

**WAREHOUSE OPERATIONS EMPLOYEES: LINKING PERSON-  
ORGANIZATION FIT, JOB SATISFACTION, AND COPING RESPONSES**

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One of the biggest challenges facing companies today and for the foreseeable future is attracting and retaining quality logistics workers (Copacino 1999; Daugherty et al. 2000; Metz and Richardson 2000; Mississippi State University 1999). The shortage of logistics personnel is not a new phenomenon (Richardson 1989). For example, driver retention in the motor carrier industry has long been considered a critical issue. Annual driver turnover rates average 100%, but some companies are as high as 200 to 300% (Keller and Ozment 1999a). Retention rates aren't much more encouraging in the warehousing industry. Annual estimates indicate that at least 20% and in some cases as much as 75% of all warehouse workers will leave their job within one year of hire date, and the cost of replacing each employee is estimated to be in the thousands of dollars (Gooley 2001; Mullins, 2002; Wilson 2001). Traditional recruiting strategies may be too passive. Logistics management must begin to be more innovative with respect to human resource development (Hale 1999).

Development of a more effective selection process that yields better compatibility between individual employees and hiring organizations is needed. Such compatibility is referred to as *person-organization fit* (P-O fit). P-O fit occurs when an organization satisfies individuals' needs, desires, or preferences (Kristof 1996). In other words, when there's a good match between the characteristics/requirements of the job and the expectations of the potential employee, there's a good fit. Lack of compatibility or poor P-O fit directly impacts employee retention. A recent survey by The Herman Group, management consultants and business futurists, identified principal reasons why employees leave a company (Gooley 2001). The primary reasons cited were employee discomfort with or misunderstanding of the corporate culture and the general lack of a sense of belonging.

The current research was undertaken to gain greater insight into the topic of person-organization fit. The researchers were particularly interested in examining the relationship between P-O fit and job satisfaction, as well as how employees deal with work situations, i.e., coping responses. Warehouse operations employees were selected for investigation. Greater understanding of the

relationship between P-O fit and job satisfaction has important managerial implications because of the current and anticipated continued shortage of warehouse operations employees. While recent poor economic conditions may have temporarily alleviated the shortage, it is likely to be a recurring problem in the future.

The following narrative provides an overview of relevant literature relating to the research constructs, details research hypotheses and the methodology, and discusses results of the research as well as its managerial implications.

## BACKGROUND

Three constructs are of primary interest to the research project: person-organization fit, job satisfaction, and coping behaviors.

### Person-Organization Fit

As mentioned previously, P-O fit refers to a match in needs, desires, or preferences (Kristof 1996). The needs, desires, or preferences can be studied from the viewpoint of either the employee or employer (organization). Stated another way, person-organization fit can be examined from two different perspectives – either needs-supplies or demands-abilities (Caplan 1987; Kristof 1996). From the needs-supplies perspective, P-O fit occurs when an organization satisfies individual's needs, desires, or preferences. The emphasis is on whether the individual is going to be happy/content in the work environment. Alternatively, the demands-abilities perspective suggests that P-O fit occurs when an individual has the abilities required to meet organizational demands. The emphasis is on the degree to which an organization is happy/content with the hire. The current research focuses on the needs-supplies perspective by investigating warehouse operations personnel and their perceptions of P-O fit. The researchers looked at the employees' perspectives (needs-supplies) – what they want in the work environment. The results have the potential for making strong managerial contributions relating to successful hiring/retention. Time and resource constraints prevented a dyadic examination including employers' perspectives (demands-abilities). However, the researchers acknowledge considerable insight could be added by looking at both sides of the dyad.

Individuals make job choice decisions based on person-organization fit. Job seekers are generally believed to prefer organizations that have the same "personality" as they do (Cable and Judge 1994). This means that potential employees are going to be more attracted to companies if the individuals believe their own personal characteristics are aligned with organizational attributes (Cable and Judge 1994; Chatman 1989; Judge and Bretz 1992). They want to feel that they will fit in and become part of the group. However, it should be acknowledged that the assumption regarding the importance of P-O fit may be more relevant to professionals versus **operating-level or manual laborers**. Warehouse employees may place more emphasis on immediate rewards, i.e., the highest paying job, rather than considering how well they will fit in a particular organizational culture.

Schneider's (1987) Attraction-Selection-Attrition (ASA) model suggests that job seekers base their P-O fit perceptions on organizations' values and that they make job choice decisions based on their perceptions. Values are enduring beliefs that a specific type of conduct is preferable to its opposite (Chatman 1989). Values guide individuals' attitudes, judgments, and behaviors. Congruence in values between job seekers and organizations should indirectly influence organizational attractiveness (Judge and Bretz 1992).

In addition to values, demographic similarity is also believed to impact perceptions of person-organization fit. Individuals demographically similar (in terms of age, race, gender, socioeconomic status, etc.) to other organization members are likely to feel like they fit in better than less similar individuals (Pfeffer 1983). Demographic similarity has been found to affect turnover (Jackson et al. 1991), performance ratings (Judge and Ferris 1992), and role ambiguity (Tsui and O'Reilly 1989).

### **Job Satisfaction**

Job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (Locke 1976). In other words, job satisfaction is the way the employee feels about his/her job. A very large number of studies have been conducted related to job satisfaction, and as a result, a wide variety of conceptual and theoretical delineations are available. Job satisfaction has been variously characterized as the sum of an individual's work-related satisfaction and dissatisfaction (Herzberg's two-factor theory), as a result of fairness in employment processes and outcomes (equity theory and/or organizational justice), and as a direct response to the satisfaction of others in the organization (social influence theory) (Adams 1963; Herzberg 1966; Salancik and Pfeffer 1977). Each of these theory bases provides a unique conceptual framework for analysis of job satisfaction, and each has generated large streams of literature related to job satisfaction's origins and outcomes. However, despite the thousands of related studies, it is still impossible to specify a single unique perspective that is generalizable.

The current research is less concerned with the origin and specific definition of job satisfaction than the association that general feelings of job satisfaction have with person-organization fit, and with workplace coping behaviors that result from the presence (or absence) of job satisfaction. Thus, the current research operationalizes job satisfaction as a global variable representing pleasant and unpleasant experiences in the **work environment**. It is a generalized attitude held by employees about the job based on the worker's evaluation of all aspects as a whole (Brayfield and Rothe 1951; Ostroff 1992).

### **Coping Behaviors**

When individuals experience stress or dissatisfaction, they may resort to some type of coping mechanism or coping behavior (Pearlin and Schooler 1978). They attempt to do something to relieve the unpleasant feelings, or to remove themselves from the environment causing the problem. This is known as the "fight or flight" response (Cannon 1929).

Another common conceptualization of coping strategies proposes three categories of response: control, escape, and symptom management (Latack 1986; Moos and Billings 1982). A control response focuses on action or being proactive. An attempt is made to take charge of the stressful situation. For example, an employee taking an action-oriented approach might attempt to change a coworker or supervisor's mind and get a new work procedure adopted. Escape responses, on the other hand, represent avoidance behavior. The employee may elect to remove himself/herself from the unpleasant job environment – perhaps through requesting reassignment or even by quitting the job. Instead of dealing with the point of stress or dissatisfaction, the employee elects to leave. Symptom management involves trying to manage the symptoms related to job stress/dissatisfaction. This may include using relaxation techniques, exercise programs, or other types of organizational stress management programs.

The current research focuses on the first two types of coping behaviors – control and escape. Control behaviors are often thought of as more positive or more desirable. Successful control behaviors allow the individual to continue to function within the organization. In contrast, escape behaviors are generally considered more destructive to the organization. In such a situation, the employee elects to leave, regardless of the impact on the organization (Latack and Havlovic 1992).

### **Person-Organization Fit, Job Satisfaction, and Coping Behaviors in Logistics**

Logistics researchers have only recently begun to focus on employee behaviors and attitudes; most studies in logistics journals have been more oriented toward logistics-related systems and processes. However, during the 1990s, research slowly began to place a greater focus on the logistics employee. Most of these were executed by bringing concepts from organizational behavior into the logistics context, and almost all focused on management employees rather than operations-level workers.

A review of the literature yields a number of studies related to employee turnover and/or retention. Studies by Keller and Ozment (1999a, 1999b), LeMay, Taylor, and Turner (1993), Ozment and Keller (1999), Richard, LeMay, and Taylor (1995), and Stephenson and Fox (1996) examined possible causes and responses for high logistics employee turnover, each within the context of the trucking/transportation industry segment. Other studies have addressed the recruitment of logistics employees. LeMay and Taylor (1988) offered some viable strategies for recruiting truck drivers; Southern, Rakowski, and Godwin (1989) examined the influence of differential incentive plans on driver recruitment; and Taylor (1994) studied the impact of realistic job previews on new driver recruitment and retention.

However, very few studies were identified that examine P-O fit, job satisfaction, and coping behaviors within the realm of logistics. No studies at all were found to have addressed person-organization fit for logistics employees. Two articles were identified that addressed logistics employee job satisfaction. In studies of truck drivers, McElroy et al. (1993) examined the effects of road time and position in the career lifecycle on job satisfaction. Richard et al. (1995) found correlations between job satisfaction and several demographic and psychographic variables. Coping

behaviors have also been largely neglected in the logistics literature; only two articles were identified. Keller and Ozment (1999a) and Ozment and Keller (1999) published studies examining driver responses to stress, using Hirschman's (1970) *Voice, Loyalty, Exit* theory as the coping response framework. This framework has been used to examine coping behaviors within the sociological and psychological literatures, and offers general personal responses to endured stress.

The current research seeks to fill gaps within the current body of logistics employee research. This research represents the first known study of operations-level warehouse employee attitudes and behaviors. As noted previously, most logistics employee research has been concerned with truck drivers and/or logistics management. Also, the research is the first known to examine P-O fit in logistics employees and its outcomes. Finally, this research extends previous work by offering more specific coping behavior responses to job-related stress (intent to turnover, absenteeism, increased job effort, and seeking additional training).

### RESEARCH HYPOTHESES

Understanding the relationships between P-O fit, job satisfaction, and coping behaviors may be beneficial to managers seeking to hire and retain warehouse operations employees. The linkage between P-O fit and job satisfaction is somewhat intuitive: employees who feel that the employer meets their expectations should enjoy greater fulfillment than employees whose expectations go unmet. Statistical testing performed by organizational researchers has provided limited support for this premise (Boxx, Odom, and Dunn 1991; Chatman 1989; O'Reilly, Chatman, and Caldwell 1991).

A lack of precise definition in prior studies has created an oversimplified view of the relationship between P-O fit and job satisfaction. The traditional definitions of person-organization fit have taken a holistic perspective regarding exactly what it is that constitutes the person, and what it is that constitutes the organization. In prior P-O fit research, people and organizations have been assumed to be one-dimensional. However, studies of individuals and of organizational cultures challenge this assumption. Human attitudes exist at multiple levels, and organizational cultures are thought to contain a large number of distinct components (Lutz 1991; Schein 1991; Taormina 1997). The current study addresses the overly simplified one-dimensional assumption, taking into account that individual attitudes and organizational cultures each operate on multiple levels and may have differential influences on warehouse employee job satisfaction.

Individual attitudes, according to Lutz, contain both cognitive and affective components. The cognitive component of the attitude is composed of the knowledge that is acquired as a result of interaction with an externality (in this case, the organizational culture). The affective component of the attitude, on the other hand, is composed of the person's feelings or emotions about the externality. Thus, the "person" element of P-O fit should include both cognitive and affective dimensions.

Similarly, the "organization" element of P-O fit should include the various facets of the organizational culture that may affect the individual's job attitudes. Chatman and Jehn (1994) operationalized organizational culture as a seven-dimensional variable, consisting of innovation, stability,

respect for people, outcome orientation, detail orientation, team orientation, and aggressiveness. However, this categorization was developed to describe organizations consisting of individuals working in more professional/salaried positions than warehouse work, and may consider elements of culture that are unimportant to blue-collar or working class employees. It is important to capture the dimensions of culture that are most important for operations type workers. Thus, operationalizations of organizational culture based on the work of Schein (1991) and Taormina (1997) have been employed. According to Schein and Taormina, employees are socialized into the organization via three sets of forces. Socialization forces emanate from: the employee's management/leader, the co-workers of the employee, and organizational characteristics, i.e., policies, structures, and procedures.

The reconceptualization of P-O fit presented here accounts for the multiple dimensions of both persons and organizations. Six different combinations of attitudes and cultural elements are possible, and thus, six different types of P-O fit will be proposed. These will be referred to as Company-Cognitive Fit, Company-Affective Fit, Supervisor-Cognitive Fit, Supervisor-Affective Fit, Co-worker Cognitive Fit, and Co-worker-Affective Fit. The six-dimensional P-O fit conceptualization is shown in Figure 1.

**FIGURE 1**  
**DIMENSIONS OF PERSON-ORGANIZATION FIT**

<b>Individual Attitude Components</b>	<b>Organizational Culture Elements</b>		
	Company Policy or Procedures	Supervisor or Manager	Co-workers
Cognition	<b>Company Cognitive Fit</b>	<b>Supervisor Cognitive Fit</b>	<b>Co-worker Cognitive Fit</b>
Affect	<b>Company Affective Fit</b>	<b>Supervisor Affective Fit</b>	<b>Co-worker Affective Fit</b>

Each of the six types of P-O fit is thought to positively influence employee job satisfaction. The first hypothesis summarizes the relationship.

**Hypothesis 1:** Each of the six proposed types of person-organization fit will be positively associated with warehouse employee job satisfaction:

- 1a: Company-Cognitive Fit will be positively associated with Job Satisfaction.
- 1b: Company-Affective Fit will be positively associated with Job Satisfaction.
- 1c: Supervisor-Cognitive Fit will be positively associated with Job Satisfaction.
- 1d: Supervisor-Affective Fit will be positively associated with Job Satisfaction.
- 1e: Co-worker-Cognitive Fit will be positively associated with Job Satisfaction.
- 1f: Co-worker-Affective Fit will be positively associated with Job Satisfaction.

Warehouse managers should seek to understand potential employee reactions to the presence or absence of job satisfaction. As previously mentioned, Latack (1986) suggested that employees will react to pleasant or unpleasant job situations by employing some sort of coping response. The employee will typically choose between control behaviors, which can benefit the employer, and escape behaviors, which can negatively impact the employer (Latack 1986; Latack and Havlovic 1992).

Job satisfaction may influence the employee's participation in the company. When warehouse employees are satisfied with their jobs, they are likely to be more willing to take steps to improve themselves or their work environment. Satisfied employees have been shown to be more likely to exert more effort on the job, attempt to improve their work performance, or act altruistically to better the work environment (Locke 1969; Petty, McGee, and Cavender 1984; Smith, Organ, and Near 1983). However, dissatisfied employees are more likely to behave in ways that are destructive to the organization. Employees who are dissatisfied with their job environment are more likely to be late for work, skip workdays, or leave the company altogether (Horn et al. 1992; Mobley 1977; Mobley, Horner, and Hollingsworth 1978; Steers and Rhodes 1978).

**Hypothesis 2:** Warehouse employee job satisfaction will be negatively associated with escape behaviors.

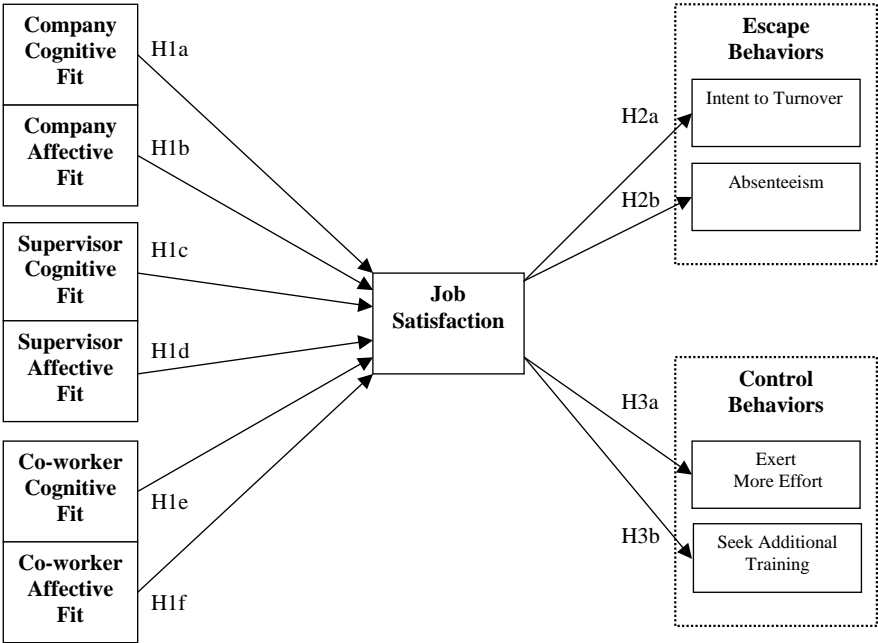
- 2a: Job Satisfaction will be negatively associated with Intent to Turnover.
- 2b: Job Satisfaction will be negatively associated with Absenteeism.

**Hypothesis 3:** Warehouse employee job satisfaction will be positively associated with control behaviors.

- 3a: Job Satisfaction will be positively associated with Exerting More Effort.
- 3b: Job Satisfaction will be positively associated with Seeking Additional Training.

Figure 2 depicts the theoretical constructs and hypothesized relationships.

**FIGURE 2**  
**HYPOTHESIZED RELATIONSHIPS**



**RESEARCH DESIGN**

Based upon a review of the literature and interviews with academics and warehousing executives, a survey was developed to measure attitudes and behaviors of warehouse operations employees. Pre-existing scales were used where possible, and are noted in Appendix A. Measures that were underdeveloped or absent from the literature were developed using techniques suggested by Cook and Campbell (1979). The survey instrument was then assembled following the procedure outlined by Dillman (2000).

The instrument was pre-tested with 112 logistics employees. Most of the subjects were warehouse operations employees, though there were a few drivers and “generalists” who assume a variety of logistics roles. The pre-test individuals worked at a different facility than the ones used in the main study. Using pre-test input, the survey was modified and scales were trimmed or expanded where necessary. Also, a total of three items were deleted as a result of improper loadings or insufficient contribution to explained variance. Person-organization fit was measured using scales developed



specifically for this study; the theoretical base was drawn from Moorman (1993), Schein (1991), Taormina (1997), and Watson and Tellegen (1985). Job satisfaction was measured using items taken from scales originally offered by Andrews and Withey (1976) and Brayfield and Rothe (1951). Intent to turnover measures were adapted from Mobley (1977) and Mobley, Horner, and Hollingsworth (1978), while absenteeism scales were adapted from those used by Steel and Rentsch (1995). The measures for the control behaviors were developed specifically for this study based on the suggestions of Cook and Campbell (1979). Purification procedures are noted in Appendix A.

Since many of the potential respondents were thought *a priori* to be Spanish-speaking individuals, two versions of the survey were developed – one in English and one in Spanish. The Spanish version was created and tested for validity using back-translation and verification techniques as specified by Brislin (1983) and Sekaran (1983). Specifically, an initial survey with the English questions was translated into Spanish by one of the authors (who has Spanish proficiency) with the assistance of another individual who is fluent in Spanish. This version was then retranslated back to English by a professional translator to insure a reasonable amount of functional, conceptual, and metric equivalence. Revisions were made to the instrument following the initial back-translation, and then an additional back-translation was made for verification of meaning. Three versions of the survey were made in each language, with the questions placed in a different order on each to minimize common method bias and respondent fatigue.

Employees from seven different warehouses and distribution centers in four states and three different geographic regions were asked to complete the survey. The participating firms are profiled in Appendix B. The instrument was distributed on-site in the warehouse during **employee break time**, or before or after work hours. Respondents were allowed to complete the survey in a location secluded from the survey administrator, and were provided with an envelope in which the completed survey was to be sealed to maintain confidentiality. Respondents were asked to leave the completed survey in a box that was located out of sight of the survey administrator to further insure that responses would be held in confidence. To increase response rate, a cash prize was offered to a single random lucky winner at each participating facility via a “lottery” method.

A total of 726 surveys were distributed. Of that number, 684 were returned. After an initial analysis of the returned surveys, it was determined that 17 had excessive missing values or were left entirely blank. Thus, a total of 667 responses were determined to be usable for the purposes of the current research. Demographic profiles of the sample frame are included in Appendix B.

To ensure valid and reliable conclusions, a post hoc psychometric assessment was conducted. Scale items for each construct were subjected to a confirmatory factor analysis using LISREL 8.3, as well as an assessment of reliability and internal consistency. All items loaded on single factors, and CFI, IFI, NFI, and NNFI indices calculated for the measurement model indicate extremely good fit (all > .90). Table 1 also indicates that convergent validity has been established; the items for each of the constructs loaded significantly (t-values > 1.96). An alpha coefficient for each scale was also calculated to further establish the comparability of the items in each scale. Finally, as further evidence of the internal consistency of the measures, item-to-total correlations were calcu-

lated to establish the range of association between the items representing each factor. The item lambda scores and T-values, item-to-total correlations, and scale alphas (including item-deleted alphas) are included in Table 1. Scale items and a covariance matrix are included in Appendix A. As evidenced in Table 1, the scales illustrate reliability and internal consistency.

**TABLE 1**  
**FACTOR ANALYSIS AND RELIABILITIES**

Construct/ Items	Item $\Lambda$	T- Value	Item to Total Corr.	Alpha if Item Deleted	Cronbach Alpha For Scale
Company Cognitive Fit (CCF)					.92
A1	.92	30.76	.84	.88	
A2	.93	30.55	.84	.88	
A3	.92	30.90	.83	.88	
Company Affective Fit (CAF)					.94
B1	.93	31.76	.84	.93	
B2	.93	31.37	.85	.93	
B3	.97	35.85	.93	.87	
Supervisor Cognitive Fit (SCF)					.91
C1	.91	29.19	.80	.89	
C2	.93	31.85	.85	.86	
C3	.92	30.01	.83	.87	
Supervisor Affective Fit (SAF)					.91
D1	.90	27.31	.79	.89	
D2	.93	31.97	.84	.86	
D3	.92	29.40	.83	.87	
Co-worker Cognitive Fit (CWCF)					.82
E1	.87	23.57	.69	.75	
E2	.88	26.49	.73	.72	
E3	.83	21.35	.63	.80	
Co-worker Affective Fit (CWAF)					.73
F1	.72	11.42	.45	.70	
F2	.90	18.95	.71	.46	
F3	.75	11.38	.46	.70	

**TABLE 1 (CONT.)**  
**FACTOR ANALYSIS AND RELIABILITIES**

Construct/ Items	Item $\Lambda$	T- Value	Item to Total Corr.	Alpha if Item Deleted	Cronbach Alpha For Scale
Job Satisfaction (JOB)					.79
J1	.79	20.11	.56	.78	
J2	.89	26.85	.71	.62	
J3	.83	20.98	.61	.72	
Intent to Turnover (ITO)					.88
T1	.89	26.45	.76	.84	
T2	.88	26.93	.75	.85	
T3	.91	30.44	.81	.79	
Absenteeism (ABS)					.87
S1	.94	17.49	.77	–	
S2	.94	21.25	.77	–	
Exert More Effort (EFF)					.81
V1	.91	23.21	.68	–	
V2	.91	28.29	.68	–	
Seek Additional Training (TRN)					.82
N1	.91	22.70	.69	–	
N2	.91	24.10	.69	–	

A final analysis was conducted to assess the level of discriminant validity between the P-O fit constructs. Following the recommendations of Fornell and Larcker (1981), average variance extracted estimates for each construct were compared to the shared variances between each of the constructs. As indicated in Tables 2 and 3, all average extractions were in excess of the shared variances between constructs for each two-factor model. Since convergent and discriminant validity have been established, tests of hypotheses and overall model fit may be assessed with confidence.

TABLE 2  
EXOGENOUS CONSTRUCT DISCRIMINANT VALIDITY

Variable	CCF	CAF	SCF	SAF	CWCF
Avg. Variance Extracted	.86	.89	.85	.84	.74
Shared Variance					
CCF	–				
CAF	.37	–			
SCF	.19	.38	–		
SAF	.27	.31	.42	–	
CWCF	.16	.37	.05	.06	–
CWAF	.17	.59	.09	.18	.37

TABLE 3  
ENDOGENOUS CONSTRUCT DISCRIMINANT VALIDITY

Variable	JOB	ITO	ABS	EFF
Avg. Variance Extracted	.70	.81	.89	.84
Shared Variance				
JOB	–			
ITO	.37	–		
ABS	.23	.08	–	
EFF	.24	.07	.04	–
TRN	.22	.08	.05	.04

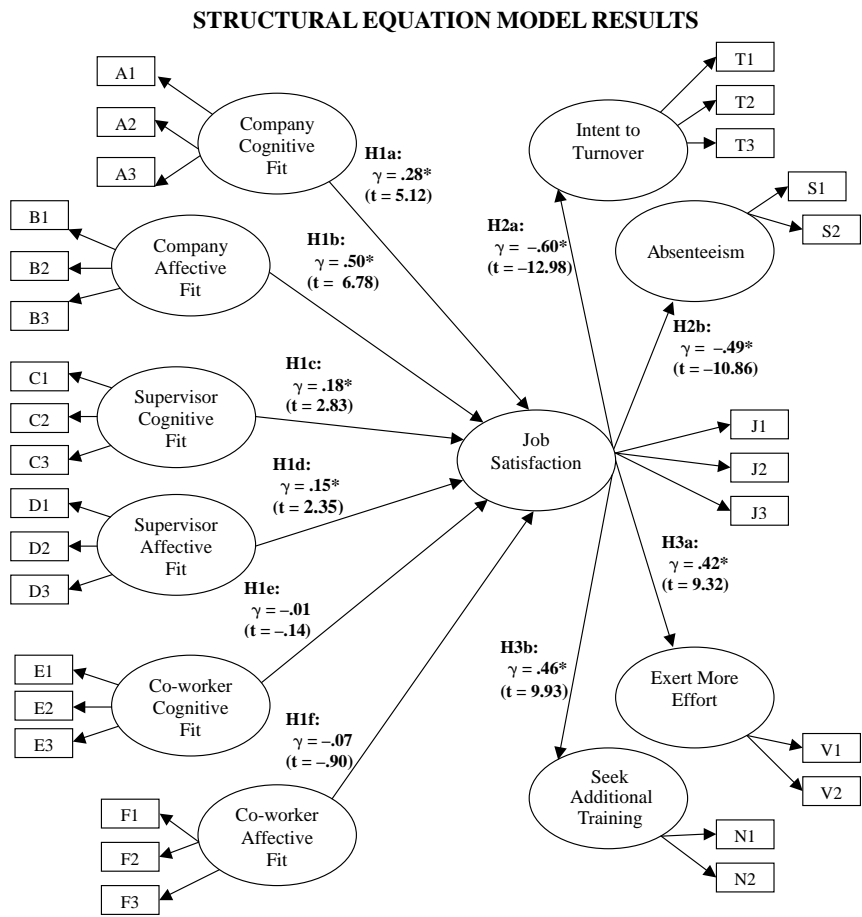
RESULTS AND DISCUSSION

The current research was intended to examine the influence of warehouse employee job attitudes on coping outcomes. A primary purpose of the research was to examine the relationships between warehouse employee person-organization fit and job satisfaction. An additional purpose was to assess the influence of job satisfaction on desirable and undesirable coping responses.

To accomplish these objectives, a structural equations model specifying the salient constructs and relationships was estimated using LISREL 8.3 software. This approach was chosen for a number of reasons. Structural equations modeling is appropriate for the simultaneous assessment of the relationships between multiple independent and dependent latent variables (Anderson and Gerbing

1988; Joreskog and Sorbom 1996). Moreover, SEM is particularly useful when moving from exploratory to confirmatory analysis. The structural diagram, including path coefficients and goodness-of-fit statistics, is included as Figure 3. The fit indices provided (CFI = .90; IFI = .90; NFI = .87; NNFI = .87) indicate good fit between the model and the data.

FIGURE 3



Overall Model Fit Indices: CFI = .90; IFI = .90; NFI = .87; NNFI = .87

\*Hypothesized sigma coefficient is significant if  $|t| > 1.96$ .

Individual hypotheses were assessed by reviewing the significance, direction, and magnitude of each sigma coefficient. Hypotheses 1a through 1f predict that each of the six types of P-O fit will be positively associated with job satisfaction. Four of these six hypotheses are supported. Cognitive and affective fit with company characteristics (H1a, H1b) are each strongly associated with job satisfaction ( $\gamma = .28, t = 5.12$ ;  $\gamma = .50, t = 6.78$ ). Policies and procedures, compensation, organizational climate, etc. are clearly perceived to be a very important aspect of the corporate culture by employees. The relationships between cognitive and affective fit with the supervisor (H1c, H1d) and job satisfaction are also statistically significant ( $\gamma = .18, t = 2.83$ ;  $\gamma = .077, t = 2.35$ ). This is not surprising; many popular management publications have suggested that interaction with management represents one of the strongest influences on employee attitudes (see Buckingham and Coffmann 1999, for example). However, co-worker-cognitive fit and co-worker-affective fit are not found to be associated with job satisfaction (H1e, H1f) in the current research ( $\gamma = -.01, t = -.14$ ;  $\gamma = -.07, t = -.90$ ). As previously speculated, one explanation for this lack of support may be related to the nature of warehouse work in general. Many warehouse operations jobs are characterized by a relatively high degree of autonomy. Though communication between employees is frequent, a single employee is often left alone to be responsible for a certain aisle, product type, or task, with teamwork playing a lesser role in the individual's job success (Mississippi State University 1999). Employees may consider that co-workers play a less significant role in their overall work life and, thus, cognitive or affective fit with co-workers is an unnecessary condition for positive emotions about the job.

Hypothesis 2 suggests that warehouse employee job satisfaction will be negatively associated with escape behaviors. The escape behaviors being considered in the current research include absenteeism and intent to turnover. Hypothesis 2 was strongly supported. Job satisfaction exhibited a very strong negative association with intent to turnover ( $\gamma = -.60, t = -12.98$ ), and absenteeism was also significantly and negatively associated with job satisfaction ( $\gamma = -.49, t = -10.86$ ). These results provide further confirmation relating to results of similar testing in the organizational behavior literature.

Hypothesis 3 proposes that warehouse employee job satisfaction will be positively associated with control behaviors. The control behaviors selected for examination in the current research are the exertion of more effort towards the job and seeking additional job-related training. Job satisfaction was found to be significantly associated with both exertion of effort and seeking training ( $\gamma = .42, t = 9.32$ ;  $\gamma = .46, t = 9.93$ ). Thus, satisfied employees appear to be more willing to invest time and effort toward improving their work situation than employees who are less satisfied with their employment.

## CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Turnover in the warehousing industry has risen perilously in recent years. Furthermore, the costs of replacing lost employees are excessively high, both in terms of human resources expenditure and

lost productivity (Gooley 2001; Wilson 2001). If worker replacement costs are to be reduced, human resources processes must consider the P-O fit of potential employees.

The current research indicates that employees who have realistic expectations about their company and supervisor characteristics are more likely to be satisfied with their employment. The research also suggests that satisfied employees are more likely to exhibit behaviors that will benefit themselves or the company, while dissatisfied employees are much more likely to leave or behave in other destructive manners. Thus, to maximize benefits and minimize costs, warehouses should attempt to hire and retain employees with expectations that can be met by the company. However, this may prove to be a difficult task. Job candidates' expectations are sometimes difficult to assess before hiring, and organizational cultures are often ambiguous or difficult to measure (Schein 1991). Managers may want to utilize a range of human resource practices to ensure that the best-matched employees are identified.

The current research suggests that screening for warehouse employee positions should be undertaken with an emphasis on person-organization fit. Job application/screening as well as many different forms of aptitude and psychological testing can be used to assess minimum qualifications. However, based on the current findings, warehouse management should also take steps to pre-assess job candidates' compatibility with both the leadership style of the supervisory staff and the cultural characteristics of the company (the participating firms did not do so). This type of assessment is best accomplished via the pre-employment interview (Judge and Ferris 1992). A greater amount of time spent during the job interview should be devoted to assessing the match between candidate expectations and supervisor or company characteristics, rather than focusing solely on basic qualifications or job skills. In order to improve the quality of P-O fit assessments, human resource personnel need to spend time on the warehouse floor, learning about the leadership styles of the supervisory staff as well as the general culture of the work environment. Psychological tests are available for assessment of management styles and comparisons to employee work habits, with the goal of creating "matches" between supervisors and new employees. This information can be used to select candidates possessing compatible characteristics into departments where they will be most effective.

It may be necessary to broaden the scope/objective of job interviews. Certainly the primary task is to assess talent of potential employees and their likely P-O fit. Job interview sessions may need to go beyond assessment and into a selling mode. Potential employees may need to be shown the importance of good fit – what's in it for them. Thus, they may be encouraged to take a job with an appealing climate rather than making purely an economic/salary-related decision.

Another approach to enhancing employee retention takes a more *post hoc* approach. Many warehouse positions have gone unfilled in recent years (IOMA 2001). The worker shortage has sometimes forced hiring managers into the unpleasant predicament of having to decide between hiring workers who do not possess optimal levels of P-O fit, and leaving the position vacant. In cases where P-O fit cannot be achieved through hiring, perhaps it can be "created" after hiring. New employee orientation sessions can be a powerful motivator and can create an excellent first

impression. Orientation sessions should be retooled, with an emphasis on company values, business philosophy, and the importance of employees to organizational goals, rather than simply filling out paperwork. Employees are also more likely to develop P-O fit when they are given the adequate training and tools to do their job. Investment in the warehouse staff sends a strong signal that the organization is committed to its workers, and can significantly enhance employee loyalty.

However, steps taken during the initial stages of employment may not be enough to provide an enduring sense of compatibility. In order for P-O fit to become more ingrained, workers should be provided with support mechanisms as they are socialized into the workplace over time. To facilitate socialization and create long-term fit, firms may want to implement a mentorship program. If new workers are paired with more experienced employees for informal "social training" related to warehouse norms, perceptions of incompatibility or dissatisfaction may be reduced. Additionally, managers may find that allowing workers to gain experience at several different positions in the warehouse can help to minimize employee misunderstandings or frustrations. Periodic job rotation provides employees with the chance to see the operations of the warehouse from a wider variety of perspectives, and may create empathy between employees through understanding of the roles of co-workers. Managers should also take advantage of the variety of motivational tools available to reward newer employees who are performing at or above standards. Public recognition and/or financial rewards can be used to positively reinforce employee behaviors that lead to warehouse performance, and may also serve to enhance the perception of P-O fit.

Each of the solutions suggested thus far can be implemented in the short-term to enhance the P-O fit of current and new employees. However, if warehousing organizations are to insure that they will have adequate numbers of well-matched employees in the future, a more long-term focus on person-organization fit is required. Long-term success of warehouse staffing initiatives will depend on the ability of the company to assess the needs and wants of the labor pool and to provide working conditions that will meet the expectations of desirable candidates. In order to hire employees with good P-O fit, it may be necessary to market the features and benefits of the company to the most desirable candidates. This may require a "repositioning" of the company to better appeal to the labor market, and/or may mean that the features and benefits related to employment in the company need to be better communicated via employment ads, job postings, and word-of-mouth (i.e., referral programs). Such communications should focus on elements of the job or company that are most important to desirable candidates. In some cases, it may even be necessary to take steps to adjust the organizational culture (e.g., when the company has developed an undesirable reputation as an employer) by replacing problem supervisors or changing unpopular policies.

Warehouse organizations can also gain long-term benefit from internal analyses directed at identifying sources of misfit. If unmet expectations are detected early in employer-employee relationships, i.e., early warning signals, it may be possible to address or resolve problems before the employee feels forced to choose an escape behavior. Monitoring programs should be implemented and used on a regular basis to measure employee attitudes toward the important elements of the company culture – the supervisory staff and company policies. The active solicitation of employee



ideas and opinions can shift the organization into alignment with employee expectations, and other widely recognized benefits of employee empowerment may be realized if the information is reviewed and used by management to improve working conditions in a timely manner.

### **Future Research**

The current research offers empirical evidence in support of relationships between warehouse operations employee P-O fit, job satisfaction, and coping behaviors. The research sample consisted of warehouse operations employees from seven U.S.-based distribution centers. Future research should explore the proposed relationships via reverification in different logistics job types (e.g., truck drivers or customer service representatives), at different levels within the workforce (e.g., logistics managers), and in different cultural settings. Furthermore, additional research should be undertaken to examine the potential effects of demographic and/or organizational control variables such as age, gender, pay rate, and job position. One recommended area involves a comparison of the Hispanic and Anglo subgroups. The basic relationships revealed in this study should be generalizable; however, further replication is required for validation.

The current research also looked at a relatively constrained set of control and escape coping behaviors. The length of the questionnaire was purposely limited so that employees could easily complete it on lunch or coffee breaks. Other control and escape behaviors should also be examined in future studies, including some latent or attitudinal responses to job-related dissatisfaction. Furthermore, an area that may add additional value to the research might include administering the questionnaire to employees who are leaving (during exit interviews) and/or have already left the firm, with subsequent testing for differential results.

The research was limited by its methodology. A frequently cited shortcoming of survey research on attitudes and behaviors, relative to more qualitative techniques, is the lack of richness of the data. Some researchers feel that smaller amounts of qualitative data are better for assessing constructs and their relationships (Cook and Campbell 1979). This limitation is balanced by the large scope of the current study, in terms of sample size and high reliability of measures. Further research using a more qualitative methodology should help to address these issues. Focus groups and/or case studies will allow for the collection of more comprehensive and detailed data related to the relative success of different human resource processes in terms of their ability to assess and capitalize on person-organization fit. The focus groups should include operations-level workers. The current research may be limited by the fact that the preparatory interviews were limited to academics and warehouse executives. In-depth interviews of departing or former employees may also serve to better explain the primary causes of misfit, and have the possibility of unearthing some of the more closely guarded underlying reasons for the selection of coping responses.

Other methodological concerns are related to employee participation and model fit. Due to time and financial constraints, it was only possible to visit each facility once during the data collection process. Employees who were absent on the day the survey was offered may hold different opinions or values than those who were available and elected to participate. Although the percentage of

missing employees was relatively small (9.3%), additional value would have been gained by including this portion of the sample in the study. Further, though the measurement model had fit indices (CFI, IFI, etc.) in excess of commonly acceptable standards, the structural model fit indices supported only a marginal level of fit. Further research should be attempted with the goal of clarifying the relationships between job satisfaction and the two types of coping behaviors.

This study provides important validation of the significance of person-organization fit. The next step is achieving greater understanding of how to measure/assess P-O fit during the hiring process and how to create better fit among current employees through organizational change.

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## APPENDIX A

### CONSTRUCT SCALE ITEMS: MEASUREMENT MODEL

**Company-Cognitive Fit:** Compared to initial expectations, rate your company...\*

A1 Reward and pay systems/amounts

A2 Work policies and procedures

A3 Lifestyle, atmosphere, surroundings

(Developed for the current study, based on the works of Schein 1991 and Taormina 1997.)

**Company-Affective Fit:** Relative to what you expected, how do you feel about your company? \*\*

B1 Pleased

B2 Bothered

B3 Happy

**Supervisor-Cognitive Fit:** Compared to initial expectations, rate your supervisor...\*

C1 As a role model and teacher

C2 Ability at solving problems

C3 As a decision maker

C4 As a leader\*\*\*

C5 Ability at handling stressful situations\*\*\*

(Developed for the current study, based on the works of Schein 1991 and Taormina 1997.)

**Supervisor-Affective Fit:** Relative to what you expected, how do you feel about your supervisor? \*\*

D1 Pleased

D2 Bothered

D3 Happy

**Co-worker-Cognitive Fit:** Compared to initial expectations, rate your co-workers...

E1 I can confide in them

E2 They give me helpful advice about procedures/policies

E3 They cooperate with me

(Developed for the current study, based on the works of Schein 1991 and Taormina 1997.)

**Co-worker-Affective Fit:** Relative to what you expected, how do you feel about your co-workers? \*\*

F1 Pleased

F2 Bothered

F3 Happy



\*Cognitive fit constructs were measured using 7-point Likert scales with 1 = much worse than expected and 7 = much better than expected

\*\*Affective fit constructs were measured on a 7-point semantic differential using “not at all” and “extremely” as anchors. The second affective item was reverse scored. All affect scales were based on studies of affect and mood by Moorman 1993, and Watson and Tellegen 1985.

\*\*\*C4 and C5 were removed from the final scale as they each loaded alone (as separate factors) and had very low item-to-total correlations (.12, .19). The resultant three-item scale has  $\alpha = .91$  and a single factor structure.

### CONSTRUCT SCALE ITEMS: STRUCTURAL MODEL

**Job Satisfaction:** In the past year, how often have you had the following feelings about your job?\*

J1 I feel fairly satisfied with my present job.

J2 I am enthusiastic about my work.

J3 I consider my job to be relatively unpleasant.\*\*

J4 I find real enjoyment in my work\*\*\*

(Adapted from Andrews and Withey 1976; Brayfield and Rothe 1951.)

**Intent to Turnover:** In the past year, how often have you...\*

T1 Considered working somewhere else

T2 Thought about quitting your job

T3 Thought about how nice it would be to work elsewhere

(Adapted from Mobley 1977; Mobley, Horner, and Hollingsworth 1978.)

**Absenteeism:** In the past year, how often have you...\*

S1 Been absent from the job because you just didn't feel like going to work

S2 Taken a day off to do something else

(Adapted from Steel and Rentsch 1995.)

**Increased Effort:** In the past year, how often have you tried to improve your work situation by...\*

V1 Trying harder to complete assigned tasks

V2 Giving more effort on the job

(Developed for the current study)

**Seek Additional Training:** In the past year, how often have you tried to improve your work situation by...\*

N1 Seeking additional training related to my tasks

N2 Learning more about my job through formal/informal instruction

(Developed for the current study)

\*Job satisfaction and the coping behavior constructs were measured using a 7-point Likert scale with 1 = never and 7 = very often

\*\*Reverse scored

\*\*\*Removed from the final scale; inclusion reduced the scale alpha to .76 (from .79) and reduced total explained variance.

## APPENDIX B

## DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Variable	Frequency	Percentage*
Gender		
Male	494	74.06
Female	137	20.53
No response	36	5.41
Age		
Under 25	118	17.69
25-34	188	28.18
35-44	149	22.33
45-54	131	19.64
Over 54	51	7.65
No response	30	4.51
Race/Ethnicity		
White	291	43.62
Black	124	18.59
Hispanic	89	13.34
Asian	72	10.79
Other	39	5.84
No response	52	7.82
Formal Education		
Some high school	77	11.53
High school diploma	294	44.73
Some college	196	29.38
College degree	56	8.39
Other	5	0.07
No response	39	5.89
Warehousing Experience		
0-2 years	237	35.53
3-5 years	189	28.33
More than 5 years	117	17.53
No response	58	8.69
Union Membership		
Union member	68	10.19
Non-union	533	79.91
No response	66	9.90

\*Within-variable percentages may not add to 100.00% due to rounding.

## PARTICIPATING FIRMS

Firm	Location	Industry	Usable Surveys
1	Oklahoma City, OK	3rd Party Logistics	66
2	Atlanta, GA	3rd Party Logistics	84
3	Fort Worth, TX	Consumer Electronics	224
4	Fort Worth, TX	Paper Products	22
5	Dallas, TX	3 <sup>rd</sup> Party Logistics	17
6	Oklahoma City, OK	Food Products	88
7	Allentown, PA	3 <sup>rd</sup> Party Logistics	166
Total			667

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