson, 1968; Aronson & Carlsmith, 1962; Thibodeau & Aronson, 1992). According to self-consistency theory, individuals hold expectancies for competent and moral behavior, known as a self-concept (Thibodeau & Aronson, 1992). Dissonance is aroused when individuals observe a discrepancy between their behavior and their personal standards or self-expectancies of competencies and morality. As shown by the socialization and work adjustment literatures (Klein & Weaver, 2000), work experiences, especially early experiences, often produce dissonance or a “reality shock” (Louis, 1980a) in that one’s expectations for mastery or rewards seem to be frustrated. While challenging work provides more rewards, it also has greater potential to create dissonance in that the individual perceives him- or herself as failing to master the challenges provided by the work (Judge, Bono, & Locke, 2000). Dissonance creates tension or discomfort within the individual, compelling him or her to reduce it by changing their perceptions or the environment causing the dissonance (Wicklund & Brehm, 1976). Researchers have argued that voluntary turnover is one possible quick response to a frustrating or dissatisfying job (Zhao, Wayne, Glibkowski, & Bravo, 2007).

There is reason to believe that job hoppers are both more likely to, first, perceive dissonance in response to challenging work, and, second, to react to such dissonance by changing jobs. First, challenging jobs may be dissonance-producing for job hoppers because information and skill needs suggest that further investments of time are needed to maintain and ultimately advance within that organizational situation. Put another way, challenging work may suggest to job hoppers that they have less chance of being successful in the future because the complexity of the work goes against their individual pre-disposition not to devote considerable time to a single job. Second, while for many individuals, responses to such dissonance may involve redoubling their efforts, or explaining or rationalizing the challenge as a natural part of the job, those who are predisposed to frequently change jobs likely view leaving their job as a more appropriate response compared to someone who has a relatively stable employment history. In other words, if an individual has a history of job hopping, this discomfort is likely to make the instinctual urges to move on to another job more salient. Research has shown that certain contexts exacerbate dysfunctional organizational behaviors (O’Hara-Devereaux & Johansen, 1994), and we believe that the dissonance produced by long and challenging transition periods associated with complex jobs exacerbates job hoppers’ urges to change jobs. As a result, these individuals move on to another job in hopes that they can master this new job more expeditiously, thus reducing dissonance.

This view of the hobo syndrome appears to complement the unfolding model of turnover (Lee & Mitchell, 1994), which posits that individuals generally follow one of four paths when leaving organizations. In Path 1, a shock prompts the execution of a script or pre-existing action plan. The employee leaves his or her current job without considering job satisfaction or searching for another job. In Path 2, a shock causes an image violation that drives the person to quit their job without searching for alternatives. In Path 3, a shock engenders debate concerning the value of the current job relative to alternatives. Path 4 closely aligns with traditional turnover models in which job dissatisfaction—rather than a shock—pushes individuals to find and evaluate alternatives.

We believe that the job complexity–hobo syndrome interaction fits well within the first two paths of the unfolding model of turnover. In Path 1, when a person predisposed to frequently change jobs experiences a longer transition period due to high levels of job complexity, he or she may interpret this situation as a shock attributable to his or her unwillingness to stay in one job for very long. If a person’s *modus operandi* is to commit to a single job for only a short period of time, evidence that a longer commitment is required for success may be viewed as a shock. Furthermore, Lee and Mitchell (1994) suggested that a person’s reactions to a shock are influenced, in part, by unique personal characteristics (e.g., personality traits or disposition). Therefore, a person who may be predisposed to change jobs frequently may experience more intense reactions to such events as a result of innate impulses to change jobs after a certain amount of time on a job. He or she then conducts a search of his or her memory for prior decisions, rules, learned responses, circumstances surrounding prior shocks, and most importantly, if the actions taken in the past were appropriate (e.g., quitting or staying). If his or her evaluation implies sufficient similarity among the situations and decision rules and appropriateness of prior behavior, the decision to quit is almost automatically enacted (Lee & Mitchell, 1994). In other words, because these individuals are predisposed to job hop, they almost automatically recall prior quits, view them as appropriate responses to such situations, and quit their current job when jobs complexity results in longer transition periods.

According to Path 2, an individual’s value image, or personal principles, triggers an evaluation of how easily an individual can reconcile his or her values (i.e., not investing much time in any one job) with the shock (i.e., realization that a highly complex job requires a longer transition period) According to image theory (Beach & Mitchell, 1987), individuals make decisions based on their perceptions of a number of images including: *value images*, embodying a combination of morals, principles, and individually held predispositions; *trajectory images*, representing the individual’s future objectives or goals; and *strategic images*, consisting of current plans and tactics. The individual’s trajectory image (i.e., personal goals), facilitates judgments concerning whether he or she can attain these goals by remaining employed by current organization. The individual’s strategic image (i.e., goal-oriented plans) leads to deliberations about whether the individual’s current efforts and activities are goal directed, in light of this shock. According to this theory, the interaction among these images is used in making two types of decisions: *adoption* decisions, which involve the selection of various plans or actions from a collection of options, and *progress* decisions, which involve the evaluation of whether a current plan is producing acceptable movement toward goals and objectives (Mitchell & Beach, 1990). Indeed, image theory (Beach & Mitchell, 1987) would suggest that job hopper’s *progress decisions*—which involve the evaluation of whether a

current plan is producing acceptable movement toward goals and objectives (Mitchell & Beach, 1990)—would fail a compatibility test, suggesting that a change is needed (Dunegan, 1995).

In the context of the hobo syndrome, we propose that when faced with the prospect that mastering a complex job is more difficult and time consuming than less complex jobs, individuals predisposed to change jobs frequently are more likely to change jobs because they perceive incompatibility between their current and trajectory images and they view changing jobs as a more favorable option. In summary, we posit that job complexity moderates the relationship between job mobility and turnover in such a way that the association between job mobility and turnover increases as job complexity increases. As a result, we propose the hypothesis below and present the model of these relationships in Fig. 1.

**Hypothesis 2.** Job complexity will moderate the relationship between job mobility and turnover such that the relationship between job mobility and turnover will increase as job complexity increases.

## 2. Method

### 2.1. Sample and procedure

Participants in this study were applicants in two different hospitals in the southeastern United States. Applicants learned about job openings for a variety of positions such as laundry worker, housekeeper, receptionist, technologist, registered nurse, and manager through a number of ways, such as wanted ads in newspapers, hospital job opening web pages, and walk-ins. A total of 15,450 applicants completed the applicant process at both hospitals. Applicants were directed to a secure website; they completed a biodata questionnaire as part of the hiring process; and hiring decisions were made based on performance according to an empirical key that was the result of a criterion-related validation study. Of the 15,450 applicants, a total of 1270 were hired. Of the 1270 who were hired, turnover data were available for 896 employees. Of these participants, 393 employees fell within the sampling frame described in the measures section below.

### 2.2. Measures

#### 2.2.1. Job mobility

Job mobility was measured through an item on the biodata questionnaire in which applicants were required to indicate how many jobs they had held in the past five years. Applicants chose the most appropriate answer from the following response options: (a) five or more; (b) four; (c) three; (d) two; (e) one; and (f) I have not been employed in the last five years. While job mobility is measured as a single-item, the fact that it is asked in an unambiguous and concrete fashion suggests that the use of this single item measure is appropriate for this study (Gardner, Cummings, Dunham, & Pierce, 1998).

#### 2.2.2. Turnover

Actual turnover data were collected over an 18 month period subsequent to each participant's hiring. If an employee voluntarily terminated employment during this 18 month period, it was coded as "0," and if an employee was retained, it was coded as "1." The determination of voluntary versus involuntary turnover and the establishment of a sampling frame to control for study bias are discussed below.

#### 2.2.3. Determining voluntary turnover behavior

A total of 1270 employees were hired by both hospitals, and the follow-up assessment of employment status revealed employees who had both voluntary and involuntary (firing) events. For those employees who fell into the sampling frame as turnovers, we reviewed reasons for turnover with only those employees classified as voluntary turnover included in the analysis.

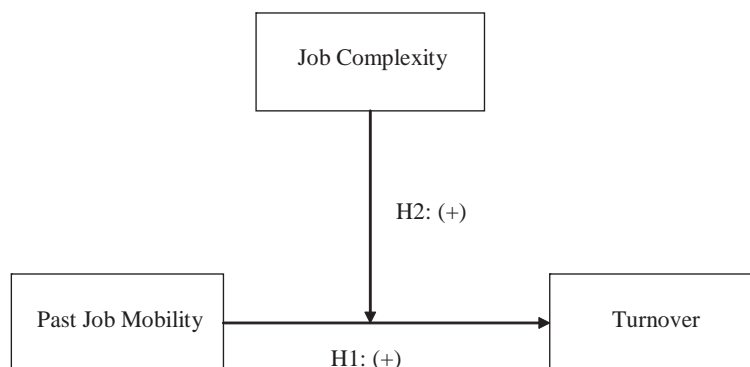


Fig. 1. Job complexity's effect on the relationship between turnover history and turnover.

Examples of employees who were classified as involuntary turnovers included employees who had failed their probationary period or were terminated for poor job performance or attendance/tardiness problems. As a result of this classification, the survival analysis included only 393 employees, of which 79 (9.9%) were voluntary quits (314 are therefore right censored).

#### 2.2.4. Job complexity

Borrowing from studies such as Shaw and Gupta (2004) and Judge and Livingston (2008), job complexity was measured by constructing a job complexity index for each job title using data available from the Occupational Network (O\*NET) database, which represents the most comprehensive information about occupations ever compiled (Campion, Morgeson, & Mayfield, 1999; Peterson et al., 2001). Using job titles supplied by the hospitals involved in the study, we matched these job titles to job titles and descriptions in the O\*NET database. We used O\*NET ratings from three areas to assess the job complexity of participants' occupations: knowledge (sum of 35 specific areas of knowledge required in a job), skills (sum of 50 specific skills required in a job [e.g., complex problem solving skills, social skills]), and abilities (sum of 52 specific abilities required in a job which can be classified into four categories: cognitive, physical, psychomotor, and sensory). These ratings are collected via questionnaires completed by occupational experts and job incumbents, and the O\*NET questionnaire contains numerous rating scales such as importance, level, extent of activity, etc. Since these different rating scales have different numerical ranges (e.g., importance is from 1 to 5, while level is from 0 to 7), O\*NET standardizes descriptor means to a scale ranging from 0 to 100 in order to simplify interpretation. For each job in the O\*NET database, the importance rating, ranging from 0 to 100, is available for each knowledge, skill, and ability. These ratings were summed to form an overall composite index of job complexity. In our database, the most complex occupations were surgeons, paramedics, respiratory therapists and clinical managers; the least complex were switchboard operators, storeroom clerks, and housekeepers.

#### 2.2.5. Study controls

Several control variables were included in the analyses. Demographic variables included were employee age (at assessment), ethnicity (coded 1 = Caucasian, 2 = African American, 3 = Hispanic, 4 = Asian/Pacific Islander, 5 = Native American), and gender (coded 0 = female, 1 = male). Additionally, cognitive ability was controlled for by using self-report data concerning educational attainment (e.g., biodata items concerning grades in school and performance on standardized tests). While actual grades and test scores represent a more straightforward measure of cognitive ability, research has shown that educational attainment is correlated .63 with cognitive ability (Berry, Gruys, & Sackett, 2006). Work experience was also thought to possibly play a role in the hobo syndrome, and so it was included as a control variable. Work experience was operationalized via a single biodata item asking applicants to rate their amount of work experience (response options range from more than 10 years to 0–6 months).

Another key concern was the role that overall job demand for a particular job may have on turnover. If a job title had strong future demand, we felt that this may contribute and bias an employee's job mobility response and thereby prevent us from concluding that job mobility was individually driven, and not a function of overall job demand itself. To control for this bias, we used labor data provided by the U.S. Bureau of Labor Statistics which has been matched to the job titles within the O\*NET system. These data include an estimate of employment in a particular O\*NET job title, and the projected future need for that job title from 2005 to 2015. We divided employment by the estimate of projected need for that job title to create a percentage (ranging from 0 to 100%) for each O\*NET job title in our data. This job demand variable ranged from 12.2% for insurance claim clerks to 62.5% for pharmacy technicians and surgical technologists, with an average of 37.6%.

#### 2.2.6. Establishing the sampling frame

Start dates for each of the employees were obtained from each hospital, subsequent to their selection for employment. For all applicants who were selected, turnover data were collected from personnel records on a monthly basis from each respective hospital. The unit of time used for the analysis was the difference between the start date and the day the employee turned over in days (or the time value was coded as right censored if not). The entire study window was 18 months subsequent to the organizational entry date of the first new hires.

Since those employees who had been hired earlier in the study window had a longer time to "turnover" within the study window, study effects could bias results (Hosmer & Lemeshow, 1999). To control for these study effects, a sampling frame (in days) was established for each employee. This sampling frame represented the difference between the last day turnover data were obtained from the hospitals, and the last employee hired by the hospitals. In essence, this sampling frame ensures that all employees will be evaluated on their turnover status using the same sampling time frame and provides a more conservative test of voluntary turnover behavior (Carr, Pearson, Vest, & Boyar, 2006). Based upon the day the last turnover data were obtained from the hospitals and the last employee questionnaire assessment, this sampling frame was set to 180 days for all employees within the study. For those employees whose turnover status indicated that they were still employed on the 180th day, they were considered right-censored, and their unit of time was set to 180 days. For all employees who engaged in voluntary turnover prior to 180 days, they were considered as a turnover event, and their unit of time was coded for the number of days employed prior to their turnover date.

### 3. Results

#### 3.1. Descriptive statistics, correlations, and analytical approach

Table 1 provides means, standard deviations, and correlations of the study controls, the main effects variables, and the number of days of employment associated with each employee. For those employees deemed as right-censored, their number of days of

**Table 1**  
Means (*M*), standard deviations (*SD*), and intercorrelations among study variables (*N* = 393).

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Age	38.34	10.07	–								
2. Ethnicity	1.47	1.02	–.01	–							
3. Gender (female = 0, male = 1)	.19	.39	.05	–.08	–						
4. Prior work experience	6.91	1.68	.44**	–.05	.00	–					
5. Cognitive ability	6.38	1.35	–.25**	–.12*	–.07	–.07	–				
6. Job demand	.37	.10	–.03	–.05	.00	–.07	.03	–			
7. Job mobility	2.95	.81	–.13**	.11*	.00	–.04	–.01	–.09	–		
8. Job complexity	3895.7	740.4	.05	–.11*	.17**	.01	–.02	.05	–.06	–	
9. Voluntary turnover <sup>a,b</sup>	161.11	44.50									

<sup>a</sup> In days. Statistics and correlations shown are for the entire sample, to include right censored cases. The mean and standard deviation values (in days) for employees designated as voluntary turnovers within the sampling frame are 91.29 days and 55.83 respectively.

<sup>b</sup> Voluntary turnover include right-censored values that are skewed; correlations are not interpretable, and thus not provided.

\*  $p < .05$ .

\*\*  $p < .01$ .

employment was set at 180 days. The analytic approach to testing our hypotheses centered on the use of Cox regression. Cox regression (more formally known as Cox proportional hazards modeling) is a statistical method that is part of a larger group of statistical techniques that are related to survival analysis. Cox regression is a semi-parametric model, which provides coefficients for independent variables based upon the “time to a specific event”—in our case voluntary turnover. The time to a specific event serves as the dependent variable, often measured as the number of days within a sampling frame until either a) the event occurred, or b) the event did not. Using this technique, we can test for the main and moderating effects of job mobility and complexity on turnover likelihood, with time serving as the dependent variables.

Prior to testing hypotheses the proportional hazards assumption was assessed for each of the main effect variables (Hosmer & Lemeshow, 1999). The purpose of this assessment is to ensure that the relationships between the main effect variables and turnover are “proportional” (i.e., the variables have the same or constant ratio or relationship over time). When the proportional hazards assumption is not supported, then the main effect variables may have a different relationship to turnover likelihood, depending upon what point in time they are measured over the entire sampling frame (Hosmer & Lemeshow, 1999). Two strategies were used to assess the proportional hazards assumption, although it should be acknowledged that the tests of this assumption are not overly robust. First, we conducted a time-dependent Cox regression with the independent variables and their interaction with the natural logarithm of time ( $\ln(t)$ ), to determine if the interaction term is significant using the Wald test. This test essentially determines if time is in fact an influence on the relationship between the main effect and turnover likelihood. Second, we examined Schoenfeld residual plots of the main effect variables using Stata. We used both strategies to evaluate the proportional hazards assumption for this study.

With regards to the time-dependent Cox regression approach, job mobility and job complexity variables were included as main effects and as part of an interaction term between the main effect and the natural logarithm of time ( $\ln(t)$ ). Using the Wald test to evaluate the significance of the interaction term, the results were found to be non-significant for job mobility ( $B = -.01$ , Wald = 2.38, *n.s.*) and job complexity ( $B = .00$ , Wald = 2.10, *n.s.*), thus providing evidence that the proportional hazards assumption was met for both variables.

For the residual examination approach, Schoenfeld residuals for each main effect variable were plotted against the natural logarithm of time for visual inspection, following procedures outlined by Hosmer and Lemeshow (1999). The pattern of residuals appeared to be non-random, and did not trend in any particular direction. Similar to the conclusions drawn from the time-dependent Cox regression approach, the Schoenfeld residual plots provide additional support that the proportional hazards assumption has been met for this study.

### 3.2. Cox regression results for organizational turnover

To aid in interpretation, we standardized our main effect variables prior to conducting the analyses. We conducted a two-stage process to test our study hypotheses. After the entry of our study controls, our main effects variables were entered. For the second stage, we used effect size interpretation to evaluate the moderating effect of job complexity on the job mobility – turnover likelihood relationship for Hypothesis 3 (Carr, Boyar, & Gregory, 2008; Trevor, 2001).

Results from Step 3 in Table 2 indicate support for the overall model ( $\chi^2 = 17.42$ ,  $p < .01$ ), with our results supporting Hypotheses 1 and 2. To interpret the turnover likelihood associated with prior mobility, as well as the examination of the moderating effect, we provide the exponentiated values and the unstandardized estimates for all study variables. These values are provided in Table 2. For interpretation purposes, exponentiated values that are less than 1 indicate that turnover likelihood is decreasing (retention is increasing) for each increase in the respective variable. Specifically, Hypothesis 1 theorized that prior job mobility would increase the turnover likelihood of employees subsequent to their hire. From our model, job mobility had a significant coefficient ( $B = .26$ ,  $p < .05$ ), which when exponentiated, indicates that for each standard deviation increase in job mobility, there is an increase in turnover likelihood 30% ( $e^{.26} = 1.30$ ). Put simply, these initial significant results indicate that increases in prior job mobility increase turnover, thus supporting Hypothesis 1.

**Table 2**Cox regression analyses of study variables on voluntary turnover ( $N = 393$ ).

Variable	Step 1 $B$ ( $e^B$ )	Step 2 $B$ ( $e^B$ )	Step 3 $B$ ( $e^B$ )
Age	.00 (1.00)	.01 (1.00)	.01 (1.01)
Ethnicity	.11 (1.12)	.10 (1.10)	.10 (1.11)
Gender (male = 0, female = 1)	-.34 (.71)	-.22 (.80)	-.23 (.79)
Prior work experience	-.01 (.99)	-.01 (.99)	-.01 (.99)
Cognitive ability	.14 (1.15)	.15 (1.16)	.16 (1.17)
Job demand	-.14 (.87)	.24 (1.27)	.00 (1.00)
Job mobility		.24* (1.27)	.26* (1.30)
Job complexity		-.28* (.76)	-.29* (.75)
Job mobility $\times$ job complexity			.27* (1.30)
Model $\chi^2$	4.56	14.58*	17.42*
$\Delta\chi^2$		10.01**	4.07**

Notes. Main study variables are standardized, prior to inclusion in the model. Values shown are unstandardized Cox regression coefficients.

\*  $p < .05$ .\*\*  $p < .01$ .

### 3.3. Effect-size interpretation of interaction term

Determination of whether the moderated effect of job mobility  $\times$  job complexity increases turnover likelihood was conducted by effect size interpretation, using the raw (i.e., non-exponentiated) coefficients within our Cox regression model. Using the unstandardized coefficients, the total effect on the logged hazard, the hazard rate multiplier, and the change in turnover likelihood for job mobility at differing levels of job complexity was calculated. Results from this analysis can be found in Table 3.

Effect size interpretation requires that the moderating variable (job complexity) be examined at different levels (–1 (low) and +1 (high) values), in conjunction with the job mobility and job mobility  $\times$  job complexity interaction variables (Trevor, 2001). Specifically, non-exponentiated values for job mobility and the interaction term are .26 and .27 respectively. For a one standard deviation increase in job complexity, the total effect of job mobility on the logged hazard was .53 ( $e_{\text{MOBILITY}} + e_{\text{INTERACTION}}$ ), which, when exponentiated, yields a 1.69 hazard rate multiplier ( $e^{.53}$ ). Based upon this calculated value, the change in organizational retention at high levels of job complexity is calculated by an equation ((hazard rate multiplier – 1)  $\times$  100) to yield a percent change value. Using the 1.69 value, this results in a 69% increase in turnover likelihood per one standard deviation increase in job mobility for employees in jobs that have high levels of complexity.

For respondents with low levels of job complexity, the effect is in the opposite direction. For a one standard deviation decrease in job complexity, the total effect of one standard deviation increase of job mobility on the logged hazard is  $-.01$  ( $e_{\text{MOBILITY}} - e_{\text{INTERACTION}}$ ), which when exponentiated results in a .99 hazard rate multiplier ( $e^{-.01}$ ). When examined as a percentage value, this results in a 1% decrease in turnover likelihood per one standard deviation increase in job mobility for individuals in jobs with lower levels of job complexity (( $e^{-.01} - 1$ )  $\times$  100). Based upon these effect size calculations, the inclusion of the interaction term leads to significant and substantially higher levels of turnover for respondents who have increased prior job mobility and are in a job with higher levels of complexity, thus supporting Hypothesis 2. As predicted, with increasing job complexity, individuals with higher levels of prior job mobility are much more likely to turnover in comparison with lower levels of job complexity, reducing retention over 69%. However, the effect of increases in prior job mobility on turnover likelihood is reduced when job complexity is lower.

## 4. Discussion

The central purpose of this study was to examine job complexity's moderating effect on the relationship between past turnover and future turnover (i.e., the hobo syndrome). To fulfill this purpose, our study first sought to further investigate the relationship between job mobility and turnover, providing additional empirical support for the hobo syndrome. Similar to Judge and Watanabe (1995), the results demonstrate support for the hobo syndrome with previous job changes predicting future employee turnover. Although Judge and Watanabe (1995) found support for the hobo syndrome, their study used data from the National Longitudinal Surveys Youth Cohort (NLSY), and their sample suffered from range restriction concerning the age of the participants (e.g., age

**Table 3**

Effect-size computations for interaction term on voluntary turnover.

Interaction term	Total effect on logged hazard <sup>a</sup>		Hazard rate multiplier <sup>b</sup>		Change in voluntary turnover likelihood <sup>c</sup>	
	Moderator Low	Moderator High	Moderator Low	Moderator High	Moderator Low	Moderator High
Job mobility $\times$ job complexity	-.01	.53	.99	1.69	-1%	69%

<sup>a</sup> Effect associated with a one standard deviation increase in the main effect ( $\beta_{\text{main}} + (\beta_{\text{interaction}} \times X_{\text{moderator}})$ ).<sup>b</sup> Exponentiated value associated with a one standard deviation increase in the main effect [ $\exp$  (total effect on the logged hazard)].<sup>c</sup> Effect on turnover likelihood associated with a one standard deviation increase in the main effect [(hazard multiplier – 1)  $\times$  100].



range was 9 years with an average age of 27.2 years). Our sample ranged from 21 to 70 with an average age of 39 years. This advantage is important given these data because one might argue that the hobo syndrome is a phenomenon that is associated with younger workers who are early in their careers and that these individuals might “grow out” of this pattern of job hopping as they mature. However, our results dispute this assertion, suggesting that the hobo syndrome is dispositional in nature and is not limited to a particular age range or career stage. Thus, we contribute to our understanding of the hobo syndrome by demonstrating that this wanderlust stems from instinctive urges and is not confined to younger, more mobile workers; instead it may be a phenomenon that spans career stages and occupational groups.

The final and central goal of the present study was to explore job complexity's effect on the hobo syndrome. Integrating self-consistency theory, the model of experiential job learning, and the unfolding model of turnover, we suggest that greater challenge and longer transition periods associated with jobs of greater complexity may lead to frustration, dissonance, and subsequently more frequent turnover among employees predisposed to change jobs (i.e., the hobo syndrome). The results indicated that the relationship between job mobility and turnover is positive and stronger in the context of high job complexity such that at high levels of complexity, turnover increases over 69% for every one standard deviation increase in job mobility while at low levels of complexity, turnover decreases 1% for every one standard deviation increase in job mobility. While the results of this study do not provide clear evidence concerning the cause of the hobo syndrome, they do help us to understand that it may not be simply the result of dispositional characteristics, as Ghiselli (1974) suggested. Similar to Judge and Watanabe (1995), we suggest that structural factors (e.g., job complexity) may also play a significant role in the hobo syndrome. If the hobo syndrome is the result of some dispositional characteristic as proposed by Ghiselli (1974) and Judge and Watanabe (1995), the results of this study seem to imply that the effects of this disposition are intensified as job complexity increases. As discussed earlier, we suggest that this effect is the result of the interplay between an individual's predilection to change jobs, their self-perceptions/expectations, and the challenges associated with becoming proficient at highly complex jobs.

#### 4.1. Alternative explanations for job complexity's moderating effect on the hobo syndrome

We recognize that there are several alternative explanations for how job complexity moderates the relationship between job mobility and turnover. One way it may function is through networking mechanisms. More complex jobs lend themselves to greater “knowledge sharing” among colleagues, which results in broader and more significant networks. Furthermore, employees in more complex jobs are more likely to be members of professional associations and organizations (e.g., National Society of Professional Engineers, Radiological Society of North America, American Nurses Association), which often serve as job placement/job search sources for employers and employees alike. Since professional jobs tend to be more complex, and such associations are typically the purview of professional jobs, this may provide employees in more complex jobs with more contacts and opportunities concerning new jobs. The advent of social networking websites has possibly made this explanation even more convincing. Many companies now use social networking platforms such as *Jobster*, *Facebook*, *MySpace*, and *LinkedIn* as a way to identify job qualified job candidates (Hansen, 2006; Leung, 2003). Since many social network connections are based on professional background, shared experiences, and industries, networking sites provide employers with access to a wide array of potential employees with specific skill sets (Heneman & Judge, 2009).

Additionally, it is possible that job complexity's effect on the job mobility–turnover relationship is related to the fact that workers in more complex jobs presumably have more abilities, skills, experience, training, etc., which affords them greater opportunity and more job options. For example, employees in complex jobs are thought to possess certain skills and abilities that provide them with a broader and more powerful set of tools such as higher levels of critical thinking, intellectual flexibility, self-direction, and interpersonal effectiveness (Valcour, 2007) which, in turn, provides them with more employment options than employees in less complex jobs. Therefore, it is possible that workers in highly complex jobs may be more likely to quit because they have more options, rather than because of transition-related difficulties. This possible explanation illustrates the need for future research concerning the process that operates whereby job complexity opens up more job opportunities and these opportunities interact with frustrations with job due to longer transition periods.<sup>1</sup>

#### 4.2. Implications for practice

The results of the current study have several important implications for practice. The finding that past turnover is related to future turnover provides further evidence that considering applicants' past turnover during the selection process is an effective strategy for organizations that wish to reduce turnover. This is an important contribution to practice since reduction of turnover can result in considerable savings. McCulloch (2003) estimated \$1400 savings per person if that employee stays at least one year. Although there are numerous ways to collect information about applicants' past job changes, this study used responses from a biodata item, and this result provides additional support for the use of biodata measures as part of the selection process, especially in instances where the job complexity of the target job is high. This is important because despite evidence that biodata measures are valid predictors of a number of important job-related criteria including turnover, organizations are still reticent to use them as part of the selection process. As more and more evidence that such measures are useful for predicting important selection criteria mounts, perhaps organizations will become more accepting of biodata as a selection device.

<sup>1</sup> We would like to thank an anonymous reviewer for suggesting increased job options as a result of greater skill and abilities associated with more complex job as an alternative explanation for our results.

Secondly, and most importantly, the finding that job complexity moderates the relationship between job mobility and turnover implies that organizations may need to adopt different retention strategies on a case-by-case basis depending on an employee's history of job changes and the complexity of the employee's job. While some organizations may adopt the strategy to simply avoid hiring applicants with a history of job hopping, labor market conditions may make that strategy a difficult proposition at times. If organizations hire applicants with a history of job hopping for highly complex jobs, they would be well served to take extra precautions to retain these employees. In accordance with Murphy's (1989) model of job performance, we believe organizations could help employees more effectively manage the transition stage by providing more and more broadly focused new employee orientation programs, coaching, and feedback early in employees' tenure to help them address the frustration often encountered in entering a new job, especially in highly complex jobs. In our experience, such actions by employers are much more common for jobs of lower complexity; yet these results suggest that similar approaches may be required for those with a history of changing jobs. Research seems to show that most orientation activities aimed at new employees are too narrow in focus, covering areas such as health and safety issues, terms and conditions of employment, and the organization itself, but ignoring important aspects such as establishing new relationships and managing the anxiety and stress associated with being a newcomer (Wanous & Reichers, 2000). Added to the normal stress of being new, employees with a history of job hopping may find the stress associated with highly complex jobs so undesirable that leaving the organization seems to be the most appropriate response. As a result, organizations may be well served by incorporating activities to assist such employees in dealing with these frustrations into new employee orientation and training programs.

#### 4.3. Contributions, limitations, and future research

This study makes several important contributions to the turnover and job complexity literatures. First, the findings provide additional support for Ghiselli's (1974) hobo syndrome and extend the work of Judge and Watanabe (1995). Second, while turnover has received ample attention in the literature, job mobility has been somewhat overlooked. We believe that this is an important oversight and that studying the relationship between job mobility and turnover will serve to help distinguish between these two concepts in future research. Third, our study examined the moderating effect of job complexity on the relationship between job mobility and turnover. We believe these results are important because when job complexity has been examined in relation to turnover, most research has examined the main effect of job complexity on turnover. We could not find any previous studies that have examined job complexity as a moderator of the hobo syndrome. Furthermore, our results may be edifying for researchers studying job complexity as a moderator or mediator in future research. As mentioned previously, most research on job complexity used subjective, self-report measures of job complexity. These measures often required respondents to rate job complexity on five or seven point scales, reducing the possible variability in job complexity and limiting the ability to find significant results. The jobs in this study ranged from very simplistic to very complex (e.g., *SD* for job complexity was 711.80) which greatly improved our ability to detect the moderating effect of job complexity.

While this study provides insight into job complexity's moderating effect on the job mobility–turnover relationship, we, unfortunately, did not have access to data relating to dispositional factors such as personality traits. Personality, specifically the five-factor model, has long been suggested as tool for investigation of problems in industrial and organizational psychology (McCrae & John, 1992). While personality has been studied as a predictor of turnover, we could find no studies that examined personality in the context of the hobo syndrome. This seems peculiar given evidence that the Big Five personality traits have been shown to be predictive of turnover (Salgado, 2002; Timmerman, 2006). Although all of the Big Five personality traits should be examined as they relate to job hopping, we feel that openness to experience and conscientiousness are particularly interesting. Since frequently changing jobs presents new but risky opportunities, openness to experience would appear to be related to the hobo syndrome. Furthermore, because job hopping is typically viewed negatively by employers (Griffeth & Hom, 2001), one would think that conscientiousness would be negatively associated with job hopping. As a result, we believe future research should explore openness to experience and conscientiousness as they relate to the hobo syndrome, especially in combination with job complexity.

Additionally, our data did not allow us to examine variables such as role ambiguity, P–O fit, or job satisfaction although evidence suggests these factors may mediate the job mobility–turnover relationship. For example, meta-analytic studies have shown role ambiguity, the extent to which incumbents are uncertain about their responsibilities or when role-related information is vague, to be positively related to intention to leave (King & King, 1990). While the direct and mediating effects of role ambiguity as they relate to turnover have been examined in many studies (cf., Fried, Shirom, Gilboa, & Cooper, 2008; King & King, 1990), the mediating effect of role ambiguity on the job mobility–turnover relationship remains uninvestigated. Similarly, P–O fit (cf., Chan, 1996; Chatman, 1991; McCulloch & Turban, 2007; O'Reilly, Chatman, & Caldwell, 1991; Saks & Ashforth, 1997; Vandenberghe, 1999) and job satisfaction (cf., Mobley, 1977; Nyberg, 2010) have been shown to have direct and mediating effects on turnover and turnover relationships; yet no studies have examined them as mediators of the job mobility–turnover relationship. For example, it would seem that P–O fit might play a role in the hobo syndrome and how job complexity affects the relationship between past turnover and future turnover. One might propose that in situations where P–O fit is high (i.e., individuals' needs are being met and/or working with those whom they share common values or characteristics), job complexity's effect on the past turnover–future turnover relationship would be diminished. In other words, because certain needs are being met in the current job, the frustrations or shocks due to longer transition period may be viewed as more tolerable by those previously prone to job hopping. We believe a similar proposition could be formed concerning job satisfaction. As a result, future research should examine these and other mediators of the hobo syndrome.

Also, while our study addresses withdrawal from a job, it does not investigate withdrawal from an occupation. Although our data did not allow us to examine how job complexity impacts decisions to leave an occupation, a study of this nature would have important implications, especially for occupations that tend to experience significant amounts of occupational withdrawal. For example, studies show that only 25% to 50% of nursing school graduates will be practicing after 5 years in the profession, and this estimate falls far below the projected need for nurses (Crow & Hartman, 2005). Although changing jobs/organizations is more common than changing occupations (Blau, 2007), examining how job complexity affects decisions to leave one's profession would be very useful in helping to address labor shortages in certain occupations such as nursing. As a result, future research on this topic is needed. Additionally, much of the extant research on the relationship between past turnover and future turnover, including this study, has neglected to examine how the nature of previous jobs (e.g., part-time, full-time, transient jobs) affects this relationship. The motivation for turnover in part-time and/or transient jobs is likely different from turnover in full-time jobs. We feel this is an interesting void in the literature and represents a fruitful avenue for future research.

Although the present study makes an important contribution to the literature, it is not without limitations. First, the data used in our study came from two organizations within the same industry. Although the data cover a wide array of jobs with varying degrees of complexity, it is not clear whether the findings of this study are germane only to the healthcare industry or if they can be generalized across multiple industries. Future research could investigate these findings in other industries and/or across numerous organizations. Second, our data came from American organizations in the Southeastern region of the country. It is possible that the results of this study were affected by regional or cultural factors, and future research might include employees from a variety of regions and cultures as some authors have suggested that national culture and cultural values have an important effect on the attitudes, perceptions, and behaviors of employees (c.f., Chen, Chen, & Meindl, 1998; Farh, Zhong, & Organ, 2004; Lam, Hui, & Law, 1999; Paine & Organ, 2000). Therefore, future research might involve determining the cultural nuances of the hobo syndrome. Third, the single-item job mobility scale may be considered a weakness although such a scale seems appropriate considering the concrete nature of job mobility (Gardner et al., 1998).

In summary, we argue that despite these limitations, the results of this study make valuable contributions to both theory and practice. We believe that these results provide greater understanding of the hobo syndrome and job complexity, providing directions for additional research and guidance for organizations wishing to manage turnover.

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