

Organizational Entry and Exit: An Exploratory Longitudinal Examination of Early Careers

Elwood F. Holton III

*Human Resource Development Program
Louisiana State University*

Craig J. Russell

*Department of Management
University of Oklahoma*

New college graduates' perceptions of organizational entry constructs were measured at the end of the first year of employment and related to subsequent turnover as well as work attitudes 3 years later in a longitudinal design. The research design examined the simultaneous effects of entry constructs for the first time in an exploratory model. The combined effects of individual readiness, organizational tactics, individual tactics, entry process perceptions, perceived job characteristics, learning, expectations, and coping responses on subsequent turnover and job attitudes of newly employed college graduates were investigated using hierarchical logistic regression. Aspects of preemployment anticipation, organization receptivity, adaptation difficulty, meeting with person previously in the position, feedback seeking, and organization attachment correctly predicted 73.3% voluntary turnover after Year 1. Organization entry constructs and first year attitudes explained 45% of the variance in organizational commitment and 48.9% of organizational attachment 3 years later. Preliminary evidence suggests mediated causal paths link other aspects of newcomer perceptions, work attitudes, and turnover.

The entry of new employees into organizations is a critical human resource process that cannot be underestimated. Organizational entry and subsequent new employee

Requests for reprints should be sent to Elwood F. Holton III, Human Resource Development Program, Louisiana State University, 142 Old Forestry Building, Baton Rouge, LA 70803. E-mail: holton@linknet.net

development processes are typically designed to accomplish two critical management goals: increase the likelihood that employees will achieve at targeted levels of performance and stay with the organization. Research indicates that socialization efforts can influence turnover (Leibowitz, Schlossberg, & Shore, 1991; Wanous, 1980), performance levels (Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989), organizational commitment (Allen & Meyer, 1990; Pierce & Dunham, 1987), satisfaction levels (Adler & Aranya, 1984; Morrow & McElroy, 1987), and person–job congruence (Richards, 1984b; Stumpf & Hartman, 1984). Because of the extensive effects of organizational socialization practices, the topic has been heavily researched.

Researchers have developed models to describe stages and processes newcomers undergo (Buchanan, 1974; Feldman, 1976; Louis, 1980, 1985; Schein, 1978; Van Maanen, 1976; Wanous, 1980): organizational socialization tactics and practices (Holton, 1998; Louis, Posner, & Powell, 1983; Van Maanen & Schein, 1979; Zahrlly & Tosi, 1989), preemployment interventions (e.g., realistic job previews, Meglino & DeNisi, 1988; Premack & Wanous, 1985), newcomer characteristics (Jones, 1986), and newcomer adjustment tactics (Ashford, 1988; Bauer & Green, 1994; Feldman & Brett, 1983; Morrison, 1993; Ostroff & Kozlowski, 1992). Some researchers have developed models that blend alternate research approaches into interactionist models portraying newcomers as proactive participants in the transition from job candidates to newcomers (Ashford & Taylor, 1990; Jones, 1983; Miller & Jablin, 1991; Reichers, 1987). Recently emphasis has been placed on understanding the content of socialization-related learning (Chao, O’Leary-Kelly, Wolf, Klein, & Gardner, 1994).

Thus, evidence suggests that organizational entry remains an important issue for organizations, resulting in substantial costs due to suboptimum performance and, more directly, higher turnover rates. However, Fisher (1986), Feldman (1989) and Bauer, Morrison, and Callister (1998) noted that efforts to test these theories have been fragmented and incomplete. Current research on predictors of newcomer turnover is highly fragmented with a variety of constructs believed to influence performance outcomes. These constructs have usually been examined in small sets of variables and typically in isolation from other influential variables. Whereas this is appropriate at early stages of theory development, later stages require simultaneous examination of entry constructs in order to discover underlying processes.

Accordingly, the purpose of this study was to provide an initial investigation into the *combined* effects of constructs identified in previous organizational entry research on newcomers’ subsequent turnover and attitude outcomes. Specifically, the joint effects of organizational tactics, individual tactics, individual readiness, perceptions of the entry process, perceived job characteristics, learning, expectations, and coping responses on turnover and job attitudes of new employees were investigated in a longitudinal design. Investigating combined effects permitted

more accurate estimates of actual effects in the presence of other operating variables. Although these constructs coexist through the “newcomer” experience, they have not previously been studied jointly.

CONCEPTUAL MODEL AND RELATED RESEARCH

Saks and Ashforth (1997), in their recent review, called for reinstatement of context in studying socialization and new employee processes. As they noted, entry processes and systems are embedded in an organization milieu that is likely to shape entry processes and outcomes. They further suggested that additional focus needs to be placed on identifying moderators and mediators in the newcomer socialization process. This can only happen when researchers strive to incorporate more complete sets of variables that more accurately reflect the organizational entry system. Such studies may become methodologically “messier” but potentially yield richer understandings. Systems theory (von Bertalanffy, 1968) suggests that researchers must strive to understand complex systemic influences on employee behavior.

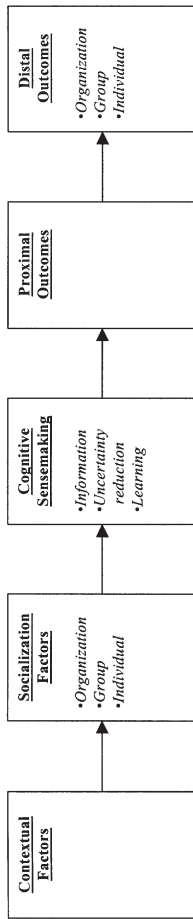
The conceptual frame for this study is very similar to the conceptual process model of socialization developed by Saks and Ashforth (1997). As shown in the top portion of Figure 1, their model suggests that socialization begins as an interaction of contextual factors and socialization factors. This interaction leads to cognitive sensemaking, which in turn produces proximal outcomes (e.g., person–job/organization fit, personal change) and distal outcomes (e.g., job attitudes, turnover).

The bottom portion of Figure 1 shows that this study uses a similar conceptual sequencing except for the contextual factors construct domain that was not explicitly included. In our model, entry inputs are seen as leading to entry process perceptions and cognitions, much like Saks and Ashford’s model where socialization factors lead to cognitive sensemaking. Further, in our model the entry process perceptions/cognitions lead to entry consequences (met expectations and coping responses), which in turn lead to entry outcomes (e.g., attitudes and turnover). The latter two domains are directly analogous to Saks and Ashford’s (1997) proximal and distal outcomes.

The exploratory model employed here provides an intermediate theory-development step falling between single or bivariate cross-sectional exploratory studies and full-scale quasi-experimental field tests of competing theoretical predictions. Exploratory research of this type provides initial indications of possible relations and is particularly valuable in narrowing the range of variables examined in later research. Additionally, test of this model will suggest possible mediation effects (full or partial) for further evaluation in full causal models. Exploratory methods such as those used here are essential in the process of discovery (McCall & Bobko, 1990).

Figure 2 portrays the complete taxonomy of construct domains and variables related to newcomer entry that were examined in this study. Though presented in a

Saks & Ashforth (1997) Conceptual Multi-level Socialization Process Model



Conceptual Model for This Study

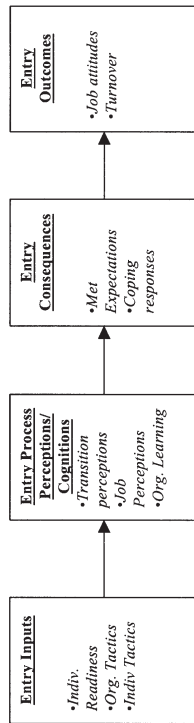


FIGURE 1 Conceptual frame for this study.

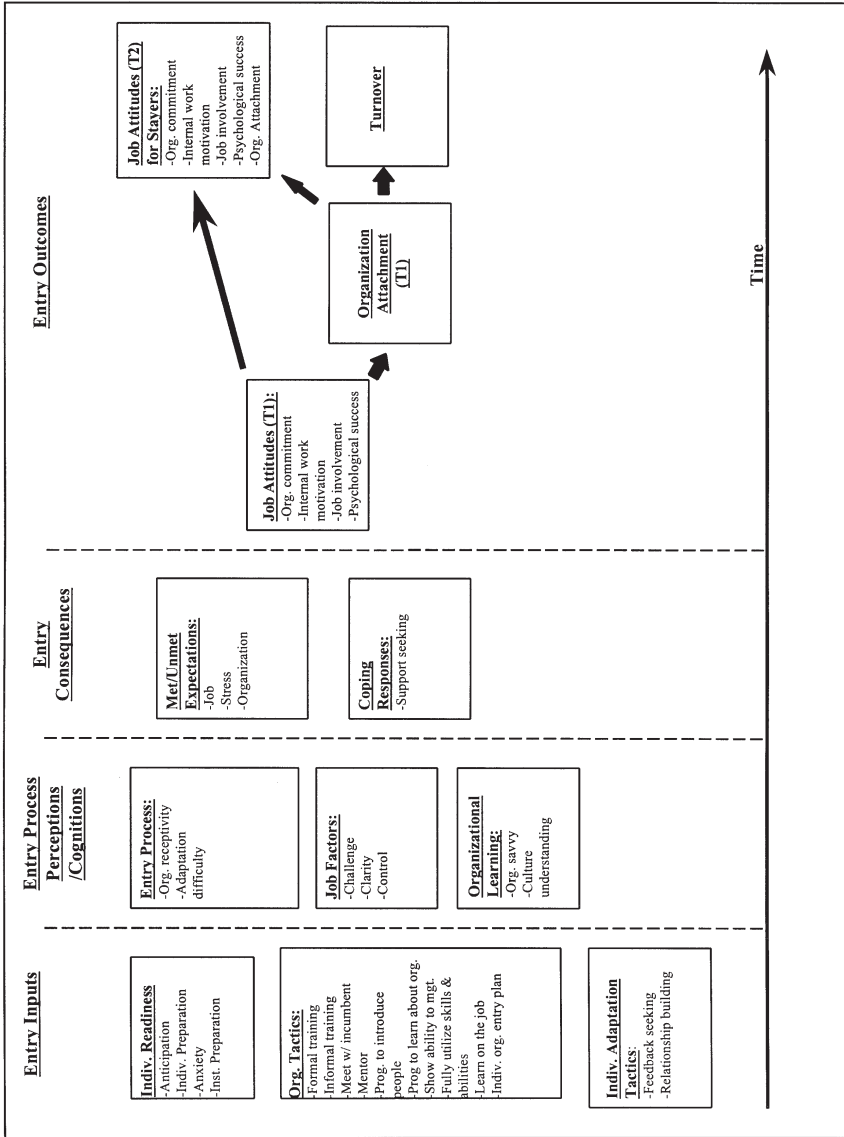


FIGURE 2 Organizational entry construct sequence for hierarchical regression.

temporal process sequence, pre-turnover decisions may occur cyclically over an extended period of time. Other researchers have used this approach to develop early-stage models. Mobley, Griffith, Hand, and Meglino (1979) and Mowday, Porter, and Steers (1982) used similar approaches in developing early models of nonnewcomer employee turnover. Prior research and theory examining subsets of these variables are described following.

Entry Process Inputs

Three groups of variables are present when newcomers first enter an organization: newcomers's level of readiness for organizational entry, newcomers' adaptation tactics, and the organization's new employee development tactics.

Individual readiness. Fisher (1986) suggested that organizational entry outcomes are influenced by a newcomer's willingness to engage in socialization/adaptation processes before and after organizational entry. This is conceptually similar to the "anticipation" stage of Mowday et al.'s (1982) organizational attachment model, containing applicants' preentry cognitions, motivation, affect, environmental circumstances, and exploratory activities. Louis (1980) and others also argued that differences in preentry attitudes and behaviors should affect entry outcomes (Ashford & Taylor, 1990; Jones, 1986; Zahrlly & Tosi, 1989). Bauer and Green (1994) found involvement in related activities prior to entry to a doctoral program (their "work") related to program performance and outcomes.

Individual adaptation tactics. Miller and Jablin (1991), Morrison (1993), and Ostroff and Kozłowski (1992) found newcomer information and feedback seeking related to such organizational entry outcomes as job satisfaction, performance, and intent to quit. Morrison (1993) found that newcomer information seeking explained 12% of the variance in satisfaction, 9% of the variance in performance, and 6% of the variance in intentions to leave.

Organizational tactics. Research suggests newcomer satisfaction, performance, commitment, intent to quit, turnover, and stress are related to support, mentors, and information provided to newcomers by employers (Ashforth & Saks, 1996; Fisher, 1985; Holton, 1998; Louis, Posner & Powell, 1983; Miller & Jablin, 1991; Nelson & Quick, 1991; Ostroff & Kozłowski, 1993). Holton (1998), Louis et al. (1983), and Nelson and Quick (1991) reported significant relations between organization tactics and commitment, satisfaction, and intent to quit.

Entry Process Perceptions and Cognitions

The second group of constructs in Figure 2 encompasses newcomers perceptions and cognitions of the organizational entry process and job factors after entry.

Entry process. Research suggests newcomer interaction with coworkers provides social acceptance and support (Ashford & Taylor, 1990; Katz, 1985; Louis, 1990), and ameliorates effects of unmet expectations (Fisher, 1985; Major, Kozlowski, Chao, & Gardner, 1995). Positive coworker relations also bridge gaps between formal training and real world work requirements thereby helping to interpret and filter events (Feldman 1977, 1980), help meet social, self-esteem, and mentoring needs (Kram, 1988; Kram & Isabella, 1985); and serve as a primary mechanism for social learning (Reichers, 1987).

Job factors. Hackman and Oldham (1975) suggested perceptions of task identity, significance, autonomy, feedback, and skill variety affect employee motivation, satisfaction and turnover. Job challenge, significance, and clarity experienced by newcomers enhances learning (Morrison & Bratner, 1992), whereas role ambiguity and conflict diminish newcomer performance, satisfaction, and commitment (Brief, Aldag, Van Sell, & Melone, 1979; Feldman, 1976; House & Rizzo, 1972).

Organizational learning. One of the organizational aspects that newcomers must quickly learn is the culture of the organization (Schein, 1968). Organizational culture influences newcomer cognitive and affective states (Kopelman, Brief, & Guzzo, 1990), retention rates (Sheridan, 1992), and satisfaction, commitment, and attendance (Meglino, Ravlin & Adkins, 1989). Newcomers use their knowledge about culture to make sense of daily organizational activities (Louis, 1980) and power structure (Louis, 1982). Chao et al. (1994) found newcomer learning on six dimensions (performance proficiency, people, politics, language, history, and organizational goals and values) at significantly lower levels for job and organization changers.

Entry Consequences

Newcomers are expected to use their perceptions and cognitions in determining whether their expectations were met and what, if anything, to do about it. Constructs in this group are conceptually similar to the *proximal outcomes* at the individual level described by Saks and Ashforth (1997).

Met/unmet expectations. Realistic job preview (RJP) research reports a strong correlation between met expectations and job attitudes (Premack & Wanous, 1985; Wanous & Colella, 1989) and turnover (Phillips, 1998). Feldman (1976) found met expectations related to activities such as role definition and awareness of interpersonal domains. New college graduates have reported mismatched expectations as a common problem (Arnold, 1985; Gardner & Lambert, 1993; Holton, 1995; Keenan & Newton, 1986; Nicholson & Arnold, 1989, 1991; Richards, 1984a, 1984b).

Coping responses. Adapting to a new organization is stressful for some individuals, particularly when expectations are not met (Frese, 1984; Katz, 1985; Nelson, 1987). Consequently, newcomers are likely to engage in coping activities. For example, Fisher (1985) found social support helped reduce levels of unmet expectations, whereas Nelson and Quick (1991) found social support reduced stress.

Entry Outcomes

Job attitudes and turnover have been widely examined as outcome measures in organizational entry research (Fisher, 1986) and represent *distal outcomes* of entry processes. Entry processes are expected to influence newcomer job attitudes (e.g., commitment, satisfaction), which subsequently influence newcomer attachment to the organization and ultimately turnover. Early job attitudes may influence later job attitudes for those who remain with the organization (Mowday et al., 1982).

Research Hypotheses

Two exploratory hypotheses (H) were derived from relations reported when these constructs were examined individually:

- H1: Readiness, organizational tactics, individual adaptation tactics, perceptions of the entry process, perceptions of job factors, organizational learning, met expectations, coping responses, and job attitudes will be negatively related to newcomer turnover.
- H2: For newcomers who remained with their Time 1 employer, individual readiness, organizational tactics, individual tactics, perceptions of the entry process, perceptions of job factors, organizational learning, met expectations, coping responses and job attitudes at Time 1 will be positively related to organizational commitment, job involvement, psychological success, internal work motivation, and organization attachment at Time 2.

A secondary purpose of the study was to explore the possible presence of mediation effects between the sets of variables predicting turnover in Hypothesis 1. At study onset no published instruments were available to directly measure newcomer perceptions of these construct domains (Chao et al., 1994 was not available). Hence, the study necessarily also involved the development of original scales for many constructs.

This article reports analyses incorporating a second phase of data collection for employees previously studied during their first year of employment (Holton, 1995, in press; Holton & Russell, 1997). This study extends the previous work by incorporating Time 2 turnover and job attitude data that have never been reported in the literature, providing new insights into the criterion validity of Time 1 measures.

Method

Sample

Surveys were sent to the entire 2,214 bachelor's graduating class from a large state university (for whom current addresses could be obtained) approximately 1 year after graduation. This effort yielded 846 responses (38.2%). Nonrespondent analyses showed that no meaningful differences existed between the demographics of this group and those of the entire graduating class.

Although some researchers have collected data earlier in a new employee's first year, 1 year after graduation was chosen to obtain a different measure of first year experiences. Measures taken at the end of the first year may be more stable and avoid much of the beta and gamma change that occurs during Year 1 (Golembiewski, Billingsley, & Yeager, 1976). This is conceptually similar to the "retrospective then" measures used in organizational change research to control for beta change (Terborg, Howard, & Maxwell, 1980). Measures taken at the end of the year are therefore expected to accurately capture identifiable and known construct domains relative to measures based on similar responses obtained earlier in a new employee's first year. The respondents answer different questions than measures taken earlier in the first year and can reasonably be expected to be more closely related to later career outcomes.

Respondents in graduate school (21.7%), and those either in jobs not perceived as appropriate for their career or not looking for a job (12.8%) should hold very different sentiments about transitions to work. Consequently, they were dropped from the sample, reducing the sample to 548. Only those respondents employed in for-profit organizations were retained for analysis: education, government, and other nonprofit employers were excluded because the instrument development process used only participants employed in business organizations. Thus, the final sample consisted of 378 bachelors' degree graduates employed in business,

professional service or other for-profit organizations in career appropriate positions, representing 17.1% of the original mailing.

A second survey was mailed approximately 3½ years after the initial survey. Current addresses were obtained for 298 (78.8%) of the original 378. Three mailings yielded 258 usable responses for a response rate of 86.6%. Thus, follow-up data were collected for 68.3% of the original for-profit, career-appropriate position sample.

Scale Development Process

Most of the variables in this study (except those noted following) were measured using new scales. Items were obtained from two sources: existing measurement scales and content analysis of 125 interviews with new employees (1 year experience or less), direct supervisors of employees, and senior executives from 12 organizations hiring significant numbers of new employees. The organizations were selected to provide a cross-section of industries. No education, government, or nonprofit organizations were available to the researchers. Interviewees were asked broad, open-ended questions on six key areas: preemployment preparation and activities, description of experiences during the first year of employment, affective responses during the first year, issues and problems in the first year, organization's new employee development strategies, and recommended newcomer adaptation tactics (each domain in Figure 1). Interviews were content analyzed to develop survey items. All items used 5-point Likert scales appropriate for each construct (unless otherwise noted).

Measures: Time 1

Exploratory factor analyses were conducted to identify latent constructs in the organizational entry construct domain. Common factor analysis with oblique rotation was used because it is more appropriate than principal components analysis for identification of latent constructs (as opposed to simple data reduction) (Hair, Anderson, Tatham, & Black 1998).

Loadings from exploratory common factor analyses with oblique rotations were obtained. Importantly, original items developed yielded exceptionally clean loadings and interpretable simple structures (average loading greater than .50 on the major factor for 21 of 29 scales and less than .20 on all other factors). Scale scores were generated using unit-weighted sums of items loading on each interpretable factor.

Twenty-one of the 29 scales exceeded Nunnally's (1978) suggested minimum reliability of at least .70 for instruments in early stages of development (average al-

pha in this study = .78), while eight scales had marginal reliabilities between .50 and .69. Given the large number of variables in the study, a conservative strategy was adopted whereby these 8 scales with marginal reliabilities were dropped from the regression analyses. However, it should be noted that they may represent promising latent constructs in need of further scale development.

Individual readiness measures. Twelve original items assessed newcomer preentry activities and attitudes toward the transition. Example items included the degree to which newcomers felt prepared to start their jobs and whether they took steps to prepare for new employers. Factor analyses identified four scales: individual preparation (6 items, $\alpha = .72$), anxiety (2 items, $\alpha = .70$), and institutional preparation (2 items, $\alpha = .73$).

The other variable in the individual readiness domain, newcomer anticipation, was measured with a single item asking if graduates were “employed in a position appropriate for starting my career” versus “employed in a position appropriate for starting my career, *but not what I had anticipated having.*” This distinction is not what graduates *wanted* or hoped for, which might be subject to bias or recall error, but what graduates had *anticipated* having (Holton & Russell, 1997).

Individual adaptation tactics. Twenty-one items reflected newcomer tactics and strategies used to aid organizational entry. Items described feedback seeking, building relationships, seeking support from friends, and proposing new ideas. The 5-point Likert scale responses ranged from “never” to “very often.” Factor analysis suggested that items loading on two scales should be reconceptualized as coping responses—adaptation tactics used after newcomers achieve some threshold level of organizational entry and initial feedback. One of the coping response scales was not retained due to low reliability but the other one, support seeking (2 items, $\alpha = .89$), was used in the study.

Factor analyses identified three other scales of individual adaptation tactics. One was not used due to low reliability, but two were used as measures of individual adaptation tactics: feedback seeking (2 items, $\alpha = .71$) and experiential learning (5 items, $\alpha = .75$)

Organization’s development tactics. Twenty common newcomer development tactics were identified from the literature (Louis et al., 1983) and informal development and nonprogrammatic tactics described in the interviews. Respondents indicated tactics’ helpfulness on a 6-point Likert scale (cf. Louis et al., 1983) with five levels of helpfulness plus a “not available” option. Cranny and Doherty (1988) demonstrated factor analytic results to be uninterpretable in job analysis questionnaires when item responses reflect perceived importance of work charac-

teristics. In this research, development into “nonnewcomer” status is the job at hand, with development tactics making up job-specific “tasks.” Paralleling Cranny and Doherty’s argument, two tactics may yield high positive correlation between ratings of helpfulness, while one occurs once a year and the other occurs hourly. Because correlations among helpfulness ratings and any factor structures derived from these correlations are meaningless, responses to each organizational tactic item were treated as separate variables in initial analyses.

Earlier multiple regression analyses with this portion of Time 1 data (Holton, 1998) showed that only 10 of the 20 tactics had a relation with any of the Time 1 job attitudes or intent to quit. Accordingly, only those 10 were included in this study to reduce the number of variables in the regression analysis.

Perceptions/cognitions of organizational entry experiences. Sixteen original items tapped newcomer perceptions of organizational entry experiences. Example experiences included organization receptiveness to newcomers and newcomer difficulty in adapting to the new environment. Factor analyses identified four scales, but two were not utilized due to low reliabilities. The two used in this study were organization receptivity (5 items, $\alpha = .80$) and adaptation difficulty (7 items, $\alpha = .72$).

Job factor perceptions. Nineteen items tapped job characteristic constructs consistently identified in the job design literature (Ashford & Cummings, 1985; Hackman & Lawler, 1971; Hall & Lawler, 1970; Mabey, 1986; Rabinowitz & Hall, 1981; Rizzo, House, & Lirtzman, 1970). Five items adapted from Hall and Lawler (1970) tapped perceived job challenge, fit, and discretion. Four role ambiguity items adapted from Ashford and Cummings (1985) tapped perceptions of feedback and clarity of job competency requirements. Construct definitions found in the literature combined with interview content analysis suggested seven additional items.

Four scales were identified from factor analyses, but one was dropped due to low reliability. The remaining three used in the study were job challenge (4 items, $\alpha = .80$), job clarity (8 items, $\alpha = .84$) and control (3 items, $\alpha = .71$).

Organizational learning. Thirteen original items tapped newcomer perceptions of how well they understood the organization’s formal and informal structures (e.g., “I understand most of the values of this organization,” “If I need to get something done, I usually know the person to whom I should turn to make it happen.”). Though developed before Chao et al. (1994) was available, the items are conceptually similar to three of their scales (organizational language, politics, organizational goals and values). Two scales were identified from factor analyses: organization savvy (6 items, $\alpha = .75$) and culture understanding (4 items, $\alpha = .71$).

Met/unmet expectations. Thirty-four original items assessed whether newcomers felt their expectations had been met. Items were derived from the interviews and previous studies of new college graduate expectations (Arnold, 1985; Dean, 1981; Mabey, 1986). It is important to note that this scale represents the newcomers' affective response to expectation–reality differences, not newcomers' estimates of the absolute difference. Six factors emerged from the factor analysis, though three had low reliabilities and were dropped from further analysis. The three used in this study were: job expectations (12 items, $\alpha = .91$), stress expectations (5 items, $\alpha = .71$) and organization expectations (7 items, $\alpha = .84$).

Job attitudes. Six job attitudes were identified from pilot interviews conducted with new employees, their supervisors and senior executives as well as existing organizational entry research (Fisher, 1982). This partially supports interview content validity. Existing attitude scales were used including (a) Hackman and Oldham's (1975) three-item short form of the JDS job satisfaction scale, (b) Organizational Commitment Questionnaire nine-item short form (Mowday, Steers, & Porter, 1979), (c) Hackman and Lawler's (1971) three-item internal work motivation scale, (d) Lodahl and Kejner's (1965) four-item job involvement scale (Ashford & Cummings, 1985), (e) a three-item intent to quit scale (Blau, 1988; Mobley, 1977), (f) and Hall and colleague's six item psychological success scale (Hall & Foster, 1977; Hall, Goodale, Rabinowitz, & Morgan, 1978). All demonstrated high reliabilities in previous research.

However, factor analyses of these scales revealed a slightly different factor structure. Specifically, the organizational attachment construct emerged as a combination of the intent to quit and job satisfaction scales. Organizational attachment is conceptually similar to continuance commitment and represents an intent to continue with the organization. Organizational commitment, in contrast, is similar to an affective commitment construct. Thus, five job attitudes were utilized: organization commitment (7 items, $\alpha = .89$), internal work motivation (2 items, $\alpha = .83$), job involvement (4 items, $\alpha = .77$), psychological success (5 items, $\alpha = .79$) and organization attachment (7 items, $\alpha = .93$).

Demographic data. Single items obtained information on company size (number of employees), newcomer age, sex, race, undergraduate major, undergraduate GPA, and employment experience.

Measures: Time 2

The follow-up survey asked about career outcomes and job attitudes. Three groups of items included: (a) demographic data on current employment, (b) turnover data,

and (c) the job attitude scales used at Time 1. Turnover was assessed by asking respondents at Time 1 and Time 2 how many organizations they had worked for since graduating from college. A nonzero difference between the two measures was coded as turnover.

Analyses

Regression analysis was used to evaluate Hypotheses 1 and 2. Hypothesis 1, which examined prediction of turnover at some point after Time 1 measures were taken, was examined using hierarchical logistic regression equations with independent variables entered in groups based on the order shown in Figure 2 (James & Brett, 1984). Logistic regression was used because the dependent variable (turnover) was a dichotomous variable. Structural equation modeling provides a more powerful test in the presence of strong, comprehensive theory. However, no comprehensive theory of latent nomological relations currently exists (Saks & Ashforth, 1997). The organizational entry model in Figure 1 only captures a chronology of entry phenomena built upon studies examining variable subsets. The current exploratory analyses constitute a step toward such a theory by simultaneously examining relations between newcomer entry perceptions, work attitudes, and turnover in a longitudinal design.

Time 2 job attitudes were examined with hierarchical multiple linear regression for participants still working in their original organizations. Hypothesis 2 asks if organizational entry constructs made any unique contribution in explaining Time 2 attitudes beyond attitude levels at Time 1. Following Adkins (1995), Time 1 attitude measures were forced to enter the regression equation first followed by measures of organizational entry scales. Variance was not partitioned among the organizational entry constructs because of the 3-year time gap between those measures.

RESULTS

Descriptive Statistics

Respondents at Time 1 were employed an average of 10.5 months at their current organization. Most newcomers were in firms with over 1,000 employees (57.7%) were male (57.1%) and White (94.4%), with GPAs between 2.0 and 3.0 (59.3%). Business (36.8%) and engineering majors (25.7%) were dominant. Respondents did not differ significantly on demographic information between Times 1 and 2, though average months employed at the current organization increased to 34.3 and number of organizations worked for changed from 1.37 to 2.07. (See Holton, 1995 for more complete descriptive statistics at Time 1.)

Bivariate correlations for all scales suggested common method variance did not yield ubiquitous low to moderate level correlations among all scales. For example,

transition satisfaction ranged in correlation from -.30 with adaptation difficulty to .60 with organization attachment. Other examples of wide-ranging bivariate correlations (e.g., adaptation difficulty correlated .38 with anxiety and -.27 with job involvement) suggested respondents' responses were not likely to have been affected by method of measurement.

Significant correlations with turnover ($r = .14-.30$) were found for 15 of 40 measures. The strongest correlations were found for met expectations, coping responses and Time 1 job attitudes. Bivariate correlation between Time 1 entry measures and Time 2 attitudes indicated moderate correlations for three attitudes: commitment (28 significant, $r = .14-.29$), psychological success (28 significant, $r = .13-.30$), and organizational attachment (25 significant, $r = .13-.36$). Only two correlations were significant for Time 2 job involvement and 13 for internal work motivation, suggesting weak relationships. (Complete correlation tables are available from the authors.)

Hypothesis Tests

Hypothesis 1: Turnover prediction. To test Hypothesis 1, organizational entry input variables (individual readiness, individual tactics, organizational tactics) entered the logistic hierarchical regression first. In Step 2, newcomer perceptions and cognitions of entry (perceptions of entry process, job characteristics, and organizational learning) were entered followed by met expectations and coping response scales in Step 3. Job attitudes were entered as Step 4 and organizational attachment scales as Step 5. Turnover was used as the dependent measure.

The group of organizational entry measures correctly classified predicted turnover ($R^2 = .275$, adj. $R^2 = .171$) in 73.3% of the respondents. Nagelkerke's R^2 , a measure conceptually similar to R^2 in linear regression, was .399 for the full model, indicating that 39.9% of the difference in predicting turnover was attributable to the independent measures.

In addition, four of the five steps exhibited significant increments in predictive power. Only Step 4, adding job attitudes, failed to add significantly to predictive power.

Six predictors significantly entered the full model, explaining 27.5% of the turnover variance. Anticipation, anticipation and organization receptivity, and adaptation difficulty were positively related to turnover, whereas meet with person in the position, feedback seeking, and organization attachment were negatively related. Anticipation was not a significant predictor when entered in Step 1, but was significant in all subsequent steps. In addition, feedback seeking, organization receptivity, and adaptation difficulty made stable contributions, entering in the second step and remaining significant in all subsequent steps. Interestingly, only one

expectation variable (organization expectations) was a significant predictor when entered at Step 3 but was not significant in the final equation. Three of the organizational tactics (formal training, providing a mentor, and providing opportunities to use skills and abilities) were significant predictors at Step 1 and meeting with the person in the position became significant at Step 5 (see Table 1).

Hypothesis 2: Attitude prediction. The corresponding attitude at Time 1 was entered first followed by all of the organizational entry measures to test Hypothesis 2, prediction of Time 2 job attitudes. All five regression equations were significant and the predictors explained a large portion of the variance in Time 2 attitudes (see Tables 2 through 4). However, the change in R^2 resulting from the addition of the organizational entry measures to the regression equation was only significant for organizational commitment, $R^2 = .458$, $F(28, 91) = 2.745$, and organizational attachment, $R^2 = .489$, $F(28, 91) = 3.109$. For organizational commitment, significant scales included Time 1 institutional preparation, feedback seeking, and organization receptivity, though Time 1 commitment did not predict Time 2 commitment. For organizational attachment, significant scales included Time 1 organizational attachment, institutional preparation, informal individual training, program provided to introduce important people, and feedback seeking. Significant variance was also explained in Time 2 internal work motivation ($R^2 = .302$), job involvement ($R^2 = .367$), and psychological success ($R^2 = .378$). Again, increases in R^2 were substantial (.17, .15, and .12, respectively) though not statistically significant.

DISCUSSION

The current exploratory results make two primary contributions to understanding newcomer organizational entry. First, new items developed to tap newcomer perceptions of entry processes were developed. Interitem correlations yielded interpretable factor loadings characterized by a simple structure and internally consistent scale scores. Combined evidence in the form of factor loadings, content, and criterion-related validity justifies future efforts to refine and expand the scales.

Second, these analyses were the first to examine measures of turnover and the preemployment, organizational entry and work attitude construct domains in one setting. Regression results reported in Tables 1 and 2 and the longitudinal design show that six scales capturing newcomer preemployment anticipation, organization receptivity, and adaptation difficulty, meet with person in the position, feedback seeking, and organization attachment demonstrated criterion-related validity with subsequent turnover. The regression model correctly predicted turnover in 73% of the respondents.

TABLE 1
Hierarchical Logistic Regression Results of Turnover on T1 Socialization Measures

	Step 1		Step 2		Step 3		Step 4		Step 5				
	Wald	R	Wald	R	Wald	R	Wald	R	Wald	R			
Nagelkerke R ²		.158		.261		.332		.361		.399			
χ ² overall model		30.66*		53.05**		69.67**		76.63**		86.29**			
χ ² step				22.34		16.67**		6.96		9.66**			
<i>Independent Variables Entered in Step</i>													
Anticipation	0.46		5.80	.111	2.572	6.96**	.132	3.045	7.05**	3.126	9.01**	.164	3.80
Individual preparation	0.07		0.01			0.01			0.64		0.47		
Anxiety	2.03		0.01			0.01			0.01		0.08		
Institutional preparation	0.04		2.13			1.34			1.67		1.69		
Formal training, individual	4.41*	.085	2.89			1.91			2.15		2.99		
Informal training, individual	0.06		0.03			0.01			0.01		0.39		
Meet with person in position	2.11		3.02			3.34			3.73		4.18*	-.091	0.817
Mentor provided	4.33*	-.083	2.84			2.45			1.41		2.76		
Program to introduce people	0.04		0.01			0.57			0.17		0.25		
Program to learn original facts	0.43		0.05			0.05			0.05		0.51		
Show ability to senior management	3.65		3.78			3.24			3.70		2.04		
Fully utilize skills and abilities	7.69**	-.130	4.30*	-.087	0.757	3.11			2.99		2.21		
Learn on the job	1.27		1.17			1.01			0.34		0.22		
Individual org. entry plan	1.68		1.43			0.75			0.65		0.25		
Feedback seeking	2.74		5.50*	-.107	0.6349	4.99*	-.103	0.638	6.77**	-.134	0.578	6.50*	0.578
Relationship building	4.27*	.082	4.49*	.090	1.686	2.83			3.98*	.086	1.727	2.41	

(Continued)

TABLE 1
(Continued)

Independent Variables Entered in Step	Step 1			Step 2			Step 3			Step 4			Step 5		
	Wald	R	Exp (B)	Wald	R	Exp (B)	Wald	R	Exp (B)	Wald	R	Exp (B)	Wald	R	Exp (B)
Organization receptivity				5.57*	.108	2.069	7.92**	.144	2.629	7.87**	.148	2.719	6.26*	.128	2.542
Adaptation difficulty				10.91**	.171	2.523	7.14**	.135	2.215	8.92**	.161	2.597	6.46*	.131	2.298
Challenge				6.31*	-.119	0.515	3.74			2.87			0.49		
Clarity				0.41			2.09			1.59			1.34		
Control				0.25			0.08			0.03			0.14		
Organization savvy				0.21			0.24			0.10			0.17		
Culture understanding				1.50			0.01			0.15			0.17		
Job expectations							0.44			0.60			0.77		
Stress expectations							2.26			2.48			2.03		
Organization expectations							4.27*	-.089	0.489	4.12*	-.089	0.489	1.14		
Support seeking							3.37			2.40			1.11		
Organizational commit										0.06			0.01		
Internal work motivation										0.07			0.32		
Job involvement										5.92*	-.121	0.542	3.13		
Psychological success										0.01			0.39		
Organization attachment													8.90**	-.163	0.351

Note. Nagelkerke's R^2 is a measure conceptually similar to R^2 in linear regression. The analysis of predictors in logistic regression is similar to linear regression except that betas are replaced by the Wald statistic. However, the sign of the Wald statistic is not interpretable nor can it be used to determine the magnitude of the predictors' impact on the dependent variable. The direction and magnitude of an independent variable's impact on the dependent is determined from the partial correlation between each predictor and the dependent variable, denoted by R in Table 3. A third statistic, labeled Exp (B) indicates the degree to which the odds of turnover occurring change as a result of a one unit change in the predictor.

* $p \leq .05$. ** $p \leq .01$.

TABLE 2
Hierarchical Regression Results for Time 2 Attitudes of Stayers

<i>Independent Variables</i>	<i>Organizational Commitment (T2)</i>					<i>Internal Work Motivation (T2)</i>				
	β	R^2	F	ΔR^2	F^a	β	R^2	F	ΔR^2	F^a
Step 1										
Time 1 attitude	.18	.1886	27.43**	—	—	.41**	.1331	18.119**	—	—
Step 2										
Anticipation	.04					.13				
Individual preparation	.10*					-.04				
Anxiety	.01					-.10				
Institutional preparation	.19					.08				
Formal training, individual	-.08					-.10				
Informal training, individual	.02					.20*				
Meet with person in position	-.05					-.25				
Mentor provided	.07					.02				
Program to introduce people	-.13					.05				
Program to learn organization facts	.15					.14				
Show ability to senior management	.05					-.11				
Fully utilize skills and abilities	.16					-.05				

(Continued)

TABLE 2
(Continued)

<i>Independent Variables</i>	<i>Organizational Commitment (T2)</i>					<i>Internal Work Motivation (T2)</i>				
	β	R^2	F	ΔR^2	$F^{(a)}$	β	R^2	F	ΔR^2	$F^{(a)}$
Learn on the job	-.08**					-.11				
Individual organization entry plan	-.14					.28*				
Feedback seeking	.30					-.11				
Relationship building	-.07**					.10				
Organization receptivity	.12*					.18				
Adaptation difficulty	.23					-.19				
Challenge	.08					.13				
Clarity	.22					.03				
Control	-.15					-.11				
Organization savvy	-.15					.08				
Culture understanding	.21					-.07				
Job expectations	-.11					-.01				
Stress expectations	-.14					-.08				
Organization expectations	-.22					-.13				
Support seeking	-.06					.03				
Full model		.4579	2.745**	.2693	1.656*		.3020	1.406*	.1689	.8066
Adjusted R ²		.291	(28,91)		(27,91)		.0873	(28,91)		(27,91)

* $p \leq .05$. ** $p \leq .01$.

TABLE 3
Hierarchical Regression Results for Time 2 Attitudes of Stayers: Part 2

<i>Independent Variables</i>	<i>Job Involvement (T2)</i>					<i>Psychological Success (T2)</i>				
	β	R^2	F	ΔR^2	F^a	β	R^2	F	ΔR^2	F^a
Step 1										
Time 1 attitude	.57**	.2192	33.12**	—	—	.34*	.2630	42.113**		
Step 2										
Anticipation	.01					-.03				
Individual preparation	.04					.10				
Anxiety	-.05					-.05				
Institutional preparation	.02					.02				
Formal training, individual	-.12					-.08				
Informal training, individual	-.06					.10				
Meet with person in position	-.10					-.01				
Mentor provided	-.02					.02				
Program to introduce people	.12					-.11				
Program to learn organization facts	.14					.18				
Show ability to senior management	.01					-.06				
Fully utilize skills and abilities	.02					.09				

(Continued)

TABLE 3
(Continued)

<i>Independent Variables</i>	<i>Job Involvement (T2)</i>					<i>Psychological Success (T2)</i>				
	β	R^2	F	ΔR^2	F^a	β	R^2	F	ΔR^2	F^a
Learn on the job	-.04					-.05				
Individual organization entry plan	.03*					-.01*				
Feedback seeking	.24					.26				
Relationship building	-.22					-.11				
Organization receptivity	.04					.12				
Adaptation difficulty	-.09					.10				
Challenge	-.03					.10				
Clarity	.16					.10				
Control	.14					-.01				
Organization savvy	-.10					-.08				
Culture understanding	-.12					.15				
Job expectations	-.22					-.05				
Stress expectations	.14					.09				
Organization expectations	.01					-.12				
Support seeking	.06					.03				
Full model		.3669	1.884*	.1477	.778		.3782	1.977*	.1152	.618
Adjusted R ²		.1722	(28,91)		(27,91)		.1869	(28,91)		

TABLE 4
 Hierarchical Regression Results for Time 2 Attitudes of Stayers: Part 3

<i>Independent Variables</i>	<i>Organizational Attachment (T2)</i>				
	β	R^2	F	ΔR^2	F^a
Step 1					
Time 1 attitude	.39**	.1915	28.67**	—	—
Step 2					
Anticipation	.01				
Individual preparation	.05				
Anxiety	-.01				
Institutional preparation	.19				
Formal training, individual	-.22*				
Informal training, individual	.19				
Meet with person in position	-.03				
Mentor provided	.09**				
Program to introduce people	-.29				
Program to learn organization facts	.19				
Show ability to senior management	.12				
Fully utilize skills and abilities	.05				
Learn on the job	-.06				
Individual organization entry plan	-.10*				
Feedback seeking	.31				
Relationship building	-.13				
Organization receptivity	.07				
Adaptation difficulty	.11				
Challenge	-.05				
Clarity	.11				
Control	.19				
Organization savvy	-.12				
Culture understanding	.14				
Job expectations	-.03				
Stress expectations	.15				
Organization expectations	-.18				
Support seeking	-.04				
Full model		.4889	3.109**	.2974	1.939*
Adjusted R^2		.3316	(28,91)		(27,91)

* $p \leq .05$. ** $p \leq .01$.

Noteworthy findings from regression analyses examining predictors of Time 2 attitudes showed that (a) feedback seeking during the first 10 months on the job was the only predictor that was significant for all Time 2 attitudes; (b) institutional preparation, initial feedback seeking behavior, adaptation difficulty, and job challenge influenced Time 2 organizational commitment; (c) Time 1 organization attachment, institutional preparation, individual informal training, program to

introduce the newcomer to other people, and initial feedback seeking behavior predicted organization attachment; (d) Time 2 attitudes were predicted by the corresponding Time 1 attitude for all expect organizational commitment.

To be sure, these results only *suggest* such causal influences. Definitive causal evidence will only exist when theory identifies all relevant antecedent variables, some subset of the variables are manipulated at Time 1, all other variables are controlled for (experimentally or statistically), and predicted changes in relevant dependent variables occur. However, a needed intermediate step in programmatic efforts to develop models of newcomer organizational entry would involve large sample longitudinal survey research permitting use of structural equation modeling procedures. Simultaneous evaluation of measurement models and hypothesized relations among constructs in the preemployment, organizational entry, and outcome domains is critical before initiating quasiexperimental manipulations of antecedents in field settings.

These results, though exploratory, suggest that a model of newcomer organizational entry must include construct domains capturing (a) preemployment activities affecting anticipation, (b) newcomer feedback seeking behaviors, (c) meeting with the person in the position, (d) newcomer perceptions of organization receptivity to newcomers, (e) newcomers' affective responses to the entry experience (adjustment difficulty), and (f) newcomer attitudes. Our initial model of newcomer organizational entry (Figure 2) ordered construct domains drawn from prior literature in a temporal process sequence similar to other related studies, e.g., preemployment anticipation logically must occur before employment, organizational and newcomer tactics must occur before an employee can react (affectively or cognitively) to those tactics, and newcomer reactions at Time 1 by definition must occur before newcomer reactions and turnover at Time 2.

Hierarchical regression results shed some light on the viability of this sequence. Logistic regression procedures applied to this implicit sequence of mediated causal relations suggest regression coefficients of causally "early" variables will significantly predict entry outcomes. When causally "later" variables are added to the regression model, coefficients for the causally early variables should become nonsignificant (James & Brett, 1984). Consistent with this mediational sequence, Table 1 results suggest two organizational tactics (providing a mentor and fully utilizing skills and abilities) significantly contributed to turnover prediction in Steps 1 and 2 but contributed nonsignificantly when process perceptions and cognitions were entered (Step 2). Similar results occurred when the coefficient for perceptions of early job challenge, fully utilize skills and abilities, and relationship building entered significantly at Step 3 then became nonsignificant in Step 4 when the degree to which organization expectations had been met was entered. Met organizational expectations also became nonsignificant in Step 5 when organizational attachment was entered. This sequence is logical in that early experiences lead to perceptions and cognitions,

which then influence an individual's assessment of the extent to which their expectations are met, which in turn influences job attitudes.

Two input measures (preemployment anticipation and feedback seeking) and two process measures (organization receptivity and adaptation difficulty) were significant predictors in Steps 2, 3, 4, and 5 (the full model). The apparent presence of direct relationships instead of mediational processes is consistent with the large literature examining one preemployment anticipation "intervention," that is, realistic job previews (Premack & Wanous, 1985). In addition, results are consistent with recent research on proactive feedback seeking as a critical newcomer skill (Morrison, 1993) and the relevance of individual transition difficulty to newcomer organizational entry (Schlossberg, 1981). The results appear to contradict Ashford and Black's (1996) findings regarding feedback seeking, confirming its importance even when evaluated in the presence of other tactics in the regression equation.

Two significant predictors in the final model were in the opposite direction from what was originally expected. Turnover was negatively related to meeting with the person previously in the position. This suggests that having access to job incumbents may have negatively influenced newcomers, perhaps by transmitting cynical cues about the organization.

Organization receptivity was positively related to turnover, indicating that new employees who found their initial employers more receptive to them had higher rates of turnover. This finding is very puzzling. This scale assessed the extent to which the organization greeted the newcomer in an enthusiastic, flexible, and helpful way. Logically, this should help decrease turnover, but it did not. One reviewer suggested this may be due to individuals being initially enthusiastic only to become disappointed later when their unrealistic expectations are not met. It is certainly possible that organizations that are initially overly enthusiastic and receptive initially may well create a "honeymoon effect" whereby unrealistic expectations are created that can not be sustained by the rest of the organization. This finding clearly needs further research.

The results are also revealing with regard to which variables do not significantly contribute to turnover prediction. For example, with the notable exception of providing a mentor, meeting with the person in the position, and designing newcomer jobs that fully use skills and abilities, all other organizational tactics consistently failed to predict turnover. Fully using newcomers' skills and abilities and providing mentors were also the only organizational tactics with significant simple turnover correlations.

The single-item nature of these measures of organizational tactics precludes recommending that firms discontinue all development efforts beyond these few significant predictors. Furthermore, anecdotal comments from the pilot interviews suggested organizational interventions may be largely orientation or job-task related and fail to address broader organizational entry issues. This suggests a clear

need to reexamine new employee development interventions (Feldman, 1989; Holton, 1996). Future survey research using both perceived and objective measures of organizational tactics is needed to replicate these results. If confirmed, quasiexperimental field experiments in which selected organizational tactics are discontinued in randomly selected work units will provide compelling evidence of whether firms should allocate resources to fewer or different tactics.

There have also been a variety of suggestions in the literature that individual differences may play a role in predicting turnover, though there is little clarity on the exact mechanisms by which it occurs. Rossei and Noel (1996) note that turnover models have generally ignored the role of individual differences and suggested a variety of mechanisms by which individual differences might indirectly influence turnover. For example, negative affectivity may impact turnover (George, 1996; Judge & Watanabe, 1993; Necowitz & Roznowski, 1994), possibly through its relation with job satisfaction. Bauer et al. (1998) speculated that individuals high in positive affectivity might have more opportunities for mentoring and informal learning because they are more pleasant to be around. Conscientiousness has also been found to be the strongest predictor of turnover among the "Big-Five" personality traits, although a somewhat weak predictor ($r = .12$) (Barrick & Mount, 1991).

The investigation of individual differences' influence on organizational entry may be a promising area for future research (Bauer et al., 1998). For example, Ashford and Cummings (1985) showed that feedback seeking behavior (a significant predictor of turnover in this study) was related to an individual's tolerance for ambiguity and those who are highly involved in their jobs. Gist, Stevens, and Bavetta (1991) found that an individual's self-efficacy was related to their application of learned skills and Major and Koslowski (1997) found that self-efficacy was related to information seeking. Although individual differences were not directly measured in this study, they may offer one explanation for some of the underlying causes of new employee turnover predicted by this model.

Results from predictions of work attitudes at Time 2 for newcomers still employed by their original organization (Tables 2 through 4) are less compelling, perhaps due to higher levels of measurement error in these dependent variables relative to the turnover measure (Table 1). Nonsignificant prediction of Time 2 organizational commitment by Time 1 organizational commitment may be due to instability during attitude formation as newcomers transition into "incumbent" status (gamma change). Extending this explanation to all results from Tables 2 through 4, the approximately 3½-year lag between Time 1 predictors and Time 2 attitude measures may have permitted the influence of many other variables on Time 2 work attitudes.

Regardless, newcomer feedback seeking behavior was statistically significant in predicting all Time 2 job attitudes. Particularly noteworthy is the fact that 45.8% of the variance in time 2 organization commitment and 48.9% of the variance in

Time 2 organization attachment were predicted by Time 1 attitudes and perceptions of organization entry constructs. This reinforces the notion that entry experiences can have long-term impact.

In sum, newcomer perceptions of the organizational entry process were measured and their relations with work attitudes and turnover examined in a longitudinal design. Results suggested aspects of preemployment activities affecting anticipation, newcomer feedback seeking behaviors, meeting with the person in the position, newcomer perceptions of organization receptivity to newcomers, newcomers' affective responses to the entry experience (adjustment difficulty), and organizational attachment predict voluntary turnover. Preliminary evidence suggested additional mediated causal paths exist linking other aspects of newcomer organizational entry perceptions, work attitudes, and turnover. Future research needs to extend and refine measurement efforts in these domains, employing more powerful statistical procedures and study designs. Extension of the criterion domain beyond proximal affective, attitudinal, and behavioral outcomes is also needed.

REFERENCES

- Adkins, C. L. (1995). Previous work experience and organizational socialization: A longitudinal examination. *Academy of Management Journal*, *38*, 839–862.
- Adler, S., & Aranya, N. (1984). A comparison of the work needs, attitudes, and preferences of professional accountants at different career stages. *Journal of Vocational Behavior*, *25*, 45–57.
- Allen, N., & Meyer, J. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomer's commitment and role orientation. *Academy of Management Journal*, *33*, 847–85.
- Arnold, J. (1985). Tales of the unexpected: Surprises experienced by graduates in the early months of employment. *British Journal of Guidance and Counseling*, *13*, 308–319.
- Ashford, S. J. (1988). Individual strategies for coping with stress during organizational transitions. *Journal of Applied Behavioral Science*, *24*, 19–36.
- Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology*, *183*, 199–214.
- Ashford, S. J., & Cummings, L. L. (1985). Proactive feedback seeking: The instrumental use of the information environment. *Journal of Occupational Psychology*, *58*, 67–79.
- Ashford, S. J., & Taylor, M. S. (1990). Understanding individual adaptation: An integrative approach. In B. Rowland & G. Ferris (Eds.), *Research in personnel and human resources management* (pp. 1–39). Greenwich, CT: JAI.
- Ashforth, B. E., & Saks, A. M. (1996). Socialization tactics: Longitudinal effects on newcomer adjustment. *Academy of Management Journal*, *39*, 149–178.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*, 1–26.
- Bauer, T. N., & Green, S. G. (1994). The effect of newcomer involvement in work-related activities: A longitudinal study of socialization. *Journal of Applied Psychology*, *79*, 211–223.
- Bauer, T. N., Morrision, E. W., & Callister, R. R. (1998). Organizational socialization: A review and directions for future research. In G. Ferris (Ed.), *Research in personnel and human resource management*, Vol. 16 (pp. 149–214). Greenwich, CT: JAI.

- Blau, G. J. (1988). Further exploring the meaning and measurement of career commitment. *Journal of Vocational Behavior*, *32*, 284–297.
- Brief, A. P., Aldag, R. J., Van Sell, M., & Melone, N. (1979). Relationship of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Health and Social Behavior*, *20*, 161–166.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, *19*, 533–546.
- Buckley, M. R., Fedor, D. B., Veres, J. G., Wiese, D. S., & Carrajer, S. M. (1998). Investigating newcomer expectations and job-related outcomes. *Journal of Applied Psychology*, *83*, 452–456.
- Chao, G. T., O'Leary-Kelly, A., Wolf, S., Klein, H. J., & Gardner, P. D. (1994). Organizational socialization: Its content and consequences. *Journal of Applied Psychology*, *79*, 450–463.
- Cranney, C. J., & Doherty, M. E. (1988). Importance ratings in job analysis: Note on the misinterpretation of factor analyses. *Journal of Applied Psychology*, *73*, 320–322.
- Dean, R. A. (1981). *Reality shock, organizational commitment, and behavior: A realistic job preview experiment*. Ann Arbor, MI: University Microfilms International.
- Feldman, D. C. (1976). A contingency theory of socialization. *Administrative Science Quarterly*, *21*, 433–452.
- Feldman, D. C. (1977). The role of initiation activities in socialization. *Human Relations*, *30*, 977–990.
- Feldman, D. C. (1980, March–April). A socialization process that helps new recruits succeed. *Personnel*, *11*–23.
- Feldman, D. C. (1989). Socialization, resocialization, and training: Reframing the research agenda. In I. L. Goldstein (Ed.), *Training and development in organizations* (pp. 376–416). San Francisco: Jossey-Bass.
- Feldman, D. C., & Brett, J. M. (1983). Coping with new jobs: A comparative study of new hires and job changers. *Academy of Management Journal*, *26*, 258–272.
- Fisher, C. D. (1982). *Identifying the outcomes of socialization: Two studies* (Report No. TR–ONR–8). Arlington, VA: Office of Naval Research.
- Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management*, *11*, 39–53.
- Frese, M. (1984). Transitions in jobs, occupational socialization and strain. In V. L. Allen & E. van de Vliert (Eds.), *Role transitions: Explorations and explanations* (pp. 239–252). New York: Plenum.
- Gardner, P. D., & Lambert, S. E. (1993). It's a hard, hard, hard, hard, hard, hard world. *Journal of Career Planning and Employment*, *53*, 41–49.
- George, J. M. (1996). Trait and state affect. In K. Murphy (Ed.), *Individual differences and behavior in organizations*. San Francisco: Jossey-Bass.
- Gist, M. E., Stevens, C. K., & Bavetta, A. G. (1991). Effects of self-efficacy and posttraining intervention on the acquisition and maintenance of complex interpersonal skills. *Personnel Psychology*, *44*, 837–861.
- Golembiewski, R. T., Billingsley, K., & Yeager, S. (1976). Measuring change and persistence in human affairs: Types of change generated by OD designs. *Journal of Applied Behavioral Sciences*, *12*, 133–157.
- Hackman, J. R., & Lawler, E. E., III. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, *55*, 259–286.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, *60*, 159–170.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hall, D. T., & Foster, L. W. (1977). A psychological success cycle and goal setting: Goals, performance and attitudes. *Academy of Management Journal*, *20*, 282–290.

- Hall, D. T., Goodale, J. G., Rabinowitz, S., & Morgan, M. A. (1978). Effects of top-down departmental and job change upon perceived employee behavior and attitudes: A natural field experiment. *Journal of Applied Psychology, 63*, 62–72.
- Hall, D. T., & Lawler, E. E., III. (1970). Job characteristics and pressures and the organizational integration of professionals. *Administrative Science Quarterly, 15*, 271–281.
- Holton, E. F., III. (in press). New employee development tactics: Perceived availability, helpfulness, and relationship with job attitudes. *Journal of Business and Psychology*.
- Holton, E. F., III, & Russell, C. J. (1997). The relationship of anticipation to newcomer socialization processes and outcomes: A pilot study. *Journal of Organizational and Occupational Psychology, 70*(2), 163–172.
- Holton, E. F., III. (1996). New employee development: A review and reconceptualization. *Human Resource Development Quarterly, 7*, 233–252.
- Holton, E. F., III. (1995). College graduates' experiences and attitudes during organizational entry. *Human Resource Development Quarterly, 6*, 59–78.
- House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance, 7*, 467–505.
- James, L., & Brett, J. (1984). Mediators, moderators, and tests for mediations. *Journal of Applied Psychology, 69*, 307–321.
- Jones, G. R. (1983). Psychological orientation and the process of organizational socialization: An interactionist perspective. *Academy of Management Review, 8*, 464–474.
- Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomer's adjustments to organizations. *Academy of Management Journal, 29*, 262–279.
- Judge, T. A., & Watanabe, S. (1993). Is the past prologue? A test of Ghiselli's hobo syndrome. *Journal of Management, 21*, 211–229.
- Katz, R. (1985). Organizational stress and early socialization experiences. In T. A. Beehr & R. S. Bhagat (Eds.), *Human stress and cognition in organizations* (pp. 117–139). New York: Wiley.
- Keenan, A., & Newton, T. J. (1986). Work aspirations and experiences of young graduate engineers. *Journal of Management Studies, 23*, 224–237.
- Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 280–318). San Francisco: Jossey-Bass.
- Kram, K. E. (1988). *Mentoring at work*. Lanham: University Press of America.
- Kram, K. E., & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal, 28*, 110–132.
- Leibowitz, Z. B., Schlossberg, N. K., & Shore, J. E. (1991, February). Stopping the revolving door. *Training and Development Journal, 43*–50.
- Lodahl, T. M., & Kejner, M. (1965). The definition and measurement of job involvement. *Journal of Applied Psychology, 49*, 24–33.
- Louis, M. R. (1980). Surprise and sensemaking: What newcomers experience in entering unfamiliar organizational settings. *Administrative Science Quarterly, 25*, 226–251.
- Louis, M. R. (1982, Spring). Managing career transition: A missing link in career development. *Organizational Dynamics, 68*–77.
- Louis, M. R. (1985). Career transition and adaptation: Appreciating and facilitating the transition. In R. Tannenbaum, N. Margulies, & F. Massarik (Eds.), *Human systems development* (67–94). San Francisco: Jossey-Bass.
- Louis, M. R. (1990). Acculturation in the workplace: Newcomers as lay ethnographers. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 85–129). San Francisco: Jossey-Bass.
- Louis, M. R., Posner, B. Z., & Powell, G. N. (1983). The availability and helpfulness of socialization practices. *Personnel Psychology, 36*, 857–866.
- Mabey, C. (1986). *Graduates into industry: A survey of changing graduate attitudes*. Brookfield, VT: Gower.

- Major, D. A., & Kozlowski, S. W. J. (1997). Newcomer information seeking: Individual and contextual influences. *International Journal of Selection and Assessment*, 5, 16–28.
- Major, D. A., Kozlowski, S. W. J., Chao, G. T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects. *Journal of Applied Psychology*, 80, 418–431.
- McCall, M. W., & Bobko, P. (1990). Research methods in the service of discovery. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 381–418). Palo Alto, CA: Consulting Psychologists Press.
- Meglino, B. M., & DeNisi, A. S. (1988). Realistic job previews: Some thoughts on their more effective use in managing the flow of human resources. *Human Resource Planning*, 10, 157–167.
- Meglino, B. M., Ravlin, E. C., & Adkins, C. L. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74, 424–432.
- Miller, V. D., & Jablin, F. M. (1991). Information seeking during organizational entry: Influences, tactics, and a model of the process. *Academy of Management Review*, 16, 92–120.
- Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology*, 62, 237–240.
- Morrison, E. W. (1993). Newcomer information seeking: Exploring types, modes, resources, and outcomes. *Academy of Management Journal*, 36, 557–589.
- Morrison, R. F., & Bratner, T. M. (1992). What enhances or inhibits learning a new job? A basic career issue. *Journal of Applied Psychology*, 77, 926–940.
- Morrow, P. C., & McElroy, J. C. (1987). Work commitment and job satisfaction over three career stages. *Journal of Vocational Behavior*, 30, 330–346.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224–247.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee–organization linkages: The psychology of commitment, absenteeism, and turnover*. San Diego: Academic.
- Necowitz, L. B., & Roznowski, M. (1994). Negative affectivity and job satisfaction: Cognitive processes underlying the relationship and effects on employee behaviors. *Journal of Vocational Behavior*, 45, 270–294.
- Nelson, D. L. (1987). Organizational socialization: A stress perspective. *Journal of Occupational Behavior*, 8, 311–324.
- Nelson, D. L., & Quick, F. C. (1991). Social support and newcomer adjustment in organizations: Attachment theory at work? *Journal of Organizational Behavior*, 12, 543–554.
- Nicholson, N., & Arnold, J. (1989). Graduates' early experience in a multinational corporation. *Personnel Review*, 18, 3–14.
- Nicholson, N., & Arnold, J. (1991). From expectation to experience: Graduates entering a large corporation. *Journal of Organizational Behavior*, 12, 413–429.
- Ostroff, C., & Kozlowski, S. W. J. (1992). Organizational socialization as a learning process: The role of information acquisition. *Personnel Psychology*, 45, 849–874.
- Ostroff, C., & Kozlowski, S. W. J. (1993). The role of mentoring in the information gathering processes of newcomers during organizational entry. *Journal of Vocational Behavior*, 42, 170–183.
- Pierce, J. L., & Dunham, R. B. (1987). Organizational commitment: Pre-employment propensity and initial work experiences. *Journal of Management*, 13, 163–178.
- Premack, P. L., & Wanous, J. P. (1985). A meta-analysis of realistic job preview experiments. *Journal of Applied Psychology*, 70, 706–719.
- Rabinowitz, S., & Hall, D. T. (1981). Changing correlates of job involvement in three career stages. *Journal of Vocational Behavior*, 18, 138–144.
- Reichers, A. E. (1987). An interactionist perspective on newcomer socialization rates. *Academy of Management Review*, 12, 278–287.

- Richards, E. W. (1984a). Undergraduate preparation and early career outcomes: A study of recent career graduates. *Journal of Vocational Behavior*, 24, 279–304.
- Richards, E. W. (1984b). Early employment situations and work role satisfaction among recent college graduates. *Journal of Vocational Behavior*, 24, 305–318.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150–163.
- Rosse, G., & Noel, T. (1996). Leaving the organization. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 451–504). San Francisco: Jossey-Bass.
- Saks, A. M., & Ashforth, B. E. (1997). Organizational socialization: Making sense of the past and present as a prologue for the future. *Journal of Vocational Behavior*, 51, 234–279.
- Schein, E. H. (1968, Winter). Organizational socialization and the profession of management. *Industrial Management Review*, 1–16.
- Schein, E. H. (1978). *Career dynamics: Matching individual and organizational needs*. Reading, MA: Addison-Wesley.
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9, 2–18.
- Sheridan, J. E. (1992). Organizational culture and employee retention. *Academy of Management Journal*, 5, 1036–1056.
- Stumpf, S. A., & Hartman, K. (1984). Individual exploration to organization commitment or withdrawal. *Academy of Management Journal*, 27, 308–329.
- Terborg, J. R., Howard, G. S., & Maxwell, S. E. (1980). Evaluating planned organizational change: A method for assessing alpha beta and gamma change. *Academy of Management Review*, 5, 109–121.
- Van Maanen, J. (1976). Breaking in: Socialization to work. In R. Dubin (Ed.), *Handbook of work, organization, and society* (pp. 67–130). Chicago: Rand McNally.
- Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. Staw (Ed.), *Research in organizational behavior* (pp. 209–264). Greenwich, CT: JAI.
- Von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. New York: Braziller.
- Wanous, J. P. (1980). *Organizational entry: Recruitment, selection and socialization of newcomers*. Reading, MA: Addison-Wesley.
- Wanous, J. P., & Colella, A. (1989). Organizational entry research: Current status and future directions. In B. Rowland & G. Ferris (Eds.), *Research in personnel and human resources management* (pp. 59–120). Greenwich, CT: JAI.
- Zahrly, J., & Tosi, H. (1989). The differential effect of organizational induction process on early work role adjustment. *Journal of Organizational Behavior*, 10, 59–74.