SOCIAL EXCHANGE UNDER FIRE: DIRECT AND MODERATED EFFECTS OF JOB INSECURITY ON SOCIAL EXCHANGE

DISSERTATION

Presented to the Graduate Council of the

University of North Texas in Partial

Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Charles D. Bultena, B.B.A., M.B.A.

Denton, Texas

May, 1998

Bultena, Charles D., Social Exchange Under Fire: Direct and Moderated Effects of Job Insecurity on Social Exchange. Doctor of Philosophy (Management), May 1998, 232 pp., 19 tables, 10 figures, 256 titles.

Uncertain economic conditions, global competition, and a dramatic increase in mergers and acquisitions over the past decade have forced most American companies to streamline operations through downsizing and restructuring. This trend has created a deep-seated fear of job loss among American workers—a job insecurity crisis. Relatively few studies have investigated employee reactions to job insecurity. This study is concerned with the impact of job insecurity on the vital social exchange relationship between employee and employer. Specifically, it explored the relationship between job insecurity and two important social exchange outcomes--organizational commitment and organizational citizenship behavior. Moreover, it assessed the moderating effects of individual factors (communal orientation and powerlessness) and situational factors (trust in management, procedural fairness, and organizational support) on these relationships.

The study was conducted in a downsizing state mental health hospital. Data were collected from 193 nurses and psychiatric technicians and their immediate supervisors who provided ratings of their citizenship behavior. Hierarchical set regression, which provides a theory-driven framework for evaluating the direct and moderating effects of sets of interrelated variables, was the primary analytical tool.

Results of the study indicated that job insecurity was, indeed, associated with lower levels of organizational commitment and some organizational citizenship behaviors, like

sportsmanship. Tests of individual and situational moderators in the study offered some hope for mitigating these negative effects. Trust in management buffered the negative relationship between job insecurity and organizational commitment, and communal orientation buffered the negative relationship between job insecurity and two organizational citizenship behaviors—altruism and conscientiousness. This suggests that employers may minimize the inevitable effects of job insecurity by striving to maintain a high level of trust among employees and by fostering communal orientation or concern for others in the workplace.

Two other findings are worthy of note. First, this study introduced a new measure of job insecurity that demonstrated greater reliability and predictive validity than traditional measures of job insecurity. Secondly, powerlessness did not act as a moderator of the job insecurity-social exchange outcomes relationship, as expected. Instead, it was strongly related to job insecurity and was the strongest correlate of organizational commitment in the study.

Overall, this study reveals some of the hidden costs of job insecurity. Job insecurity is associated with reduced organizational commitment and citizenship behavior. Building trust and fostering concern for others may offer some hope for mitigating these effects.

SOCIAL EXCHANGE UNDER FIRE: DIRECT AND MODERATED EFFECTS OF JOB INSECURITY ON SOCIAL EXCHANGE

DISSERTATION

Presented to the Graduate Council of the

University of North Texas in Partial

Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Charles D. Bultena, B.B.A., M.B.A.

Denton, Texas

May, 1998

TABLE OF CONTENTS

Page

LIST OF TABLES vii

LIST OF FIGURES ix

Chapter

1. INTRODUCTION 1

Statement of the Problem 6
Theoretical Foundation 9
Purpose of the Research 13
Significance of the Research 14
Definition of Terms 15
Summary and Preview of the Study 17

2. REVIEW OF THE LITERATURE 19

Introduction 19
History and Scope of Job Insecurity Research 19
The Stress Model of Job Insecurity 22
Stress-Based Outcomes of Job Insecurity 26
Physiological Strains 26
Psychological Strains 28
Behavioral Strains 30
Summary of Stress-Based Outcomes of Job Insecurity 31
The Organizational Model of Job Insecurity 33
Organizational Outcomes of Job Insecurity 35
Propensity to Leave 35
Job Effort and Performance 37
Resistance to Change 39
Organizational Commitment 41
Trust 43
Summary of Organizational Outcomes of Job Insecurity 44

Chapter Page

A Social Exchange Model of Job Insecurity 47
Job Insecurity 52
Job Insecurity and Organizational Commitment 54
Job Insecurity and Organizational Citizenship Behaviors 56
Organizational Citizenship Behaviors 57
Work Attitudes and Organizational Citizenship Behavior 61
The Dispositional View 61
The Social Exchange View 64
The Job Insecurity-OCB Relationship 70
Individual Difference Moderators 72
Communal Orientation 76
Powerlessness 80
Situational Moderators 85
Trust in Management 87
Procedural Fairness 91
Organizational Support 95
Chapter Summary 102

3. RESEARCH METHODOLOGY 104

Research Design 104
Sample 105
Measures 108
Independent Variables 109
Global Job Insecurity Scale 110
Modified Kuhnert Scale 111
Moderator Variables 112
Communal Orientation 112
Powerlessness 113
Trust in Management 114
Procedural Fairness 115
Organizational Support 116
Dependent Variables 118
Organizational Commitment 119
Organizational Citizenship Behavior 120
Control Variables: Demographic Characteristics 121
Procedure 123
Data Analysis Techniques 125
Power Analysis 128
Chapter Summary 129

Chapter Page

4. RESULTS 130

Descriptive Statistics 130
Statistical Test Results 135
Phase I - Organizational Commitment 136
Step 1 - Demographics 137
Step 2 - Job Insecurity 137
Step 3 - Individual Factors 139
Step 4 - Situational Factors 140
Step 5 - Interactions 141
Summary of Phase I Results 145
Phase II - Organizational Citizenship Behavior 145
Step 1 - Demographics 146
Step 2 - Job Insecurity 147
Step 3 - Individual Factors 148
Step 4 - Situational Factors 149
Step 5 - Interactions 150
Summary of Phase II Results 156
Summary of Statistical Tests and Hypothesis Outcomes 157
Chapter Summary 157

5. EVALUATION OF RESULTS 160

Discussion of Results 160
Demographics 161
Job Insecurity and Social Exchange Outcomes 162
Individual Factors 166
Situational Factors 170
Theoretical Contributions and Implications for Practice 173
Theoretical Contributions 173
Implications for Practice 175
Study Limitations 179
Methodological Limitations 179
Internal Validity 180
Statistical Conclusion Validity 181
Construct Validity 183
External Validity 185
Theoretical Limitations 187

Chapter Page

Directions for Future Research 190
Replication of Present Study 191
Causes and Consequences of Powerlessness 191
Dimensionality of Job Insecurity 192
Moderators of the Job Insecurity-Work Outcomes Relationship 193
Intervening Processes 194
Measures of Social Exchange Outcomes 196
Domain of the Social Exchange Model 196
Chapter Summary 197

APPENDIX A: EMPLOYEE QUESTIONNAIRE 198

APPENDIX B: SUPERVISOR QUESTIONNAIRE 205

APPENDIX C: POWER ANALYSIS 208

REFERENCES 213

LIST OF TABLES

Table		Page
1.	Summary of Stress-Based Outcomes of Job Insecurity	32
2.	Summary of Organizational Outcomes of Job Insecurity	45
3.	Summary of Work Attitudes Related to Organizational Citizenship Behaviors	69
4.	Summary of Individual Difference Moderators of the Job Insecurity-Work Outcomes Relationship	76
5.	Summary of Research Hypotheses	103
6.	Hierarchical Set Regression: Order of Entry and Set Composition	127
7.	Correlation Matrix and Reliabilities for Day Technicians	131
8.	Correlation Matrix and Reliabilities for Night Nurses	132
9.	Set Regression Statistics for Job Insecurity with Organizational Commitment as the Dependent Variable	138
10.	Set Regression Statistics for Powerlessness with Organizational Commitment as the Dependent Variable	139
11.	Set Regression Statistics for Situational Factors with Organizational Commitment as the Dependent Variable	140
12.	Moderated Regression Statistics for Day Technicians with Organizational Commitment as the Dependent Variable	142
13.	Moderated Regression Statistics for Night Nurses with Organizational Commitment as the Dependent Variable	143
14.	Set Regression Statistics for Job Insecurity with OCB as the Dependent Variable	147

Table | Page

15. Set Regression Statistics for Individual Factors with OCB as the Dependent Variable 149

16. Multivariate Tests of Interactions for Day Technicians with OCB as the Dependent Variable 151

17. Multivariate Tests of Interactions for Night Nurses with OCB as the Dependent Variable 152

18. Univariate Tests of Significant Interactions with the Dimensions of OCB as the Dependent Variables 153

19. Summary of Tests of Hypotheses 158

LIST OF FIGURES

Figure Page

1. Social Exchange Model of Job Insecurity 10
2. The ISR Model of Work Stress 24
3. The Organizational Model of Job Insecurity 34
4. Research Model 51
5. Partial Model Tested in Phase I 137
6. Relationship Between Job Insecurity and Organizational Commitment for High and Low Levels of Trust in Management 144
7. Partial Model Tested in Phase II 146
8. Relationship Between Job Insecurity and Centered Altruism Scores for High and Low Levels of Communal Orientation 154
9. Relationship Between Job Insecurity and Centered Conscientiousness Scores for High and Low Levels of Communal Orientation 156
10. Revised Research Model 190

CHAPTER 1

INTRODUCTION

Uncertain economic conditions, global competition, and a dramatic increase in mergers and acquisitions over the past decade have forced American corporations to streamline operations and cut costs. Downsizing is the strategy of choice in corporate efforts to reduce costs (Greenhalgh, 1991; Greenhalgh, Lawrence, & Sutton, 1988). Leana and Ivancevich (1987) report that 7.6 million workers lost their jobs from 1983 to 1986 alone. Even white-collar jobs, once known for stability, are increasingly vulnerable to layoffs. In fact, eighty-five percent of Fortune 1000 firms implemented white-collar layoffs between 1987 and 1991 affecting more than five million white-collar jobs (Cameron, Freeman, & Mishra, 1991). Anecdotal accounts of downsizing in the popular literature report an alarming rise in layoffs in U.S. corporations over the past five years and warn that prolific layoffs are beginning to take their toll on American workers (Caudron, 1996; Mandel, 1996; Sloan, 1996).

The recent trend toward increased use of flexible employment arrangements further exacerbates the threat of job cuts. Pfeffer and Baron (1988) describe a growing trend away from long-term, permanent employment toward contingent work involving short-term temporary and part-time jobs. These authors predict that firms will continually reduce the relative size of their core workforce (permanent, relatively secure workers) in favor of increased use of flexible temporary and part-time employees. The U.S. Bureau of Labor

Statistics (1994) estimated that the use of temporary agency workers quadrupled from 1983 to 1993. Overall, continued downsizing and the shift toward contingent work contribute to the loss of permanent jobs.

This lack of job stability is creating a pervasive fear of job loss in the workforce. A recent nation-wide survey of over 350,000 employees conducted by the International Survey Research Corporation revealed that the percentage of employees who frequently worry about being laid off has more than doubled over the past five years from 20 percent to 44 percent (Hardin, 1995). A more startling finding emerged in a study of human resource managers conducted by Raber, Hawkins, and Hawkins (1995). Seventy percent of human resource managers employed in 909 firms that had downsized over the past five years indicated that their employees were generally insecure about their future with the company. Overall, a decade of downsizing has left the majority of workers feeling insecure about the continuity of their jobs (Brockner, Grover, Reed, & DeWitt, 1992). These feelings reflect a growing sense of job insecurity, which Greenhalgh and Rosenblatt (1984) define as "perceived powerlessness to maintain desired continuity in a threatened job situation" (p. 438). This deep-seated fear of job loss has given rise to a growing "job insecurity crisis" among American workers (Greenhalgh, 1984).

Despite the prevalence of job insecurity in the workplace, relatively few studies have investigated employee reactions to job insecurity. This is due, in part, to the sensitive and emotional nature of the topic (Jacobson & Hartley, 1991). Nevertheless, a substantial body of research has emerged to suggest two distinct views of employee reactions to job insecurity: the stress model and the organizational model. Social psychologists and stress

researchers view job insecurity as an element of the general stress model developed by the University of Michigan's Institute for Social Research--the ISR model (Caplan, Cobb, French, Harrison, & Pinneau, 1975; Katz & Kahn, 1978). According to this model, job insecurity is a source of stress (a job stressor) that produces deviations from normal physiological, psychological, and behavioral responses in an individual, known as strains. Field research offers considerable support for the stress model. Job insecurity is related to a variety of job strains, including psychological distress (Dooley, Rook, & Catalano, 1987; Roskies & Louis-Guerin, 1990; Roskies, Louis-Guerin, & Fournier, 1993), psychological adjustment (Kuhnert & Palmer, 1991; Kuhnert & Vance, 1992; Vance & Kuhnert, 1988), job dissatisfaction (Borg & Elizur, 1992; Caplan et al., 1975; Dijkhuizen, 1980; Lim, 1996), nonconforming behaviors (Lim, 1996), and even poor health (Cobb & Kasl, 1977; Greenhalgh & Jick, 1989; Heaney, Israel, House, 1994).

The organizational model of job insecurity is more concerned with the organizational outcomes of job insecurity (i.e., work attitudes and behaviors) than with employee health and well-being. The only comprehensive organizational model of job insecurity was developed by Leonard Greenhalgh and his associates (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991). This model is the culmination of a decade of field research in downsizing organizations (e.g., Greenhalgh, 1979; Jick, 1979; Greenhalgh & Jick, 1979, 1989; Sutton, 1983, 1987). According to the model, employees respond to job insecurity in terms of increased propensity to leave and resistance to change, and reduced work effort and organizational commitment (Greenhalgh & Sutton, 1991). These reactions, in turn, lead to reduced organizational effectiveness.

Empirical research supports most of the predictions of the organizational model. The detrimental effects of job insecurity on propensity to leave and resistance to change are well supported (e.g. Ashford, Lee, & Bobko, 1989; Borg & Elizur, 1992; Greenhalgh, 1979, 1982; Jick, 1979; Rosenblatt & Ruvio, 1996; Sutton, 1983, 1987), but support for the adverse effects of job insecurity on work effort is mixed (e.g., Abramis, 1994; Ashford et al., 1989; Brockner et al., 1992; Hall & Mansfield, 1971; Hanlon, 1979; Rosenblatt & Ruvio, 1996; Van Vuuren, Klandermans, Hartley, 1991). The literature reserves its strongest support for the detrimental effect of job insecurity on organizational commitment, which is the most popular dependent variable in studies of job insecurity. Consistent evidence for the negative effect of job insecurity on organizational commitment is found in numerous studies (e.g., Ashford et al., 1989; Borg & Elizur, 1992; Brockner, Grover, Reed, DeWitt, & O'Malley, 1987; Greenhalgh, 1979; Hartley, 1991; Rosenblatt & Ruvio, 1996; Schweiger & Lee, 1993; Van Vuuren et al., 1991). These findings suggest that reduced organizational commitment or psychological attachment to the organization (O'Reilly & Chatman, 1986) is the most salient reaction to job insecurity.

Social exchange theory offers a useful framework to account for the impact of job insecurity on organizational commitment. According to social exchange theory (Blau, 1964), one party's receipt of a benefit obligates another party to reciprocate or return the favor (Gouldner, 1960). Continued receipt and reciprocation create increasing obligations between the parties of an exchange relationship (Blau, 1964; Homans, 1961; Thibaut & Kelley, 1959). Fulfillment of mutual obligations over time leads to the development of a healthy social exchange relationship between the parties characterized by commitment,

trust, and loyalty (Blau, 1964; Holmes, 1981). Highly committed employees are more likely to engage in organizational citizenship behaviors, which are extra-role behaviors that are above and beyond the call of duty (Organ, 1988). Thus, a healthy social exchange relationship between employee and employer promotes high levels of organizational commitment and organizational citizenship behavior.

Job insecurity and the attendant fear of losing valued job features or the job itself (Greenhalgh & Rosenblatt, 1984) is the antithesis of social exchange. The apparent violation of the employer's obligation to provide secure employment disrupts social exchange leading previously committed employees to withdraw, and formerly conscientious employees to curtail citizenship behaviors (Parks & Kidder, 1994; Wiesenfeld & Brockner, 1993). Consequently, organizational commitment and organizational citizenship behaviors should be early casualties of job insecurity. Despite the intuitive appeal of this argument, a social exchange model of job insecurity is conspicuously absent from the literature. Moreover, no studies have investigated the relationship between job insecurity and organizational citizenship behaviors.

This study proposes and tests a social exchange model of job insecurity to account for the relationship between job insecurity and two social exchange outcomes--organizational commitment and organizational citizenship behaviors. In addition, it identifies and tests several individual difference and situational moderators that may offer some hope for mitigating the detrimental effects of job insecurity on social exchange.

Statement of the Problem

The impact of job insecurity on the vital social exchange relationship between employee and employer has been largely ignored in the literature. Despite considerable evidence that job insecurity has detrimental effects on social exchange outcomes, like organizational commitment (e.g., Ashford et al., 1989; Borg & Elizur, 1992; Brockner, et al., 1987; Hartley, 1991; Rosenblatt & Ruvio, 1996; Van Vuuren et al., 1991), neither the stress model (Katz & Kahn, 1978) nor the organizational model (Greenhalgh & Rosenblatt, 1984) of job insecurity recognize the role of social exchange in the job insecurity-work outcomes relationship.

This shortcoming is also evident in the absence of research concerning the impact of job insecurity on another important social exchange outcome--organizational citizenship behavior (OCB). This is surprising because discretionary extra-role behaviors, like OCB's, are the only work behaviors an employee may curtail in response to job insecurity without further jeopardizing continued employment. Thus, the literature is silent concerning what may be the most likely behavioral manifestation of job insecurity (Parks & Kidder, 1994). Overall, the literature is largely silent concerning the effects of job insecurity on social exchange and social exchange outcomes, like organizational commitment and OCB. This study addresses these shortcomings by proposing and testing a social exchange model of job insecurity to account for the effects of job insecurity on the social exchange outcomes of organizational commitment and OCB.

Another gap in the literature concerns the limited number of studies investigating moderators of the job insecurity-work outcomes relationship. Individual difference and

situational moderators are important in the study of job insecurity because they offer some hope for mitigating the debilitating effects of job insecurity on employees and, ultimately, organizational effectiveness. Isolated studies have investigated the moderating effects of several individual differences, including self-esteem (e.g., Brockner et al., 1987; Brockner, Grover, O'Malley, Reed, & Glynn, 1993; Orpen, 1994), causal attributions (Van Vuuren et al., 1991), coping responses (Stassen, 1994), job dependence (e.g., Brockner et al., 1992; Kuhnert & Vance, 1992), age (Kuhnert & Vance, 1992) and job type (Rosenblatt & Ruvio, 1996) on the relationship between job insecurity and several work outcomes (e.g., commitment, job satisfaction, psychological adjustment, and intent to quit). Only two of these studies involved the job insecurity-organizational commitment relationship (Rosenblatt & Ruvio, 1996; Van Vuuren et al., 1991), and no studies assessed individual difference moderators of the job insecurity-OCB relationship.

This study addresses this gap in the literature by evaluating two important individual difference moderators of the job insecurity-social exchange outcomes relationship--communal orientation and powerlessness. Communal orientation is assessed because it reflects a feeling of responsibility or concern for the welfare of others (Clark, Ouellette, Powell, & Milberg, 1987). As such, it may act as a buffer, mitigating the detrimental effects of job insecurity on social exchange outcomes. Powerlessness, which refers to a lack of control over work-related events (Seeman, 1959), is included because it is expected to exacerbate the adverse effects of job insecurity on social exchange outcomes. Neither variable has been evaluated as a moderator of employee reactions to job insecurity.

Investigations of the moderating effects of situational factors on the job insecurity-work outcomes relationship are seldom found in the job insecurity literature. The only situational factor that has been explicitly tested as a moderator of this relationship is social support (Borg & Elizur, 1992; Dooley, Rook, & Catalano, 1987; Lim, 1996). Another stream of research by Brockner and his colleagues (e.g., Bies et al., 1993; Brockner et al., 1987; Brockner et al., 1990; Brockner et al., 1992; Brockner et al., 1994) suggests that fairness moderates the job insecurity-social exchange outcomes relationship, but these studies do not provide an empirical test of this relationship.

This study extends limited research in this area by investigating the moderating effects of three situational factors that are critical determinants of social exchange: trust, fairness, and commitment (Blau, 1964, Holmes, 1981; Rousseau & Parks, 1993). Employees who feel their employer is trustworthy, fair, and committed to them are more tolerant of short-term inequities and injustices that occur in the workplace (Folger, 1986; Parks & Kidder, 1994; Rousseau & Parks, 1993). Therefore, these factors are expected to buffer the detrimental effects of job insecurity on social exchange outcomes. This study examines the moderating effects of three specific forms of trust, fairness, and commitment that are most relevant to social exchange--trust in management, procedural fairness, and perceived organizational support.

Overall, the job insecurity literature has not examined the effects of job insecurity on social exchange and its outcomes. This study addresses this gap in the literature by proposing and testing a social exchange model of job insecurity that accounts for the direct and moderated relationships between job insecurity and the social exchange outcomes of

organizational commitment and OCB. Therefore, the general research question addressed in this study is: What are the direct and moderated relationships between job insecurity and the social exchange outcomes of organizational commitment and organizational citizenship behavior?

Theoretical Foundation

The theoretical basis for this study lies in social exchange theory. Recent studies of organizational attitudes and behavior suggest that social exchange theory (e.g., Blau, 1964; Homans, 1974) provides a useful framework for understanding both employee commitment (Eisenberger et al., 1986; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Shore & Wayne, 1993) and organizational citizenship behaviors (Konovsky & Pugh, 1994; Moorman, 1991; Organ, 1990). The classic model of social exchange (Blau, 1964) differentiates between economic exchange and social exchange. Economic exchange is based on transactions of clearly specified commodities that are often guided by formal, explicit contracts. Social exchange, by contrast, is based on a relationship in which individuals trust other parties in the relationship to meet future obligations to deliver unspecified social commodities ranging from tangible gifts and acts of service to intangible benefits like friendship and companionship. The value of these gifts or obligations is usually tied to the interpersonal relationship between the exchange partners (Blau, 1964).

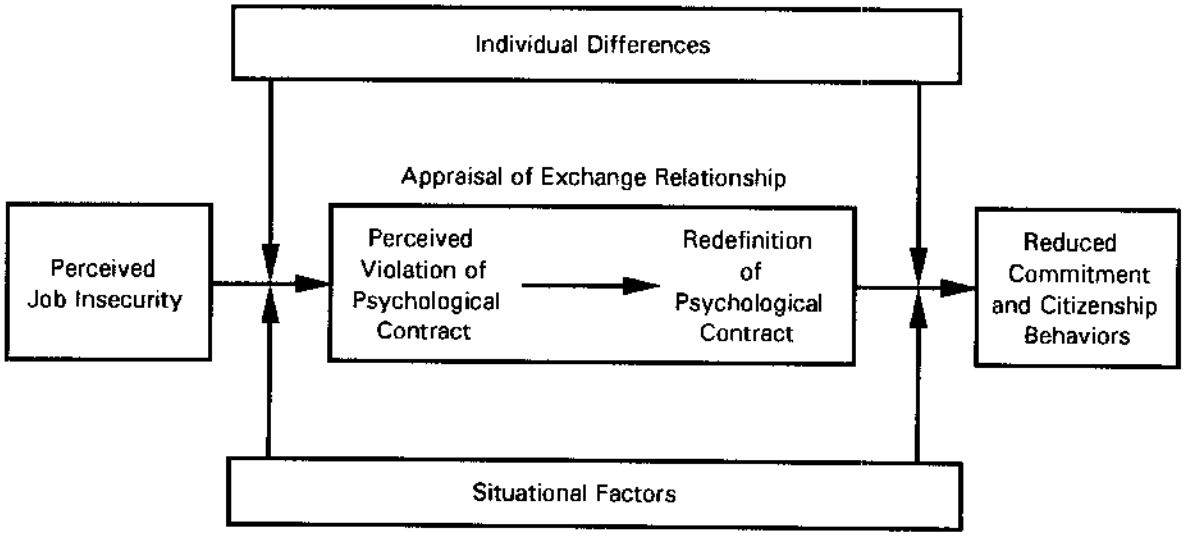
Social exchange is governed by what Gouldner (1960) called the norm of reciprocity. The norm of reciprocity is a standard of conduct inherent in all social exchanges whereby a beneficial act by a donor creates an obligation on behalf of the recipient. According to Blau, if the recipient meets this obligation, he or she is proven to be

trustworthy. Increased trust facilitates greater exchange activity which, in turn, creates a social bond between the parties to the exchange. This social bond eventually leads to commitment between the parties whereby both parties depend exclusively on each other to meet important needs (Blau, 1964). Failure by one party to meet its obligations diminishes trust and commitment and eventually leads to a dissolution of the social bond between the two parties (Blau, 1964; Gouldner, 1960; Holmes, 1981).

A social exchange model of job insecurity is proposed in Figure 1 to account for the direct and moderated effects of job insecurity on commitment and organizational citizenship behaviors. The basic premise of the model is that job insecurity is detrimental to the vital social exchange relationship between employee and employer. Specifically, the model suggests that job insecurity impacts the social exchange outcomes of commitment and organizational citizenship behavior through its effect on psychological contracts.

Figure 1

Social Exchange Model of Job Insecurity



Social exchange theory is closely tied to the literature on psychological contracts. According to Schein (1980), psychological contracts are the depiction of the exchange relationship between the individual and the organization. They represent the set of beliefs held by employees regarding the reciprocal obligations between them and their employer (Rousseau, 1989). Psychological contracts serve the primary function of reducing uncertainty in exchange relationships, which increases predictability and control in the workplace (Shore & Tetrick, 1994). Rousseau and her colleagues (Parks, 1992; Rousseau, 1989; Rousseau & Parks, 1993) distinguish between two forms of psychological contracts--transactional contracts and relational contracts. Transactional contracts involve obligations, like high pay, merit pay, and opportunities for advancement, that are specific and quid pro quo in nature (Rousseau, 1990; Robinson, Kraatz, & Rousseau, 1994; Robinson & Morrison, 1995). These contracts are consistent with Blau's notion of economic exchange. Relational contracts, on the other hand, involve obligations, like job security, training, development, and support, that serve to maintain the employee-employer relationship and are not quid pro quo in nature (Rousseau, 1990; Robinson et al., 1994; Robinson & Morrison, 1995). Relational contracts reflect Blau's notion of social exchange.

Psychological contracts are a powerful determinant of employee attitudes and behavior (Schein, 1980). Employees engaged in relational contracts are likely to be highly committed to the organization (Eisenberger et al., 1986) and to engage in organizational citizenship behaviors that are above and beyond the call of duty (Organ, 1988, 1990; Robinson & Morrison, 1995). Unfortunately, psychological contracts are often violated because organizations fail to meet employee expectations of their obligations (Robinson &

Rousseau, 1994). Anticipated organizational changes like layoffs, mergers, pay cuts, and changes in work structure may trigger a re-evaluation of the psychological contract that leads the employee to conclude that the contract has been violated (Wiesenfeld & Brockner, 1993). Job insecurity, which involves a fear of losing valued job features or even the job itself (Greenhalgh & Rosenblatt, 1984), can be interpreted by employees as a failure of the employer to fulfill its obligations. Therefore, job insecurity should be viewed as a serious violation of the psychological contract among many employees.

Violations of psychological contracts have profound repercussions (Schein, 1980). Cognitive dissonance theory (Festinger, 1957) suggests that employees will redefine the terms of the violated psychological contract. Relational psychological contracts will become more transactional in nature leading committed employees to withdraw and conscientious employees to withhold beneficial extra-role behaviors from the organization (Parks & Kidder, 1994). Organizational citizenship behaviors will be the first to fall victim to violated psychological contracts because they are easily curtailed with little risk to the employee (Organ, 1988). Thus, job insecurity is expected to have a detrimental effect on commitment and organizational citizenship behaviors.

Despite a general tendency toward negative reactions, considerable variation in employee reactions to job insecurity exists (e.g., Greenhalgh, 1979; Brockner 1988; Hartley, 1991; Roskies & Louis-Guerin, 1990; Lim, 1996). This suggests a moderated relationship between job insecurity and the appraisal of psychological contracts and the impact of these appraisals on commitment and organizational citizenship behaviors. Both the ISR model (Katz & Kahn, 1978; Caplan, 1983) and the organizational model

(Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991) recognize the moderating effects of individual differences and situational factors on individual reactions to job insecurity. Therefore, the moderating effects of both individual differences and situational factors are incorporated in the proposed social exchange model of job insecurity.

In summary, the social exchange model specifies that job insecurity, which is viewed by employees as a violation of their psychological contract with the employer, triggers a redefinition of this contract from a relational contract toward one that is more transactional in nature. This diminishes social exchange leading to reduced commitment and organizational citizenship behaviors. Individual differences and situational factors moderate the negative effects of job insecurity on the appraisal of psychological contracts and the impact of these appraisals on commitment and organizational citizenship behaviors.

Purpose of the Research

The purpose of this research is to test the social exchange model of job insecurity proposed in this study. Specifically, this study examines the direct and moderated relationships between job insecurity and the social exchange outcomes of commitment and organizational citizenship behavior. It attempts to answer the following research questions:

1. *Is job insecurity associated with lower levels of organizational commitment and organizational citizenship behavior?*
2. *Do individual differences, like communal orientation and powerlessness, moderate the job insecurity-commitment relationship and the job insecurity-organizational citizenship behavior relationship?*

3. *Do situational factors, comprised of trust in management, procedural fairness, and perceived organizational support, moderate the job insecurity-commitment relationship and the job insecurity-organizational citizenship behavior relationship?*

Significance of the Research

Many consider job insecurity to be the most serious threat facing the modern workforce (e.g., Brockner et al., 1992; Greenhalgh & Sutton, 1991; Mandel, 1996; Sloan, 1996). It is of interest to both scholars and practitioners and has both theoretical and practical significance. This study extends theory by introducing a new model of job insecurity and by investigating previously unexplored relationships in the study of job insecurity. The social exchange view of job insecurity offers a new perspective and is an attractive alternative to dated stress (Jacobson, 1985) and organizational (Greenhalgh & Rosenblatt, 1984) models of job insecurity. Moreover, this study extends theory by exploring two important aspects of employee reactions to job insecurity that have been largely ignored in the literature. First, it provides a systematic examination of the unexplored relationship between job insecurity and a likely behavioral manifestation of job insecurity--organizational citizenship behavior. Secondly, it examines several unexplored individual difference and situational moderators that offer some hope for mitigating the detrimental effects of job insecurity on social exchange outcomes.

For practitioners, this study offers valuable insight into the hidden costs of job insecurity and may provide some hope for mitigating these effects. Previous research, which found no significant relationship between job insecurity and traditional measures of in-role performance, did not consider the more likely consequences of job insecurity on

discretionary, extra-role aspects of performance, like organizational citizenship behaviors (Organ, 1988). This study offers a rare opportunity to evaluate this hidden cost of job insecurity. Significant results may explain why only one third of downsizing companies in a recent American Management Association survey actually reported productivity gains following a layoff (Madrick, 1995).

The moderators tested in this study may offer practitioners some hope for mitigating the debilitating effects of job insecurity in the workplace. Significant results in tests of the moderators specified in the proposed model would indicate that employers can maintain commitment and organizational effectiveness by managing the job insecurity crisis. Such findings may suggest specific actions that employers can use to "secure an insecure workforce," thus building a hedge against the effects of job insecurity. Significant findings regarding individual difference moderators would suggest a need to encourage communal orientation (concern for others) in the organization and a need to empower employees (Conger & Kanungo, 1988; Kanungo, 1992) as a hedge against the adverse affects of job insecurity. Findings in support of the moderating effects of the situational factors examined in this study would suggest that employers may buffer the damaging effects of job insecurity by taking steps to maintain trust, ensure fairness, and demonstrate concern for its employees during times of organizational change.

Definition of Terms

The major constructs involved in the proposed social exchange model of job insecurity to be tested in this study are described in the definitions that follow. Terms are

organized according to their role in the proposed model as independent variables, moderator variables, and dependent variables.

Independent Variable

Job Insecurity: perceived powerlessness to maintain desired continuity in a threatened job situation (Greenhalgh & Rosenblatt, 1984).

Moderator Variables

Communal Orientation: the desire or felt obligation to respond to the needs of others (Clark, Ouellette, Powell, & Milberg, 1987).

Powerlessness: a perceived lack of control over important work-related events that affect one's life (Seeman, 1959).

Trust in Management: the extent to which an employee ascribes good intentions to and has confidence in the words and actions of their employer (Cook & Wall, 1980).

Procedural Fairness: the use of fair procedures to arrive at work outcomes (Folger & Greenberg, 1985; Lind & Tyler, 1988).

Perceived Organizational Support: global beliefs concerning the extent to which the organization values one's contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986).

Dependent Variables

Organizational Commitment: the relative strength of an individual's identification with and involvement in a particular organization (Mowday, Porter, & Steers, 1982).

Organizational Citizenship Behavior: discretionary work behaviors, not recognized by the formal reward system, that promote the effective functioning of the organization (Organ, 1988). Five important forms of organizational citizenship behavior are included in this study.

a) Altruism: engaging in discretionary behaviors that have the effect of helping a specific other person with an organizationally relevant task or problem (Organ, 1988).

b) Courtesy: taking action to prevent problems from occurring by respecting others' needs (Konovsky & Pugh, 1994; Organ, 1988).

c) Sportsmanship: a willingness to accept minor frustrations without complaint (Konovsky & Pugh, 1994; Organ, 1988).

d) Conscientiousness: carrying out role behaviors well beyond the minimum required levels (Organ, 1988).

e) Civic Virtue: responsible participation in the political life of the organization (Graham, 1986, 1991).

Summary and Preview of the Study

The preceding discussion provided an introduction to the study, including a statement of the problem, the theoretical foundation of the study, the purpose and significance of the study, and definition of key terms. Chapter 2 presents a thorough review of the job insecurity literature. In the course of this review, the research model is presented and relevant study hypotheses are developed. The research design and methodology used to carry out the study is described in Chapter 3. The results of the study are then reported in Chapter 4. Finally, Chapter 5 explains study findings, outlines the theoretical and

practical implications of the study, examines study limitations, and explores promising directions for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter provides an extensive review of the literature pertaining to this study. First, a brief historical overview of the job insecurity literature is presented. This section is followed by a review of the major models of job insecurity found in the literature. Empirical evidence pertaining to each model is reviewed. The proposed social exchange view of job insecurity is then presented. The remainder of the chapter reviews research relevant to each of the relationships suggested in the proposed model. The relationship between job insecurity and commitment and organizational citizenship behavior is first considered followed by an assessment of proposed individual difference and situational moderators of the relationship. Research hypotheses are presented for each of these relationships.

History and Scope of Job Insecurity Research

The study of job insecurity can be traced to early research by industrial and organizational psychologists who were concerned primarily with the positive role of job security in the workplace. Early interest in job security dates to the Great Depression when Chant (1932) reported that managers listed steady work as one of the 12 most important factors in any job, and Hersey (1936) reported that the vast majority of both union and non-union workers he studied ranked secure jobs as the second most important workplace issue.

The rise of the human relations school of management following the Hawthorne Studies (Roethlisberger & Dickson, 1946) sparked renewed interest in the satisfaction and motivation of workers in the 1940's and 1950's. Maslow's (1954) classic need hierarchy viewed job security as a safety need that begins to motivate people once basic physiological needs are satisfied. Safety needs, according to Maslow (1954), include "the common preference for a job with tenure and protection" (p. 87). McGregor (1960) confirmed the importance of job security as a component of employees' need for safety and Super (1957) viewed job security as "one of the dominant needs and one of the principal reasons for working" (p. 13).

Over the next two decades, job security was viewed as an extrinsic hygiene factor, a facet of job satisfaction, and a job characteristic. Herzberg's two-factor theory (Herzberg, Mausner, & Snyderman, 1959; Herzberg, 1966) viewed job security, not as a motivator, but as a hygiene factor which, when absent, could lead to job dissatisfaction. Herzberg's content analysis of interview data collected from a sample of 200 accountants and engineers suggested that job security was the most important hygiene factor (Herzberg et al., 1959).

Job security was viewed as a distinct facet of job satisfaction in Hackman and Oldham's (1974) Job Diagnostic Survey. Satisfaction with job security was assessed along with four other facets of job satisfaction--pay, social, supervision, and growth. Finally, job security was viewed as a job characteristic by Jurgensen (1978) who conducted a 30-year investigation of job applicants from 1946 to 1975. Breaking the data down into six five-year intervals, Jurgensen found that job security ranked first in importance among 11 job characteristics during the first four intervals (1946 to 1965) and second only to the type of

work in the last two intervals (1966 to 1975). Further research by Oldham and his colleagues (Oldham et al., 1982; Oldham, Kulik, Ambrose, Stepina, & Brand, 1986) evaluated job security as both a job facet (e.g., pay, complexity, supervisory behavior) and as a form of job satisfaction. Job security emerged as the best predictor of performance among the job facets studied (Oldham et al., 1986).

Early interest in the positive aspects of job security has been replaced by a contemporary focus on the negative consequences of job insecurity, which is defined as "perceived powerlessness to maintain desired continuity in a threatened job situation" (Greenhalgh & Rosenblatt, 1984, p. 438). The potential loss of continuity in the job situation may refer to loss of the job itself or loss of valued job features (Greenhalgh & Rosenblatt, 1984).

Job insecurity is generally viewed as a negative experience with adverse human and organizational consequences (Jacobson & Hartley, 1991). Social psychologists and stress researchers are concerned with the human consequences of job insecurity as a source of stress, a job stressor. According to the general stress model, job insecurity generates stress that impacts the physical and psychological health of employees (Caplan, et al., 1975; Katz & Kahn, 1978; Jacobson, 1985). Organizational scientists, on the other hand, are concerned with the organizational outcomes of job insecurity. The organizational model of job insecurity focuses on individual reactions to job insecurity (e.g., propensity to leave, reduced effort, and resistance to change) that are closely linked to organizational effectiveness (Greenhalgh, 1983, 1984; Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991). Thus, contemporary research has diverged into two dominant models of job

insecurity--the stress model and the organizational model of job insecurity. Research pertaining to each of these views is presented in the following sections. A social exchange view of job insecurity is then introduced.

The Stress Model of Job Insecurity

The stress model of job insecurity recognizes job insecurity as a source of stress (a job stressor) that impacts the physical and psychological health of employees. It is primarily concerned with the physiological, psychological, and behavioral strains job insecurity generates among employees (e.g., Caplan et al., 1975; Katz & Kahn, 1978; Jacobson, 1985). Job insecurity can be a stressful experience for employees. Anticipation of job loss generates intense personal distress and can produce a grief reaction similar to that of an anticipated death (Greenhalgh, 1979; Strange, 1977). In fact, concern about future job loss may be as traumatic for employees as actual job loss (Cobb & Kasl, 1977; Dijkhuizen, 1980; Dooley, Rook, & Catalano, 1987; Roskies & Louis-Guerin, 1990). Stress researchers have identified job insecurity as one of the most important job stressors in the workplace (Abramis, 1994; Ashford et al., 1989; Caplan et al., 1975; Dijkhuizen, 1980; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964).

Stress is generally considered a process whereby characteristics of the workplace or the job itself cause employees to feel uncomfortable or experience ill health (Beehr, 1990). Two key components of this process are stressors and strains. Stressors are any characteristics of the work environment that give rise to stress while strains refer to the discomfort or ill health resulting from stress (Saal & Knight, 1995). Specifically, strains

refer to any deviation from normal physiological, psychological, or behavioral responses in an individual (Caplan et al., 1975).

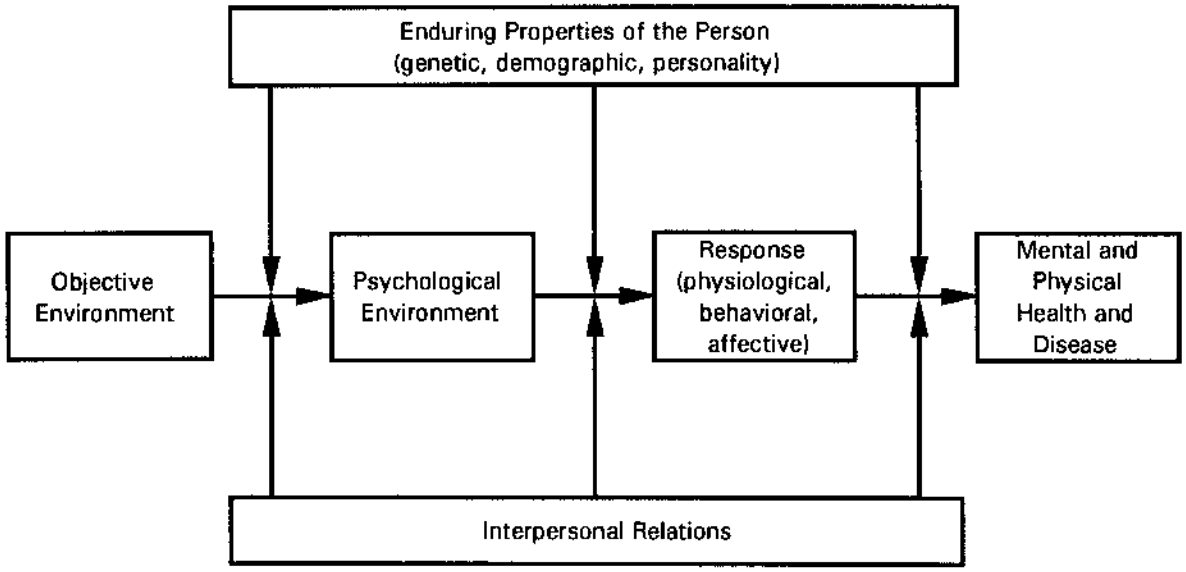
Extensive reviews of the stress literature recognize the ISR model (Katz & Kahn, 1978) as the dominant framework for understanding the process of work stress (Ganster & Schaubroeck, 1991; Kahn & Byosiere, 1992). The ISR model, also referred to as the Person-Environment (P-E) Fit model, is the culmination of over 20 years of stress research conducted by the Institute for Social Research at the University of Michigan (Caplan et al., 1975; Caplan 1983; French, Caplan, & Harrison, 1982; French & Kahn, 1962; French, Rogers, & Cobb, 1974; Katz & Kahn, 1978; Kahn et al., 1964). The general form of the ISR model (Katz & Kahn, 1978), shown in Figure 2, emphasizes several principles that have "become agreed upon doctrine, if not practice, in research on organizational stress" (Kahn & Byosiere, 1992, p. 590). These principles suggest a causal sequence whereby objective characteristics of the work environment (stressors) impact the psychological environment experienced by the individual (perceived stress) which, in turn, leads to deviations from normal physiological, behavioral, and affective responses (strains) ultimately affecting long-term mental and physical health and disease (Caplan et al., 1975; Katz & Kahn, 1978).

The major linkages in this causal sequence are moderated by enduring properties of the person (individual differences) and the nature of the social environment (interpersonal relations). The degree of fit between the individual and the work environment determines the stressfulness or strain that is experienced. Two types of fit are specified by the model: (1) the extent to which the person's skills and abilities meet the demands of the job, and (2) the extent to which the person's needs or preferences are supplied in the work

environment. Misfit of either kind increases stress and strain (Caplan et al., 1975; Katz & Kahn, 1978).

Figure 2

The ISR Model of Work Stress



Source: Katz, D., & Kahn, R. L. (1978). The social psychology of organizations (2nd ed.). New York: Wiley.

The ISR model is consistent with Lazarus' theory of psychological stress (Lazarus, 1966; Lazarus & Folkman, 1984) which states that the occurrence of psychological stress depends on the individual's evaluation of the situation as threatening, regardless of the objective threat. When the nature of the threat is clear, objective danger will be viewed as stressful, but when it is unclear or ambiguous, subjective appraisal, not the situation per se, determines whether the situation is considered stressful or not (Lazarus & Folkman, 1984). The threat of job loss is often ambiguous because management's plans for job cuts are usually shrouded in secrecy (Greenhalgh, 1984). As a result, subjective or perceived job

insecurity is more strongly related to stress outcomes than objective indicators of job insecurity (Caplan et al., 1975; Roskies & Louis-Guerin, 1990; Roskies, Louis-Guerin, Fournier, 1993). For these reasons, most studies of job insecurity rely on measures of perceived job insecurity (e.g., Ashford et al., 1989; Caplan et al., 1975; Kuhnert & Lahey, 1988; Rosenblatt & Ruvio, 1996).

The most extensive test of the ISR model was conducted in a University of Michigan study of over 2,000 workers in 23 occupations (Caplan et al., 1975) that confirmed most of the model's predictions and demonstrated the importance of the person-environment fit as a predictor of strain outcomes. Harrison's (1985) review of the stress literature, which was generally supportive of the model, acknowledged its usefulness and predicted its continued development and application. Edwards and Cooper (1990), in their review of the stress literature, recognized the utility of the ISR model but questioned the validity of empirical research based on the model. The real value of this model, according to Ganster and Schaubroeck (1991), "lies in its specification of the process by which occupational experiences become stressful" (p. 241). Thus, the ISR model serves as a useful framework to guide research concerning the diverse aspects of workers' reactions to job insecurity (Greenhalgh & Jick, 1989).

Due to the highly emotional and sensitive nature of the topic, few studies have investigated the stress-based outcomes of job insecurity (Jacobson & Hartley, 1991). Those studies that do appear in the literature generally accept the basic tenets of the ISR model, that job insecurity is a subjective experience arising from an individual's cognitive appraisal of objective threats of job loss and that this appraisal and individual reactions to it are

moderated by individual differences and elements of the social environment (e.g., Caplan et al., 1975; Greenhalgh & Jick, 1989; Klandermans, et al., 1991; Roskies & Louis-Guerin, 1990; Roskies et al., 1993).

Stress-Based Outcomes of Job Insecurity

In the ISR model, job insecurity is considered a job stressor. It is expected to produce stress or tension leading to deviations from normal physiological, psychological, and behavioral responses in the individual, called strains (Caplan et al., 1975; Katz & Kahn, 1978). Research studies of the stress-based outcomes of job insecurity can be organized in terms of the strains it produces. This review evaluates the physiological, psychological, and behavioral strains associated with job insecurity.

Physiological Strains

Physiological strains refer to any deviation from what can be considered to be normal physical health defined by current medical knowledge (Abramis, 1994; Caplan et al., 1975). Few empirical studies have investigated the effects of job insecurity on physical health. Most are correlational studies that associate self-report measures of perceived job insecurity with self-report checklists of somatic (bodily) health complaints.

Findings of two major studies conducted in relatively stable organizations where there was little imminent threat of job loss did not support a significant relationship between job insecurity and physical health. The first was an extensive study of the relationship between stress and worker health carried out by the Institute for Social Research at the University of Michigan in the early 1970's (Caplan et al., 1975). This large-scale study of over 2,000 men in 23 occupations across 67 organizations found no significant relationship

between perceived job insecurity and somatic health complaints. Moreover, perceived job insecurity was not significantly related to measurements of pulse, blood pressure, cholesterol, and various hormones in a subsample of 390 workers drawn from the overall sample. Similar results were obtained in another correlational study conducted by Ashford et al. (1989) in which perceived job insecurity was not significantly related to somatic health complaints in a sample of 183 industrial hygienists, auditors, and nurses. Overall, these studies suggest that job insecurity is not related to physical health in situations where the threat of major job cuts is minimal.

The opposite pattern emerged in studies involving declining organizations where the threat of job loss was more acute. In a study of a plant closing by Kasl, Gore, and Cobb (1975), the mean number of days when physical symptoms were experienced was higher among employees who anticipated losing their jobs than for those who felt their jobs were secure. A similar study of plant closings in Michigan (Cobb & Kasl, 1977) reported higher incidence of coronary-prone symptoms (i.e., symptoms indicating higher risk of heart attack) among workers in plants scheduled for closing than for those in non-threatened plants. Studies of employees in a merged hospital system offered consistent evidence that job insecurity is associated with increased somatic health complaints (Jick, 1979; Greenhalgh & Jick, 1989). Further, a well-controlled study, conducted by Matthews, Cottington, Talbott, Kuller, and Siegel (1987) found that self-reports of job insecurity were correlated with higher diastolic blood pressure for 241 blue-collar factory workers.

Finally, the strongest evidence supporting a relationship between job insecurity and reduced physical health was provided by Heaney, Israel, and House (1994) who conducted

an extensive longitudinal study of the physical health effects resulting from chronic job insecurity among a sample of 207 automobile workers. Those who experienced high levels of job insecurity over a 14-month period reported significantly more physical symptoms (e.g., breathing difficulty, racing heart, frequent colds, eye strain, and headaches) than those who did not. Overall, job insecurity is associated with reduced physical health in situations where an acute threat of job loss exists.

Psychological Strains

Psychological strains refer to any deviation from what can be considered to be normal psychological health (Abramis, 1994; Caplan et al., 1975). Stressful situations often result in reduced psychological health which is characterized by dissatisfaction and poor psychological adjustment (Klandermans, et al., 1991; Kuhnert & Vance, 1992; Warr, 1987). The stress literature reveals a consistent relationship between job insecurity and job dissatisfaction. The previously described study by Caplan et al. (1975) found a significant positive correlation ($r = .39$) between job insecurity and dissatisfaction. Early studies by Jick (1979) and Dijkhuizen (1980) reported a negative relationship between job insecurity and job satisfaction. The latter study assumed job insecurity was high among employees whose jobs were at risk (objective job insecurity) without actually measuring perceived job insecurity.

Greenhalgh and Jick (1989) reported a strong negative correlation between insecurity regarding the future of the job task and job satisfaction ($r = -.49$). A similar relationship was reported in Burke's (1991) study of job insecurity among 72 stock brokers and Ashford et al.'s (1989) study of job insecurity among 183 industrial hygienists, auditors,

and nurses. More recent studies, like Heaney, Israel, and House's (1994) study of automobile workers, also support a negative relationship between job insecurity and job satisfaction. In-home structured interviews of 281 employees in diverse occupations (Abramis, 1994) revealed a modest relationship between job insecurity and job dissatisfaction ($r = .22$) and a recent mail survey of 306 working MBA graduates, conducted by Lim (1996), revealed strong positive correlations between job insecurity and both life and job dissatisfaction.

International studies provide considerable additional support for the aversive effects of job insecurity on satisfaction. Large studies in Britain and the Netherlands confirm a moderate negative relationship between job insecurity and job satisfaction (Van Vuuren, Klandermans, Jacobson, & Hartley, 1991). Moreover, a large-scale study of over 8,000 employees in 12 European high-tech organizations reported high negative correlations between job insecurity and satisfaction with the company (Borg & Elizur, 1992). This relationship was considerably stronger in declining organizations where the threat of job loss was more salient. Overall, there is considerable empirical evidence that feelings of job insecurity are detrimental to employee job satisfaction.

The stress literature also provides considerable evidence for the adverse effects of job insecurity on psychological adjustment. Classic stress studies reported that job insecurity is associated with boredom and depression (Caplan et al., 1975) and with anxiety, depression, and irritation (Dijkhuizen, 1980). Greenhalgh and Jick (1989) documented evidence of a significant relationship between insecurity with the job task and felt strain ($r = .41$). Moreover, a stream of research conducted by Kuhnert and his colleagues

revealed consistent evidence of a significant relationship between job insecurity and poor psychological adjustment among manufacturing and government workers (Kuhnert & Palmer, 1991; Kuhnert, Sims, & Lahey, 1989; Vance & Kuhnert, 1988). Kuhnert and Vance (1992) found that negative reactions to job insecurity, in terms of poor psychological adjustment, were stronger among blue collar workers and young workers.

Studies undertaken by Roskies and her colleagues reported a significant relationship between job insecurity and psychological distress among managers (Roskies & Louis-Guerin, 1990) and airlines reservation clerks (Roskies, et al., 1993). Another stream of research by Catalano and his associates revealed that insecure employees experience greater psychological distress and depression (Dooley, Rook, & Catalano, 1987) and are more likely to seek help for psychological problems (Catalano, Rook, & Dooley, 1986) than secure employees. International studies in Israel and the Netherlands indicate that job insecurity is related to depression (Van Vuuren et al., 1991). Overall, the literature offers extensive support for the notion that job insecurity is associated with poor psychological adjustment. These findings in conjunction with those reported for job (dis)satisfaction offer considerable support for the aversive relationship between job insecurity and psychological health.

Behavioral Strains

Behavioral strains are any deviation from normal behavioral responses in an individual (Caplan et al., 1975). Few studies have dealt with the relationship between job insecurity and behavioral strains. A notable exception is Caplan et al.'s (1975) classic study that investigated the relationship between a variety of job stressors, including job insecurity,

and excessive cigarette smoking, coffee and cola consumption, eating (obesity), and dispensary visits. Job insecurity was not significantly related to any of these behavioral strains. Similar conclusions were reached in Burke's (1991) study of the job insecurity among stock brokers where medication use and abnormal changes in lifestyle were not related to job insecurity. One of the few studies indicating support for the job insecurity-behavioral strain relationship was Lim's (1996) mail survey of 306 MBA graduates. In this study, self-report measures of proactive job search and noncompliant behaviors were significantly related to job insecurity ($r = .35$ and .34, respectively). Thus, the stress literature offers only mixed support for the job insecurity-behavioral strains relationship. Other outcomes, like poor performance, reduced work effort, resistance to change, and turnover, are not included as behavioral strains in this section because they are generally considered to be organizational outcomes of job insecurity (Beehr & Newman, 1978; Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991). These outcomes are discussed in conjunction with the organizational model of job insecurity.

Summary of Stress-Based Outcomes of Job Insecurity

A summary of research studies concerning the stress-based outcomes of job insecurity is presented in Table 1. Overall, the stress literature offers considerable evidence to support the ISR model prediction that job insecurity is associated with physiological and psychological strains. Support for a job insecurity-behavioral strain relationship, however, is limited. Thus, job insecurity is generally viewed as an important job stressor that is associated with reduced physiological and psychological health.

Table 1

Summary of Stress-Based Outcomes of Job Insecurity

Source	Physiological Strain	Psychological Strain	Behavioral Strain
Abramis, 1994		Dissatisfaction, Anxiety, Depression, and Anger*	
Ashford, Lee, & Bobko, 1989	Health Complaints	Job Satisfaction*	
Borg & Elizur, 1992		Satisfaction*	
Brockner, et al., 1993		Worry*	
Burke, 1991		Job/Life Satisfaction and Psychological Distress*	Medicine Use and Abnormal Lifestyle
Caplan et al., 1975	Pulse, Blood Pressure, Cholesterol, Hormones	Dissatisfaction, Boredom, Depression*	Excessive Smoking, Drinking, and Eating
Catalano, Rook, & Dooley, 1986		Seeking Psychological Help*	
Cobb & Kasl, 1977	Coronary-Prone Symptoms*		
Dijkhuizen, 1980		Satisfaction, Anxiety, Depression, Irritation*	
Dooley, Rook, & Catalano, 1987		Psychological Distress and Depression*	
Greenhalgh & Jick, 1989	Health Complaints*	Job Satisfaction, Strain, Psychological Distress*	
Heaney, Israel, & House, 1994	Physical Symptoms*	Job Satisfaction*	
Jick, 1979	Health Complaints*	Job Satisfaction*	
Kasl, Gore, Cobb, 1975	Physical Symptoms*		
Kuhnert & Palmer, 1991		Psychological Adjustment*	
Kuhnert, Sims, Lahey, 1989		Psychological Adjustment*	
Kuhnert & Vance, 1992		Psychological Adjustment*	
Lim, 1996		Job/Life Dissatisfaction*	Proactive Job Search, Noncompliant Behavior*
Matthews et al., 1987	Diastolic Blood Pressure*		
Roskies & Louis-Guerin, 1990		Psychological Distress*	
Roskies, Louis--Guerin, & Fournier, 1993		Psychological Distress*	
VanVuuren, Klandermans, Hartley, 1991		Job Satisfaction and Depression*	
Vance & Kuhnert, 1988		Psychological Adjustment*	

* Indicates support for relationship(s)

The Organizational Model of Job Insecurity

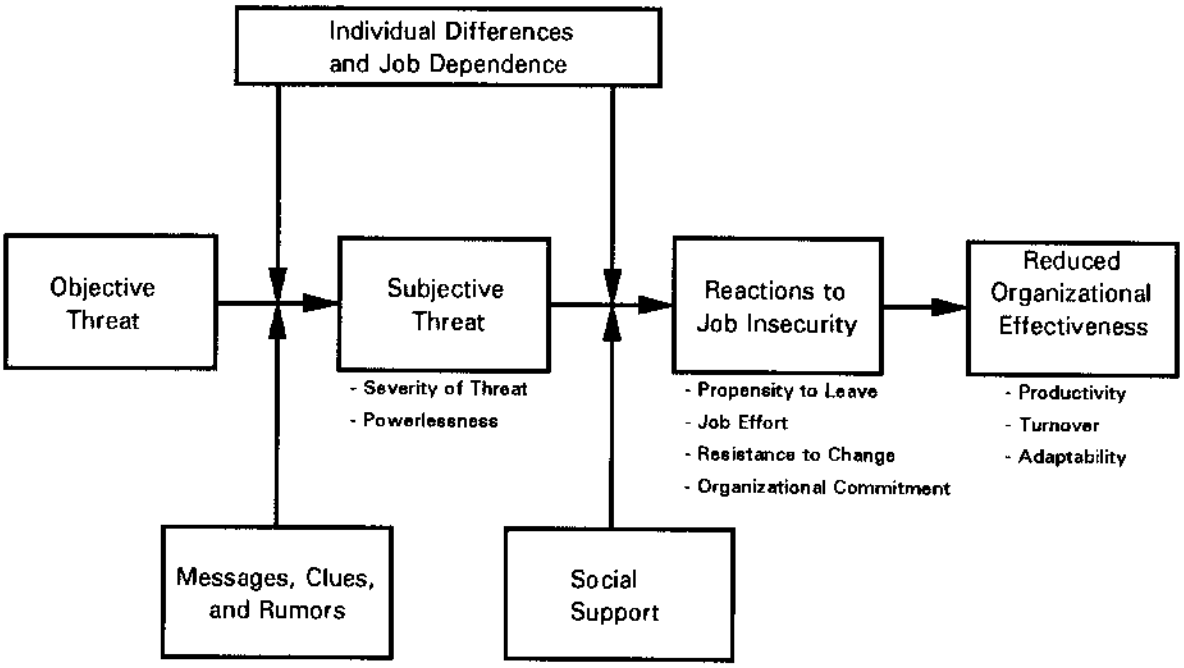
Unlike social psychologists and stress researchers, who are concerned primarily with the effects of job insecurity on employee health and well-being, organizational researchers are more focused on the organizational outcomes of job insecurity. The only comprehensive model of the organizational consequences of job insecurity was developed by Greenhalgh and Rosenblatt (1984). The organizational model of job insecurity, shown in Figure 3, focuses on individual reactions to job insecurity that are closely linked to organizational effectiveness. According to the model, the threat of losing a secure job, an organizational inducement (March & Simon, 1958), is viewed as a violation of the psychological contract between the employee and employer (Schein, 1980). Such a violation creates an imbalance in the exchange relationship (Mowday et al., 1982), which employees attempt to restore by reducing their willingness to participate (searching for a new job or quitting) or by reducing their contributions if exit is constrained (Barnard, 1938). Therefore, the model specifies that employees respond to job insecurity in terms of propensity to leave, job effort and performance, and resistance to change (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991).

The organizational model, like the stress model, specifies that individual reactions to job insecurity depend upon the individual's evaluation of the situation as threatening, regardless of the objective threat (Lazarus & Folkman, 1984; Greenhalgh & Rosenblatt, 1984). Organizational messages and clues, rumors, and individual differences impact the individual's evaluation of objective information concerning job continuity (Greenhalgh & Rosenblatt, 1984). Subjective threat or perceived job insecurity is multifaceted, consisting

of the severity of the threat to job continuity and powerlessness to counteract the threat. Severity of the threat depends on the scope and importance of the potential loss and the perceived probability of its occurrence. The scope of the threat ranges from loss of the job itself to loss of valued job features. Powerlessness occurs when employees believe they have no means to avoid or protect themselves from a threat to job continuity. This sense of powerlessness exacerbates the experienced threat (Greenhalgh & Rosenblatt, 1984).

Figure 3

The Organizational Model of Job Insecurity



Source: Greenhalgh, L., & Rosenblatt, Z. (1984). Job Insecurity: Toward Conceptual Clarity. Academy of Management Review, 9, 441.

Individual reactions to the subjective threat, according to the model, are moderated by individual differences (e.g., locus of control, work orientation, and need for security), the extent to which one is dependent on the job, and the level of social support in the workplace. Individual reactions are manifest in terms of propensity to leave, job effort, resistance to change, and organizational commitment. These individual reactions are, in turn, linked to organizational effectiveness, in terms of productivity, turnover, and adaptability (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991).

Organizational Outcomes of Job Insecurity

The organizational model of job insecurity serves as a useful framework for reviewing empirical research regarding the organizational outcomes of job insecurity. Empirical research is reviewed in this section according to the four major individual reactions to job insecurity specified in the organizational model--propensity to leave, job effort and performance, resistance to change, and organizational commitment. Research involving trust, which is not included in the model, is also reviewed because recent studies have linked job insecurity to reduced trust in management.

Propensity to Leave

The first comprehensive studies of individual reactions to job insecurity were undertaken by Greenhalgh (1979, 1982) and Jick (1979). Using different measures of job insecurity and propensity to leave and different samples from the same downsizing hospital system, both researchers reported a significant positive correlation between job insecurity and propensity to leave. Additional research in the same organization revealed that more valuable workers, those with more marketable skills, were the first to leave (Greenhalgh &

Jick, 1979). Sutton's (1983) extensive case studies of eight dying organizations confirmed this pattern. Finally, a more recent study of layoffs in a merged hospital system by Greenhalgh and Jick (1989) indicated that ambiguity concerning the future of the employee's specific tasks (job features) was related to propensity to leave while ambiguity concerning the future of the organization was not. This finding underscores the importance of perceived threats to job features as an important component of job insecurity.

Longitudinal studies of employee reactions to job insecurity also supported a positive relationship between job insecurity and propensity to leave. A study of 120 employees before and after surviving a layoff in a manufacturing plant revealed that job insecurity is indirectly associated with intent to withdraw through its impact on job satisfaction (Davy, Kinicki, & Scheck, 1991). A longitudinal field experiment conducted by Schweiger and Lee (1993) involved six manufacturing plants, some of which were involved in a merger. Employees in the acquired plants experienced greater job insecurity than those in the acquiring plants, and job insecurity was positively associated with intent to quit.

Additional support for the relationship between job insecurity and intent to quit was provided by Ashford, Lee, and Bobko (1989), who developed and tested a comprehensive, multidimensional measure of job insecurity among a sample of 183 industrial hygienists, auditors, and nurses. This multiplicative measure of job insecurity was strongly correlated with intent to quit ($r = .46$). Moreover, Borg and Elizur (1992) reported a moderate positive correlation between job insecurity and intent to quit in a large study of over 8,000 workers in 12 European high-technology organizations.

Finally, two new studies explored the job insecurity-propensity to leave relationship. First, Lim (1996) found a moderate association between job insecurity and self reports of job search ($r = .35$) in a mail survey of 306 MBA graduates. A second study by Rosenblatt and Ruvio (1996) tested this relationship among Israeli school teachers using a modified version of Ashford et al.'s (1989) job insecurity scale. Again, job insecurity was moderately associated with intent to quit.

Overall, these findings offer strong, consistent support for the relationship between job insecurity and constructs like propensity to leave and intent to quit. Consistent support was obtained in a variety of settings ranging from schools and hospitals to manufacturing plants using a multitude of research methodologies ranging from mail surveys to case studies and longitudinal field experiments.

Job Effort and Performance

According to the organizational model, job insecurity creates an imbalance in the exchange relationship between employee and employer that employees attempt to restore by reducing their contributions to the organization (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991). Since job effort is the most basic contribution employees bring to the exchange relationship, the organizational model predicts that they will respond to job insecurity with reduced work effort (Greenhalgh, 1983). Despite the intuitive appeal of this argument, empirical evidence linking job insecurity to job effort is mixed.

Several empirical investigations support the notion that job insecurity is associated with reduced job effort and performance. Early studies of a downsizing hospital system by Greenhalgh (1979) and Jick (1979) documented a significant negative correlation between

job insecurity and work effort. Hanlon's (1979) interviews of city employees during New York City's financial crisis revealed that an incapacitating fear of job loss among these workers led to a general decline in productivity during the crisis. Canadian researchers found that job insecurity was associated with decreased work effort among a sample of 1,291 managers in relatively stable companies (Roskies, & Louis-Guerin, 1990). Finally, two recent studies documented a negative relationship between job insecurity and self-reported performance. Abramis' (1994) structured in-home interviews of 281 workers in the Detroit area revealed significant negative correlations between job insecurity and self-reported technical and social performance ($r = -.25$ and $-.19$, respectively). A similar relationship was found using self-report measures of performance in Rosenblatt and Ruvio's (1996) study of Israeli teachers.

Unfortunately, several important studies refute these findings. Sutton's (1987) case studies of workers facing impending job loss actually documented an increase in work effort and productivity following the announcement of plant closings. Faced with a complete lack of job security, these workers increased effort to earn extra cash and a good recommendation in preparation for job loss (Sutton, 1987). Other studies found no significant relationship between job insecurity and job effort and performance. A field experiment of R&D researchers conducted by Hall and Mansfield (1971) found no significant differences in self-reported work effort or performance between the control group (those with high job security) and the experimental group (those with low job security). Further, Ashford et al. (1989) found no significant relationship between their measure of perceived job insecurity and supervisory performance ratings. International

studies of the relationship produced contradictory results. A Dutch study found no relationship between job insecurity and work effort, while an Israeli study found that those with higher levels of job insecurity actually increased their work effort (Van Vuuren et al., 1991).

An enlightening stream of research by Brockner and his colleagues offers a useful explanation for these equivocal findings. Brockner and his associates (Brockner, Davy, & Carter, 1985; Brockner, Grover, Reed, Dewitt, & O'Malley, 1987) conducted a series of laboratory experiments designed to simulate a layoff among college students performing a paid proofreading task. Performance rose among layoff survivors--those who remained after one of their coworkers was laid off. The performance boost was greatest among survivors with low self-esteem. This performance boost did not occur when layoff victims were treated unfairly. Finally, a large field study of employees working in 300 stores in a downsizing retail chain revealed an inverted-U relationship between perceived job insecurity and work effort (Brockner, Grover, Reed, and Dewitt, 1992). Moderate levels of job insecurity were associated with high work effort while high or low levels of job insecurity were associated with low work effort. This curvilinear relationship along with the moderating effects of self-esteem and fairness revealed in laboratory experiments may explain the equivocal findings of investigations of the job insecurity-work effort relationship.

Resistance to Change

Job insecurity is often prompted by anticipation of major organizational change (Greenhalgh & Sutton, 1991). The threat-rigidity thesis (Staw, Sandelands, & Dutton,

1981) suggests that change, which constitutes a threat to workers, will result in a natural tendency toward rigidity or resistance to change. Thus, the organizational model predicts a positive relationship between job insecurity and resistance to change (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991).

Scant research evidence offers some support for a positive relationship between job insecurity and resistance to change. A national survey carried out by Margolis, Kroes, & Quinn (1974) revealed that workers with high levels of job insecurity were less supportive of organizational change in terms of their reduced participation in employee suggestion programs. Greenhalgh's (1979) classic study of employees in a declining hospital system documented a positive relationship between job insecurity and resistance to change. A laboratory study conducted in the same year by Fox and Staw (1979) reached a similar conclusion. Job insecurity was associated with greater commitment to a previously chosen course of action (rigidity). A similar finding was reported in D'Aunno & Sutton's (1988) study of 156 drug-abuse treatment centers. Reduced funding was associated with greater reliance on bureaucratic red tape and standardized jobs.

Two new studies offer additional support for the predicted relationship. Lim (1996) found that job insecurity was positively correlated with self reports of noncompliant job behaviors among MBA graduates ($r = .34$), and Rosenblatt and Ruvio's (1996) study of Israeli school teachers confirmed a positive relationship between job insecurity and resistance to change. Overall, evidence from the few studies investigating the job insecurity-resistance to change relationship is supportive of the organizational model.

Organizational Commitment

The organizational model states that perceived job insecurity may lead to psychological withdrawal or reduced commitment to the organization (Greenhalgh, 1983; Greenhalgh & Sutton, 1991). Therefore, the model predicts a negative relationship between job insecurity and organizational commitment. Empirical research consistently supports this prediction.

Early investigations were carried out by Greenhalgh (1979) and Jick (1979) among employees in a downsizing hospital system. Both studies found a significant negative correlation between job insecurity and organizational commitment. Another early study by Hanlon (1979), who studied city employees during New York City's financial crisis, revealed that fear of job loss is associated with diminished organizational commitment.

A large study of store clerks and managers employed in a downsizing national retail chain conducted by Brockner et al. (1987) demonstrated a significant drop in organizational commitment relative to the pre-layoff period among employees who remained after a layoff. (survivors). These findings can be construed as evidence of a negative relationship between job insecurity and organizational commitment if one assumes that layoff survivors experience elevated job insecurity following a layoff. This assumption is problematic because survivor reactions to layoffs are quite variable (Brockner, 1988), and job insecurity was not measured in the study.

Studies involving elaborate measures of perceived job insecurity also supported the predicted relationship. Ashford et al. (1989) found a strong negative correlation between job insecurity assessed with their extensive Job Insecurity Scale and organizational

commitment (r = -.47). An even stronger relationship was reported between job security and organizational commitment (r = .51) in Kuhnert and Vance's (1992) study of 430 employees in a troubled manufacturing organization. Finally, Rosenblatt and Ruvio's (1996) study of Israeli school teachers confirmed a negative relationship between job insecurity and organizational commitment.

A series of longitudinal studies provided further support for the relationship. Questionnaires administered to employees of an acquired manufacturing plant at three month intervals during the year following acquisition indicated a declining trend in commitment (Davy, Kinicki, Scheck, & Kilroy, 1989). Another longitudinal study by Davy et al. (1991) offered a rare glimpse of employees' attitudes before and after a layoff in a manufacturing plant. Path analysis revealed that job insecurity was indirectly related to decreased organizational commitment. Finally, Schweiger and Lee's (1993) longitudinal field experiment involving employees from six manufacturing plants confirmed a significant negative relationship between a measure of job insecurity and organizational commitment.

European studies also supported the predicted relationship. A British study of 137 workers who had survived several waves of layoffs indicated a strong negative relationship between job insecurity and organizational commitment (Hartley, 1991). Dutch studies of employees in three downsizing organizations (an engineering company, a shipyard, and a manufacturing plant) offered consistent support for a moderate negative relationship between these variables (Van Vuuren et al., 1991). Lastly, Borg and Elizur's (1992) extensive study of European workers revealed a moderate negative relationship between

these variables. Follow-up surveys of firms implementing layoffs revealed much stronger negative relationships.

Overall, organizational commitment is the most popular dependent variable in studies of the organizational outcomes of job insecurity. The literature offers strong support for a moderate to strong negative relationship between job insecurity and organizational commitment in diverse settings, using a variety of measures and methodologies.

Trust

The organizational model generally predicts that job insecurity will be associated with negative work attitudes (Greenhalgh & Sutton, 1991). While not explicitly included in the organizational model, distrust toward management or the organization can be expected among employees who feel their employer has violated its obligation to provide a secure job. Nevertheless, the issue of trust has attracted little attention among American job insecurity researchers. Two notable exceptions are Ashford et al.'s (1989) study of 183 industrial hygienists, auditors, and nurses, which revealed a strong negative correlation between job insecurity and trust in the organization ($r = -.51$) and Schweiger and Lee's (1993) longitudinal field experiment that produced similar results using the same measure of trust.

International researchers have demonstrated considerably more interest in this relationship. Canadian researchers documented a negative correlation between managers' perceptions of job insecurity and trust in the organization (Roskies & Louis-Guerin, 1990). Hartley's (1991) case study of a downsizing British industrial vehicle plant revealed a

moderate negative relationship between job insecurity and trust in management. Finally, Borg and Elizur's (1992) study of over 8,000 employees in 12 European high-tech organizations documented strong negative correlations between job insecurity and trust in top management. Overall, limited empirical evidence offers consistent support for the detrimental effects of job insecurity on employee trust in management and the organization.

Summary of Organizational Outcomes of Job Insecurity

A summary of research concerning the organizational outcomes of job insecurity is presented in Table 2. Empirical research is generally supportive of the predictions of the organizational model. Predictions regarding propensity to leave are well supported. Evidence regarding job effort, however, is mixed suggesting a curvilinear relationship between job insecurity and job effort (Brockner et al., 1992). Scant research offered consistent support for the detrimental effects of job insecurity on resistance to change and trust.

The literature reserves its strongest support for a negative relationship between job insecurity and commitment. Organizational commitment is the most popular dependent variable in studies of job insecurity. Consistent evidence in support of a negative relationship between job insecurity and organizational commitment is found in numerous studies (e.g., Greenhalgh, 1979; Hanlon, 1979; Brockner et al., 1987; Ashford et al., 1989; Borg & Elizur, 1992; Van Vuuren et al., 1991; Hartley, 1991). Thus, research suggests that reduced organizational attachment may be the most salient reaction to job insecurity.

Table 2

Summary of Organizational Outcomes of Job Insecurity

Source	Propensity to Leave	Job Effort and Performance	Resistance to Change	Commitment	Trust
Abramis, 1994		X*			
Ashford, Lee, & Bobko, 1989	X*	X		X*	X*
Borg & Elizur, 1992	X*			X*	X*
Brockner, Davy, & Carter, 1985		X			
Brockner, Grover, Reed, & Dewitt, 1992		X			
Brockner, Grover, Reed, Dewitt, & O'Malley, 1987		X		X*	
Davy, Kinicki, & Scheck, 1991	X*			X*	
Davy, Kinicki, Scheck, & Kilroy, 1989				X*	
D' Aunno & Sutton, 1988			X*		
Fox & Staw, 1979			X*		
Greenhalgh, 1979, 1982	X*	X*	X*	X*	
Greenhalgh & Jick, 1979	X*				
Greenhalgh & Jick, 1989	X*				
Hall & Mansfield, 1971		X			
Hanlon, 1979		X*		X*	
Hartley, 1991				X*	X*
Jick, 1979	X*	X*		X*	
Kuhnert & Vance, 1992				X*	
Lim, 1996	X*		X*		
Margolis, Kroes, & Quinn, 1974			X*		
Rosenblatt & Ruvio, 1996	X*	X*	X*	X*	
Roskies & Louis-Guerin, 1990		X*			X*
Sutton, 1983	X*				
Sutton, 1987		X			
Schweiger & Lee, 1993	X*			X*	X*
Van Vuuren, Klandermans, Hartley, 1991		X		X*	

* Indicates support for the relationship

Social exchange theory (Blau, 1964, Holmes, 1981) provides a useful explanation for the importance of commitment as a reaction to job insecurity. According to this view, employees who feel the organization values their contributions and is concerned about their well-being reciprocate by becoming more attached or committed to the organization themselves (Eisenberger, et al., 1986). Therefore, job insecurity, which communicates a lack of commitment on the employer's part (Wiesenfeld & Brockner, 1993; Parks & Kidder, 1994) should lead to diminished employee commitment. Unfortunately, the job insecurity literature is largely silent concerning this social exchange view of job insecurity.

Another serious gap in the literature pertains to the relationship between job insecurity and another important social exchange construct--organizational citizenship behaviors. These discretionary, extra-role work behaviors are not explicitly recognized by the formal reward system, but they work together to promote organizational effectiveness (Organ, 1988). Because these discretionary behaviors are the only work behaviors employees may curtail in a threatened job situation without further jeopardizing continued employment, they are the most likely behavioral manifestation of job insecurity (Parks & Kidder, 1994). Surprisingly, no studies have directly assessed the impact of job insecurity on organizational citizenship behavior. The present study addresses this gap in the literature by proposing and testing a social exchange model of job insecurity which accounts for the direct and moderated effects of job insecurity on commitment and organizational citizenship behaviors.

A Social Exchange Model of Job Insecurity

Recent studies of organizational behavior and attitudes suggest that social exchange theory (e.g., Blau, 1964; Homans, 1974) provides a useful framework for understanding both employee commitment (Eisenberger et al., 1986; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Shore & Wayne, 1993) and organizational citizenship behaviors (Konovsky & Pugh, 1994; Moorman, 1991; Organ, 1990). The classic model of social exchange (Blau, 1964) differentiates between economic exchange and social exchange. Economic exchange is based on transactions of clearly specified commodities which are often guided by formal, explicit contracts. Social exchange, by contrast, is based on a relationship in which individuals trust other parties in the relationship to meet future obligations to deliver unspecified social commodities ranging from tangible gifts and acts of service to intangible benefits like friendship and companionship. The value of these gifts or obligations is usually tied to the interpersonal relationship between the exchange partners (Blau, 1964).

Social exchange is governed by what Gouldner (1960) called the norm of reciprocity. The norm of reciprocity is a standard of conduct inherent in all social exchanges whereby a beneficial act by a donor creates an obligation on behalf of the recipient. According to Blau, if the recipient meets this obligation, he or she is proven to be trustworthy. Increased trust facilitates greater exchange activity which, in turn, creates a social bond between the parties to the exchange. This social bond eventually leads to commitment between the parties whereby both parties depend exclusively on each other to meet important needs (Blau, 1964). Failure by one party to meet its obligations diminishes

trust and commitment and eventually leads to a dissolution of the social bond between the two parties (Blau, 1964; Gouldner, 1960; Holmes, 1981).

A social exchange model of job insecurity is proposed in Figure 1 (see Chapter 1) to account for the direct and moderated effects of job insecurity on commitment and organizational citizenship behaviors. The basic premise of the model is that job insecurity is detrimental to the vital social exchange relationship between employee and employer. Specifically, the model suggests that job insecurity impacts the social exchange outcomes of commitment and organizational citizenship behavior through its effect on psychological contracts.

Social exchange theory is closely tied to the literature on psychological contracts. According to Schein (1980), psychological contracts are the depiction of the exchange relationship between the individual and the organization. They represent the set of beliefs held by employees regarding the reciprocal obligations between them and their employer (Rousseau, 1989). Psychological contracts serve the primary function of reducing uncertainty in exchange relationships, which increases predictability and control in the workplace (Shore & Tetrick, 1994). Rousseau and her colleagues (Parks, 1992; Rousseau, 1989; Rousseau & Parks, 1993) distinguish between two forms of psychological contracts--transactional contracts and relational contracts. Transactional contracts involve obligations, like high pay, merit pay, and opportunities for advancement, that are specific and quid pro quo in nature (Rousseau, 1990; Robinson, Kraatz, & Rousseau, 1994; Robinson & Morrison, 1995). These contracts are consistent with Blau's notion of economic exchange. Relational contracts, on the other hand, involve obligations, like job security, training,

development, and support, that serve to maintain the employee-employer relationship and are not quid pro quo in nature (Rousseau, 1990; Robinson et al., 1994; Robinson & Morrison, 1995). Relational contracts reflect Blau's notion of social exchange.

Psychological contracts are a powerful determinant of employee attitudes and behavior (Schein, 1980). Employees engaged in relational contracts are likely to be highly committed to the organization (Eisenberger et al., 1986) and to engage in organizational citizenship behaviors that are above and beyond the call of duty (Organ, 1988, 1990; Robinson & Morrison, 1995). Unfortunately, psychological contracts are often violated because organizations fail to meet employee expectations of their obligations (Robinson & Rousseau &, 1994). Anticipated organizational changes like layoffs, mergers, pay cuts, and changes in work structure may trigger a re-evaluation of the psychological contract that leads the employee to conclude that the contract has been violated (Wiesenfeld & Brockner, 1993). Job insecurity, which involves a fear of losing valued job features or even the job itself (Greenhalgh & Rosenblatt, 1984), can be interpreted by employees as a failure of the employer to fulfill its obligations. Therefore, job insecurity should be viewed as a serious violation of the psychological contract among many employees.

Violations of psychological contracts have profound repercussions (Schein, 1980). Cognitive dissonance theory (Festinger, 1957) suggests that employees will redefine the terms of the violated psychological contract. Relational psychological contracts will become more transactional in nature leading committed employees to withdraw and conscientious employees to withhold beneficial extra-role behaviors from the organization (Parks & Kidder, 1994). Organizational citizenship behaviors will be the first to fall victim

to violated psychological contracts because they are easily curtailed with little risk to the employee (Organ, 1988). Thus, job insecurity is expected to have a detrimental effect on commitment and organizational citizenship behaviors.

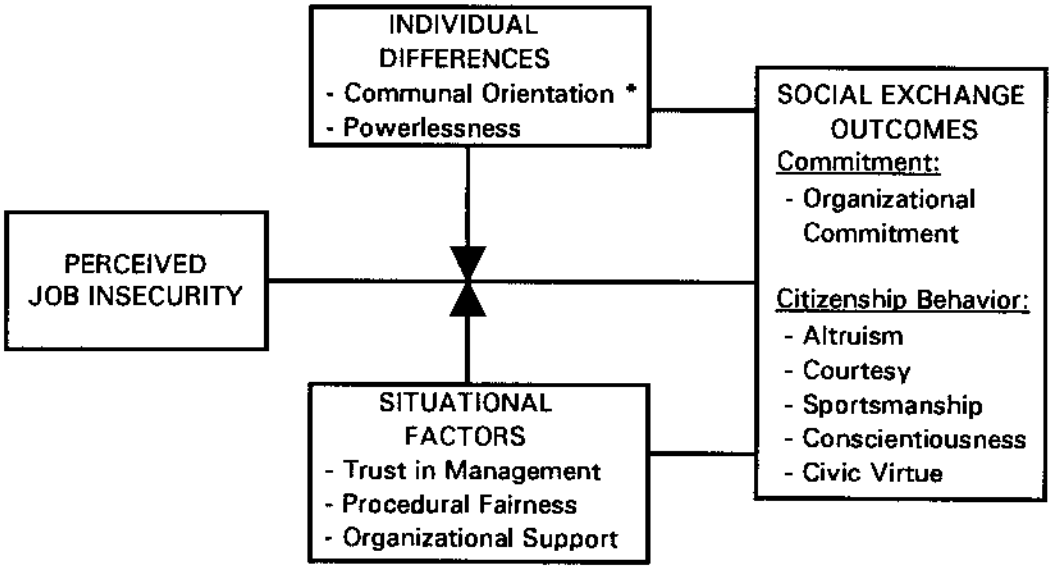
Despite a general tendency toward negative reactions, considerable variation in employee reactions to job insecurity exists (e.g., Greenhalgh, 1979; Brockner 1988; Hartley, 1991; Roskies & Louis-Guerin, 1990; Lim, 1996). This suggests a moderated relationship between job insecurity and the appraisal of psychological contracts and the impact of these appraisals on commitment and organizational citizenship behaviors. Both the ISR model (Katz & Kahn, 1978; Caplan, 1983; see Figure 2) and the organizational model (Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991; see Figure 3) recognize the moderating effects of individual differences and situational factors on individual reactions to job insecurity. Therefore, the moderating effects of both individual differences and situational factors are incorporated in the proposed social exchange model of job insecurity.

In summary, the social exchange model specifies that job insecurity, which is viewed by employees as a violation of their psychological contract with the employer, triggers a redefinition of this contract from a relational contract toward one that is more transactional in nature. This diminishes social exchange leading to reduced commitment and organizational citizenship behaviors. Individual differences and situational factors moderate the negative effects of job insecurity on the appraisal of psychological contracts and the impact of these appraisals on commitment and organizational citizenship behaviors.

The research model to be tested in this study is presented in Figure 4. This model, which is derived from the social exchange model of job insecurity, accounts for the direct and moderated relationships between job insecurity and the social exchange outcomes of commitment and organizational citizenship behavior. Due to the correlational nature of this study, no effects are hypothesized. The order of these relationships, however, is theoretically derived. Because organizational scientists are just beginning to operationalize and develop measures of the various aspects of psychological contracts (Rousseau, 1990; Robinson & Rousseau, 1994; Robinson et al., 1994; Robinson & Morrison, 1995), their intervening role in the model is assumed, but not explicitly examined.

Figure 4

Research Model



* Relationships involving communal orientation and commitment are not tested

The theoretical foundation and literature pertaining to each hypothesized relationship in the research model is presented in the sections that follow. First, the relationship between job insecurity and commitment will be discussed. A discussion of the relationship between job insecurity and organizational citizenship behaviors follows. Finally, individual differences and situational moderators of the job insecurity-social exchange outcomes relationship will be discussed.

Job Insecurity

Job insecurity is defined by Greenhalgh and Rosenblatt (1984) as "perceived powerlessness to maintain desired continuity in a threatened job situation" (p. 438). It is a subjective phenomenon that arises from the cognitive appraisal of the job situation as threatening (Jacobson, 1991; Lazarus, 1966; Lazarus & Folkman, 1984). The experience of job insecurity is not reserved exclusively for firms experiencing crisis conditions (objective job insecurity) but may exist even in relatively stable employment situations (Jacobson & Hartley, 1991; Rosenblatt & Ruvio, 1996; Roskies & Louis-Guerin, 1990). Both the stress model (Katz & Kahn, 1978; see Figure 2) and the organizational model (Greenhalgh & Rosenblatt, 1984; see Figure 3) state that individual reactions to job insecurity are more strongly related to perceived job insecurity than to objective job insecurity (e.g., poor economic conditions, organizational decline, and budget cuts). Investigations involving measures of both perceived and objective job insecurity (e.g., Dooley et al., 1987; Roskies & Louis-Guerin, 1990; Roskies et al., 1993) support this proposition. Therefore, this study is concerned with individual reactions to perceived job insecurity.

According to the organizational model (Greenhalgh & Rosenblatt, 1984), perceived job insecurity is a function of the interaction of two factors--the severity of the threat to job continuity and powerlessness to counteract the threat. The organizational model predicts that perceived job insecurity will be highest when employees feel the threat is severe and they feel powerless to counteract it. Greenhalgh and Rosenblatt (1984) recommended that measures of these dimensions be multiplicatively combined to form an index of job insecurity. Ashford et al. (1989) developed and tested a multidimensional measure of job insecurity based on Greenhalgh and Rosenblatt's (1984) theoretical model. This complex 57-item measure includes subscales tapping powerlessness and various aspects of severity of threat. Scores from these subscales were multiplicatively combined to produce an index of job insecurity.

While Ashford and her colleagues demonstrated that their job insecurity index explained more variance in work attitudes (e.g., trust, commitment, and job satisfaction) than did global measures of job insecurity (e.g., Caplan et al., 1975; Johnson, Meece, and Crano, 1984), their findings did not support the notion that powerlessness is a dimension of job insecurity. In fact, the three-item powerlessness subscale of their measure predicted work attitudes nearly as well as the entire 57-item instrument. Moreover, powerlessness was not strongly related to the other job insecurity subscales in their measure ($r = .21$ to .27). Correlations between powerlessness and these job insecurity subscales were so weak ($r = .09$ to .11) in a similar study by Rosenblatt and Ruvio (1996), that powerlessness was dropped from the job insecurity measure. Thus, empirical research suggests that

powerlessness is not a dimension of job insecurity, but a separate construct whose effects must be evaluated independently.

This view is supported by Jacobson (1991) who criticized multiplicative job insecurity scales in his review of the job insecurity literature because they tend to be voluminous, they lack parsimony, and they obscure important relationships between the elements of job insecurity and work outcomes. He recommended, instead, that measures of severity of threat and powerlessness be treated as separate independent variables to allow for investigation of the direct and interactive effects of these variables on work outcomes. His recommendation is adopted in this study and reflected in the research model in Figure 4. Powerlessness is treated as a separate independent variable and perceived job insecurity refers only to the severity of the threat to job continuity. Therefore, the research model recognizes both the direct and interactive relationships between these variables and social exchange outcomes. The interactive effect of severity of threat and powerlessness on work outcomes proposed by Greenhalgh and Rosenblatt (1984) is explicitly tested by evaluating powerlessness as a moderator of the relationship between perceived job insecurity (severity of threat) and social exchange outcomes. The rationale for evaluating the moderating effects of powerlessness on the job insecurity-social exchange outcomes relationship will be discussed in more detail in the Individual Difference Moderators section of this review.

Job Insecurity and Organizational Commitment

Organizational scientists have long debated the meaning and dimensionality of organizational commitment. In fact, over 25 commitment-related concepts and measures were identified in Morrow's (1983) review of the commitment literature. Despite the

apparent confusion, two distinct forms of organizational commitment emerged in Mathieu and Zajac's (1990) extensive review of over 200 articles pertaining to commitment--calculated and attitudinal commitment. Other writers refer to these constructs as continuance and affective commitment, respectively (Meyer & Allen, 1984). Continuance commitment, which is based on the work of Becker (1960), is concerned with the economic costs of leaving the organization. According to this view, employees are bound to the organization because they have side bets or sunk costs (e.g., a pension plan) invested in the organization that they cannot afford to lose (Hrebiniak & Alutto, 1972). This form of commitment is consistent with Blau's (1964) notion of economic exchange.

Affective commitment, which is the most common form of organizational commitment in the literature (Mathieu & Zajac, 1990), is the focal commitment construct in this study. It is defined as "the relative strength of an individual's identification with and involvement in a particular organization" (Mowday, Porter, & Steers, 1982, p. 27), and is characterized by acceptance of the organization's values, willingness to exert extra effort on behalf of the organization, and a strong desire to remain with the organization (Mowday et al., 1982). Affective commitment, hereafter referred to as organizational commitment, reflects an individual's psychological attachment to the organization (O'Reilly & Chatman, 1986). Job insecurity, which is often viewed as a serious violation of an employer's obligations to its employees (Robinson & Rousseau, 1994; Wiesenfeld & Brockner, 1993), triggers a redefinition of a relational contract toward one that is more transactional in nature, leading employees to psychologically withdraw from the organization (Parks &

Kidder, 1994). Therefore, the social exchange model of job insecurity predicts that job insecurity will be negatively related to organizational commitment.

Empirical research, previously reviewed in the discussion of organizational outcomes (see Table 2), offers consistent support for a negative relationship between job insecurity and organizational commitment. To summarize, early investigations of employees facing an acute threat of job loss confirmed a significant negative relationship between job insecurity and organizational commitment (Greenhalgh, 1979; Jick, 1979; Hanlon, 1979). More recent studies, involving elaborate measures of job insecurity (Ashford, et al., 1989; Kuhnert & Vance, 1992; Rosenblatt & Ruvio, 1996), also confirmed this relationship. A series of longitudinal studies involving acquisitions and restructuring in several manufacturing plants provided further evidence of the detrimental effects of job insecurity on organizational commitment (Davy et al., 1991; Davy et al., 1989; Schweiger & Lee, 1993). Finally, several important international studies conducted across Europe confirmed a negative relationship between job insecurity and organizational commitment (Borg & Elizur, 1992; Hartley, 1991; Van Vuuren, et al., 1991).

In summary, the social exchange model of job insecurity (see Figure 4) and empirical research suggest that job insecurity is negatively related to organizational commitment. This leads to the first hypothesis to be tested in this study:

H1: Job insecurity will be negatively associated with organizational commitment.

Job Insecurity and Organizational Citizenship Behaviors

In his classic work on organizational behavior, Katz (1964) identified three essential behaviors that are required for organizational effectiveness. Employees must: (1) be

induced to enter and remain in the organization, (2) carry out specific role requirements in a reliable fashion, and (3) engage in innovative or spontaneous activity that is above and beyond the call of duty. Thus, Katz distinguished between prescribed in-role behaviors and discretionary extra-role behaviors. Katz and Kahn (1978) insisted that exclusive reliance on formally prescribed in-role behaviors would lead to the utter collapse of the organization.

Extensive research by organizational scholars failed to produce evidence of a meaningful relationship between job satisfaction and traditional in-role or productivity measures of performance (see Brayfield & Crockett, 1955; Vroom, 1964; Iaffaldano & Muchinsky, 1985 for reviews). Organ (1977) suggested that lack of support for this intuitively appealing relationship was due, in large part, to the way in which performance was operationalized. Organ suggested that job satisfaction would be more strongly related to cooperative extra-role behaviors than to traditional measures of job performance (e.g., quantity and quality of output). Early findings by Bateman and Organ (1983) revealed that the correlation between job satisfaction and extra-role behaviors ($r = .41$) was indeed much higher than the .14 correlation between job satisfaction and performance reported in reviews by Vroom (1964) and Iaffaldano and Muchinsky (1985). Organ and his colleagues (Bateman & Organ, 1983; Smith, Organ, & Near, 1983, Organ, 1988) labeled these cooperative extra-role behaviors, organizational citizenship behaviors.

Organizational Citizenship Behaviors

Organizational citizenship behavior (OCBs) are discretionary work behaviors, not explicitly recognized by the formal reward system, that promote the effective functioning of the organization (Organ, 1988). They are broadly classified as prosocial organizational

behavior, which includes any behavior performed by a member of an organization that is intended to promote the welfare of individuals, groups, or organizations (Brief & Motowidlo, 1986). Organizational citizenship behavior is distinguished from another form of prosocial organizational behavior, known as organizational spontaneity. Like OCB, organizational spontaneity refers to discretionary work behaviors that promote the effective functioning of the organization. It differs from OCB, however, in that it is not bound by the prohibition Organ (1988) has placed on behavior that is rewarded by the organization (George & Brief, 1992). Organizational spontaneity includes discretionary work behavior that is rewarded by the organization (e.g., participating in a suggestion program that offers rewards for good ideas).

Organ's (1988, 1990) five-factor conceptualization of OCB is the dominant theoretical framework for the study of extra-role behavior (see Van Dyne, Cummings, & Parks, 1995 for a review). This framework identifies five important dimensions of OCB: altruism, conscientiousness, courtesy, sportsmanship, and civic virtue. Altruism involves helping a specific person with an organizationally relevant task or problem, while conscientiousness refers to carrying out role behaviors well beyond minimum required levels (Organ, 1988). Courtesy prevents problems from occurring by respecting other's needs, and sportsmanship is a willingness to accept minor frustrations without complaint (Organ, 1988). Finally, civic virtue involves responsible participation in the political life of the organization (Graham, 1986). Organ's framework is the theoretical foundation for most recent studies of OCB (e.g., Konovsky & Organ, 1996; Konovsky & Pugh, 1994; Moorman, 1991, 1993; Niehoff & Moorman, 1993; Podsakoff, MacKenzie, & Bommer,

1996; Podsakoff, MacKenzie, & Fetter, 1993; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Tansky, 1993).

Despite the dominance of Organ's (1988, 1990) framework, three alternative taxonomies of citizenship behavior have been proposed in the literature. First, Graham and her associates (Graham, 1991; Van Dyne, Graham, & Dienesch, 1994) have recently argued that Organ's (1988) taxonomy is flawed because it assumes that the boundary between in-role and extra-role behavior is well defined and consistent across persons, jobs, and organizations over time. They suggest that many of the behaviors tapped by popular OCB measures based on Organ's (1988, 1990) taxonomy (e.g., Podsakoff & MacKenzie, 1989; Podsakoff, MacKenzie, Moorman, & Fetter, 1990) may be viewed as in-role behaviors by employees and their supervisors. To avoid this fuzzy distinction, Graham (1991) extended the notion of civic citizenship from political philosophy to the organizational setting. From this perspective, she identified three responsibilities of organizational citizens that include both in-role and extra-role behaviors--organizational obedience, organizational loyalty, and organizational participation. Measures of these dimensions of citizenship behavior were developed and validated by Graham and her colleagues (Van Dyne, Graham, & Dienesch, 1994). These measures were used in a recent study by Moorman & Blakely (1995), which provided evidence that collectivist values are linked to Graham's (1991) dimensions of civic citizenship.

A second alternative taxonomy was offered by Williams and Anderson (1991) who suggested that OCB's occur in two basic forms--those that benefit individuals in the organization (OCBI) and those that benefit the organization in general (OCBO). These

authors drew from existing measures of OCB (e.g., Bateman & Organ, 1983; Smith et al., 1983) to develop and validate measures of OCBI and OCBO. In addition, they developed a brief measure of in-role behavior (IRB). Confirmatory factor analysis of data collected from 127 employed MBA students and their supervisors supported the usefulness of this taxonomy of work behaviors. Williams and Anderson (1991) argued that all three measures of work behavior were required to sort out the differential effects of various personal and situational factors on organizational behavior. Their two-factor taxonomy of OCB was skillfully applied to university faculty by Skarlicki and Latham (1995). Using new measures designed specifically for university faculty, these researchers demonstrated that research productivity was far lower among those who focused on OCBO (efforts to promote the university and its programs) than those who focused on OCBI (helping students and colleagues).

Finally, a third less popular taxonomy was proposed by Karambayya (1990). She developed and tested measures of four dimensions of OCB, including personal industry, independent initiative, enabling others, and loyal boosterism. These dimensions were linked to several contextual variables, like culture, work unit size and stability, interpersonal interaction, task interdependence and complexity, and rewards. This taxonomy has generated little interest among OCB researchers.

Despite their contributions to the literature, these alternative conceptualizations of OCB are not widely accepted among organizational researchers. As stated previously, Organ's (1988, 1990) five-factor conceptualization of OCB is the dominant framework in the literature and the basis for most OCB research. Moreover, well validated measures of

Organ's (1988) five dimensions of OCB, like Podsakoff et al.'s (1990) Organizational Citizenship Behavior Scale, are readily available. For these reasons, Organ's formulation of OCB was adopted in this study. References to OCB will refer to Organ's conceptualization of the construct unless otherwise noted.

Work Attitudes and Organizational Citizenship Behavior

This study is concerned with the impact of work attitudes on OCB. In particular, it is concerned with the effects of job insecurity on OCB. Still in its infancy, the job insecurity literature has yet to produce a direct assessment of the relationship between this important work attitude and OCB. This review first explores what has been discovered about the relationship between work attitudes and OCB. Then, it addresses the theoretical justification for the hypothesized job insecurity-OCB relationship specified in the research model.

Organizational citizenship behavior is itself a relatively new construct that was formally described and operationalized only a decade ago (see Organ, 1988). Nevertheless, an impressive body of theory and empirical research has addressed the relationship between work attitudes and OCB. According to Organ's (1990) review of the literature, two dominant views characterize the study of OCB--the dispositional view and the social exchange view of OCB. These two views provide the framework for this review of research regarding the work attitudes-OCB relationship.

The Dispositional View

Early studies of OCB pointed to a robust relationship between job satisfaction and OCB. Bateman and Organ (1983) were the first to develop and test a measure of OCB.

Their study of 77 university employees and their supervisors revealed a strong correlation (r = .41) between employee self reports of job satisfaction and supervisor ratings of employees on a 30-item OCB scale. Smith, Organ, and Near (1983) extended this line of inquiry by developing a new OCB scale that tapped two distinct classes of OCB--altruism and generalized compliance (a more impersonal form of conscientiousness). Their study of 422 bank employees revealed significant correlations between job satisfaction and supervisor ratings of altruism and generalized compliance (.33 and .29, respectively). The first study of OCB among managers was conducted by Motowidlo (1984) who found a .27 correlation between job satisfaction and ratings of consideration for subordinates provided by each manager's superior. Finally, Puffer's (1987) study of 141 appliance salespeople revealed a .28 correlation between a measure of satisfaction with material rewards and an index of prosocial helping behavior. Collectively, these findings led to the dispositional view of OCB (Organ, 1990) that suggests positive affect or mood state governs OCB.

If mood states and dispositional traits indeed underlie job satisfaction, one would expect to find even stronger relationships between these variables and OCB than that observed between job satisfaction and OCB. George and Brief (1992) present a strong argument that affectively-toned measures of personality, like positive or negative affectivity, predict organizational spontaneity--a concept closely related to OCB. Research evidence, however, does not support this argument. Smith et al. (1983) reported only modest correlations between neuroticism (a measure of trait negative affectivity) and both altruism and general compliance (-.19 and -.13, respectively). In a large study of 369 hospital employees, Organ and Konovsky (1989) found that negative affectivity and positive

affectivity were not as strongly related to altruism and compliance as were satisfaction with pay and work. George (1991) found no significant relationship between positive affectivity and altruism among a sample of 221 salespeople in a national retail chain, but a measure of positive mood state was, however, significantly related to altruism ($r = .24$). Finally, Konovsky and Organ (1996) found that a combined measure of satisfaction and fairness was, by far, a stronger predictor of OCB than were personality traits among a sample of 402 hospital employees. In his review of the effects of personality on OCB, Organ (1994) concluded that affectively-toned personality traits, like positive and negative affectivity, exhibit weak, and for the most part, insignificant relationships with OCB. Thus, the dispositional view of OCB has not been supported in the literature.

Folger (1986) suggested that job satisfaction measures actually reflect evaluative cognitions or beliefs about job dimensions more than they do mood states or affect. According to Folger, these evaluative cognitions are derived from comparison of one's job dimensions (e.g., work conditions, pay, supervision, and promotions) to an internal standard derived from social comparison processes, past experiences, or promises. An extensive review of three widely used job satisfaction instruments by Brief and Roberson (1989) supports this proposition. Based on this evidence, Organ (1990) proposed that the apparent relationship between job satisfaction and OCB is due to the substantial fairness component present in responses to job satisfaction scales. He predicted that perceived fairness would explain more variance in OCB ratings when separate measures of job satisfaction and perceived fairness were taken. Organ (1988, 1990) introduced his social exchange view of OCB to account for the impact of fairness on OCB.

The Social Exchange View

Organ's (1988, 1990) social exchange view of OCB is grounded in Blau's (1964) distinction between economic and social exchange. Economic exchange is based on transactions between employee and employer which occur on a quid pro quo or calculated basis. Social exchange, on the other hand, refers to open-ended relationships that entail unspecified future obligations that do not occur on a quid pro quo basis. Social exchange relationships are based on an individual's trusting that the other parties to the exchange relationship will fairly discharge their obligations over the long run (Holmes, 1981). Social exchange relationships are governed by the norm of reciprocity (Gouldner, 1960), which states that people have a strong tendency to reciprocate the beneficial acts of others. According to Organ, fairness leads to OCB because it fosters a social exchange relationship between employee and employer. Social exchange and the norm of reciprocity dictate that fair treatment will be reciprocated by employees. According to Organ, OCB's are the most likely avenue for reciprocation because these behaviors, unlike prescribed in-role behaviors, are discretionary and under direct control of employees. Thus, fairness perceptions should promote social exchange and reciprocation in the form of increased OCB (Organ, 1988, 1990).

A considerable body of evidence supports Organ's (1988, 1990) claim that fairness perceptions are more strongly related to OCB than measures of affective job satisfaction. Scholl, Cooper, and McKenna (1987) found that pay equity with respect to others doing the same job was more strongly related to a general, self-report measure of OCB ($r = .41$) than was a traditional measure of pay satisfaction ($r = .19$). In an interesting study of 195

Taiwanese communication workers and their supervisors, measures of leader fairness emerged as strong predictors of altruism while measures of job and work satisfaction were unrelated to OCB when leader fairness was controlled (Farh, Podsakoff, & Organ, 1990). Similar findings were obtained by Williams and Anderson (1991) who demonstrated that measures of job cognitions (beliefs regarding the fairness of specific work outcomes) were stronger predictors of OCB than affective measures of job satisfaction among employed MBA students and their supervisors. An elaborate study of 225 manufacturing employees and their supervisors conducted by Moorman (1993) reported similar findings. Data from the same sample were used by Moorman (1991) to evaluate the comparative effects of job satisfaction and three measures of fairness (distributive, procedural, and interactional justice) on OCB. Fairness measures were far more predictive of OCB than job satisfaction. In fact, job satisfaction was not significantly related to OCB when fairness perceptions were controlled. Finally, perceived fairness was positively associated with four of five dimensions of OCB in Deluga's (1994) study of 86 subordinate-supervisor dyads. Overall, empirical research supports Organ's (1988, 1990) social exchange view of OCB and the importance of perceived fairness as a key determinant of OCB.

Recently, organizational scholars have shifted their attention to the intervening processes by which favorable treatment of employees leads to increased OCB. According to social exchange theory, fulfillment of obligations over time leads to the development of trust, loyalty, and commitment among parties in an exchange relationship, which, in turn, facilitates even greater social exchange (Blau, 1964; Holmes, 1981). One stream of research by Konovsky and her associates offers considerable insight into the mediating

effects of trust on the fairness-OCB relationship. Folger and Konovsky (1989) evaluated the relative importance of distributive justice (fairness of job outcomes) and procedural justice (fairness of the procedures used to determine job outcomes) in predicting trust and commitment. Procedural justice emerged as a stronger predictor of both trust and commitment while distributive justice was more closely related to specific facets of job satisfaction, like pay satisfaction. A related study by Konovsky and Folger (1991) developed and validated an eight-item measure of procedural justice in supervisor decision making which was more strongly related to OCB than a measure of distributive justice. Finally, Konovsky and Pugh (1994) employed structural equation modeling to test for trust as a mediator in the fairness-OCB relationship. Data collected from a sample of 475 Veterans Affairs hospital employees and their supervisors indicated that trust in one's supervisor mediates the relationship between procedural justice and OCB. Procedural justice also was found to have a direct relationship to OCB. Taken together, these studies demonstrate that procedural justice, not distributive justice, is associated with OCB, and that trust mediates the procedural justice-OCB relationship.

Related to trust is the role of commitment in social exchange relationships. O'Reilly and Chatman (1986) developed and tested measures of three forms of organizational commitment--internalization, identification, and compliance. Findings from two studies involving university employees and students revealed that identification and internalization were positively related to self-reported altruism. Shore and Wayne (1993) conducted an extensive evaluation of the relationships between several forms of commitment and OCB in a study of 383 employees and their supervisors. Affective commitment was positively

associated with two forms of OCB, altruism and compliance (.22 and .14, respectively). Continuance commitment was negatively related to both forms of OCB (-.20 in both cases). A relatively new construct, perceived organizational support (Eisenberger et al., 1986), had the strongest relationship to both forms of OCB (.30 and .23, respectively). Finally, Morrison (1994) found evidence that affective commitment is positively related to OCB, and that perceptions of job breadth (views concerning what is in-role and what is extra-role behavior) moderate the commitment-OCB relationship.

Finally, Podsakoff and his associates investigated the effects of transformational leadership behaviors on OCB. Transformational leadership behaviors (TLB's) refer to leader behaviors that make followers more aware of task outcomes, activate higher-order needs, and induce them to transcend self-interest for the sake of the organization (Bass, 1985). Using a new OCB scale designed for their study, Podsakoff, MacKenzie, Moorman, and Fetter (1990) found no direct relationships between TLB's and OCB. Some of these behaviors, however, were indirectly related to OCB through trust. Two similar studies by Podsakoff and his associates documented significant relationships between Kerr and Jermier's (1978) substitutes for leadership and several forms of OCB (Podsakoff, MacKenzie, & Fetter, 1993; Podsakoff, Niehoff, MacKenzie, & Williams, 1993). In a study of over 1,500 professional employees and their supervisors, Podsakoff, MacKenzie, and Bommer (1996) found that substitutes for leadership did not moderate the relationship between TLB and OCB. One TLB (individualized support) was positively related to trust ($r = .28$) and modestly related to all five forms of OCB's. Another interesting study by Deluga (1994) investigated the relationship between trust-building activities, leader-member

exchange (LMX), and OCB. Perceived fairness was not related to LMX quality, but it was positively related to OCB. Moreover, LMX quality was not significantly related to OCB. Finally, Niehoff and Moorman (1993) conducted an intriguing study of the impact of supervisor monitoring behavior on OCB among movie theater employees. Frequency of observation was positively related to measures of fairness and negatively related to four of five OCB's. Overall, this stream of research demonstrates that some forms of leader behavior, as well as some substitutes for leadership, are associated with OCB.

A summary of the research reviewed in this section is presented in Table 3. Considerable evidence was presented that employee assessments of fairness of pay, supervision, and policies account for the robust relationship between job satisfaction and OCB. The literature offers strong and consistent support for the relationship between fairness and OCB. Moreover, several studies offer meaningful support for the relationship of trust and commitment to OCB. Overall, this review suggests that fairness, trust, and commitment are the major work attitudes associated with OCB. These variables represent what Holmes (1981) labeled as social exchange macromotives--attributions about exchange partners that facilitate and maintain social exchange. Thus, the literature strongly supports the usefulness of Organ's (1988) social exchange view of OCB.

Nevertheless, the study of OCB is still in its infancy (Schnake, 1991). Many relationships remain to be investigated. One important gap in the OCB literature concerns the absence of studies dealing with the effects of job insecurity on OCB. The present study addresses this gap in the literature by assessing the direct and moderated relationship between job insecurity and OCB from a social exchange perspective.

Table 3

Summary of Work Attitudes Related to Organizational Citizenship Behaviors

Source	Job Satisfaction	Pos/Neg Affect	Fairness	Trust	Commit-ment	Leader Behavior
Bateman & Organ, 1983	X*					
Deluga, 1994			X*	X		X
Farh, Podsakoff, & Organ, 1990	X		X*			
Folger & Konovsky, 1989	X		X*	X	X	
George, 1991		X*	X			
Konovsky & Folger, 1991			X*			
Konovsky & Organ, 1996	X*	X	X*			
Konovsky & Pugh, 1994			X	X*		
Moorman, 1991	X		X*			
Moorman, 1993	X	X	X*			
Morrison, 1994	X				X*	
Motowidlo, 1984	X*					
Niehoff & Moorman, 1993			X			X*
O'Reilly & Chatman, 1986					X*	
Organ & Konovsky 89	X*	X				
Podsakoff, MacKenzie, & Bommer, 1996				X		X*
Podsakoff, MacKenzie, & Fetter, 1993						X
Podsakoff, MacKenzie, Moorman, & Fetter, 1990	X			X		X
Podsakoff, Niehoff, MacKenzie, & Williams, 1993						X
Puffer, 1987	X*			X*		
Scholl, Cooper, & McKenna, 1987	X		X*			
Shore & Wayne, 1993					X*	
Smith, Organ, & Near, 1983	X*	X				X
Van Dyne, Graham, Dienesch, 1994	X					
Williams & Anderson, 1991	X		X*		X	

* Indicates support for the relationship

The Job Insecurity-OCB Relationship

No empirical studies of the relationship between job insecurity and OCB were found in the literature. Three related studies, however, provide some insight into the relationship. First, Puffer's (1987) study of 141 retail salespeople and their managers revealed a significant positive relationship between satisfaction with material rewards and a measure of altruism ($r = .28$). While this study seems unrelated at first glance, it is important to note that Puffer's four-item satisfaction scale was comprised of two items tapping pay satisfaction and two items tapping satisfaction with job security. No information regarding the unique effects of the job security items was provided.

A related study by Lim (1996) investigated the relationship between job insecurity and noncompliant job behaviors, which refer to defiant behaviors, like intentional tardiness, idle conversation, and reduced work effort. Based on self-report data collected from 306 employed MBA graduates, Lim found a moderate positive relationship between job insecurity and noncompliant behaviors ($r = .34$). This finding may offer some insight into the job insecurity-OCB relationship because some measures of OCB are highly correlated with noncompliant behaviors. Puffer (1987), for instance, reported a -.75 correlation between her measure of altruism and noncompliant behavior. While some argue that these constructs are conceptually distinct (e.g., Puffer, 1987; Parks & Kidder, 1994), their strong intercorrelation implies that they may simply represent opposite ends of the same behavioral continuum.

Finally, Robinson and Morrison (1995) conducted a longitudinal study that measured perceived violation of psychological contract among a sample of 126 employed

MBA graduates. Their measure tapped violation of transactional obligations (pay, promotion, and advancement) and relational obligations (job security, career development, and training). Violation of the relational contract, which included items assessing job security, was negatively associated with civic virtue (r = -.29). Unfortunately, the unique effects of job security on civic virtue were not evaluated in the study. Overall, these studies offer limited, indirect support for a possible relationship between job insecurity and OCB.

The proposed social exchange model of job insecurity, shown in Figure 4, suggests that job insecurity will be negatively related to OCB. The theoretical justification for this argument lies in social exchange theory (Blau, 1964) and the notion of psychological contract (Rousseau, 1989, Rousseau & Parks, 1993). Organ's (1988, 1990) social exchange view of OCB suggests that OCB's are rendered as a form of reciprocation by employees engaged in a social exchange relationship with their employer. Employee perceptions of the implied terms or reciprocal obligations of the exchange relationship are reflected in psychological contracts (Rousseau, 1989). Social exchange is consistent with relational contracts, while economic exchange is reflected in transactional contracts (Parks, 1992; Rousseau, 1989; Rousseau & Parks, 1993). Anticipated organizational changes like layoffs, mergers, and restructuring often lead employees to conclude that their psychological contract has been violated (Robinson & Rousseau &, 1994). Such a violation triggers a re-evaluation of the psychological contract (Wiesenfeld & Brockner, 1993). This leads to redefinition of the psychological contract from a relational contract to one that is more transactional in nature, leading conscientious employees to withhold beneficial extra-role behaviors, like OCB, from the organization (Parks & Kidder, 1994). Job insecurity,

which involves a fear of losing valued job features or even the job itself (Greenhalgh & Rosenblatt, 1984), should be viewed as a serious violation of the psychological contract among employees. Thus, job insecurity should be associated with lower levels of OCB.

While the relationship between job insecurity and OCB has not been empirically tested in the literature, the proposed social exchange model of job insecurity strongly suggests that such a relationship exists. Because OCB can be curtailed at little risk to the employee (Organ, 1988), it is the most likely behavioral manifestation of job insecurity (Parks & Kidder, 1994). This leads to the second hypothesis to be tested in this study:

H2: Job insecurity will be negatively associated with organizational citizenship behaviors.

Individual Difference Moderators

The social exchange model of job insecurity proposed in Figure 1 recognizes the moderating effects of both individual differences and situational factors on employee reactions to job insecurity. The most extensive treatment of moderators of the relationship between job insecurity and organizational outcomes is found in Greenhalgh and Rosenblatt's (1984) organizational model of job insecurity, shown in Figure 3. The organizational model specifies several individual difference factors that are expected to moderate the relationship between job insecurity and organizational outcomes. These include locus of control, conservatism, work orientation, attribution tendencies, need for security, and job dependence.

Several studies have investigated the moderating effects of a variety of individual difference factors. A series of studies conducted by Brockner and his associates

demonstrated that self-esteem moderates the relationship between job insecurity and work effort. Individuals who are low in self-esteem are willing to exert more work effort when faced with job insecurity (Brockner et al., 1985; Brockner et al., 1987; Brockner, Grover, O'Malley, Reed, & Glynn, 1993). Orpen's (1994) study of 129 Australian manufacturing employees revealed that self-esteem and locus of control moderate the relationship between job insecurity and psychological well-being, which was assessed using a self-report measure of anxiety and depression. The negative relationship between job insecurity and psychological well-being was stronger for employees with low self-esteem and those with high external locus of control. Another international study by Borg and Elizur (1992) demonstrated that work ethic moderates the relationship between job insecurity and work outcomes like satisfaction and trust. Employees with a strong work ethic were less likely to respond negatively to job insecurity.

Another stream of research investigated the moderating effects of causal attributions and coping responses. A Dutch study concluded that attributing job insecurity to individual, uncontrollable causes (e.g., age, health, and ethnicity) is associated with increased depression and reduced satisfaction and organizational commitment (Van Vuuren et al., 1991). This study also noted that organizational commitment moderated employee responses to job insecurity. Committed employees faced with job insecurity were more likely to take actions to retain their jobs while less committed employees were more likely to psychologically withdraw from the organization. These findings were extended in a more recent study by Stassen (1994) involving 200 telecommunications workers who had just survived a layoff. Stassen noted that control coping (a proactive, action-oriented response)

mitigated the negative effects of job insecurity on turnover intent and job performance while escape coping (avoidance and withdrawal) exacerbated these effects.

Several studies investigated the moderating effects of variables related to job dependence. Kuhnert and his colleagues (Kuhnert & Vance, 1992; Vance & Kuhnert, 1988) found consistent evidence that employment security (i.e., belief that a comparable job can be found in the event of job loss) moderates the relationship between job insecurity and psychological adjustment, which reflects self-reported symptoms of anxiety, depression, hostility, and obsessive-compulsive disorders. Manufacturing employees with low employment security had more adverse reactions to job insecurity in both studies. Similar findings were obtained in a series of interviews with machine shop employees conducted by Roskies, Liker, and Roitman (1988). Moreover, economic need to work moderated the job insecurity-work effort relationship in Brockner et al.'s (1992) study of retail store employees. An inverted-U relationship between job insecurity and work effort was found for those with high economic need to work. A similar study by Orpen (1993) using a more sophisticated job insecurity scale did not support this finding. Lastly, need for job security did not moderate the relationship between job insecurity and a variety of work outcomes in a study of hospital employees conducted by Greenhalgh and Jick (1989). Overall, employment security demonstrated consistent moderating effects while economic need and need for security did not.

Finally, two studies investigated the moderating effects of two key demographic characteristics: age and job type. Kuhnert and Vance (1992) found that age moderates the relationship between job insecurity and psychological adjustment among blue collar

workers, but not white collar workers. Younger blue collar workers were more sensitive to job insecurity and reacted more negatively than did older blue collar workers. This is understandable because blue collar layoffs, which are typically seniority-based, put younger workers at greater risk of job loss. A more recent study by Rosenblatt and Ruvio (1996) demonstrated distinct differences in the relationship between job insecurity and commitment, intent to quit, and resistance to change among four different types of Israeli school teachers. Teachers hired on a contract basis, who were not associated with a professional union, did not react as strongly to job insecurity as did permanent, union affiliated teachers. These authors suggest that the stronger reactions by permanent, union affiliated teachers were due to higher expectations of job security. Overall, several individual difference moderators of the job insecurity-work outcomes relationship have been established in the literature. A summary of this research is presented in Table 4.

The present study is concerned with the impact of job insecurity on the social exchange outcomes of commitment and OCB. Only two studies investigated individual difference moderators of the job insecurity-commitment relationship (Van Vuuren et al., 1991; Rosenblatt & Ruvio, 1996). No such studies were found for the job insecurity-OCB relationship. To address this gap in the literature, two important individual difference moderators were selected for inclusion in this study--communal orientation and powerlessness. Communal orientation is included because it reflects a feeling of responsibility or concern for the welfare of others (Clark, Ouellette, Powell, & Milberg, 1987). As such, it may act as a buffer, mitigating the detrimental effects of job insecurity on social exchange outcomes. Powerlessness is included because it is expected to exacerbate

the adverse effects of job insecurity on social exchange outcomes. Neither variable has been evaluated as a moderator of employee reactions to job insecurity.

Table 4

Summary of Individual Difference Moderators of the Job Insecurity-Work Outcomes Relationship

Source	Moderator Evaluated	Work Outcome(s)
Borg & Elizur, 1992	Work Ethic*	Satisfaction, Trust
Brockner, Davy, & Carter, 1985	Self-Esteem*	Performance
Brockner, Grover, O'Malley, Reed, & Glynn, 1993	Self-Esteem*	Worry, Work Effort
Brockner, Grover, Reed, & Dewitt, 1992	Perceived Control, Economic Need*	Work Effort
Brockner, Grover, Reed, Dewitt, & O'Malley, 1987	Self-Esteem*	Performance
Greenhalgh & Jick, 1989	Tolerance for Ambiguity, Need for Security	Satisfaction, Involvement, Propensity to Leave
Kuhnert & Vance, 1992	Employment Security, Age, Job Type*	Psychological Adjustment
Orpen, 1993	Job Dependence	Performance
Orpen, 1994	Self-Esteem, Locus of Control*	Psychological Well-Being
Rosenblatt & Ruvio, 1996	Job Type*	Commitment, Intent to Quit, Resistance to Change, Organizational Support
Roskies, Liker, & Roitman, 1988	Employment Security, Job Mobility*	Satisfaction, Trust
Stassen, 1994	Coping Responses*	Intent to Quit, Performance
Van Vuuren, Klandermans, Jacobson, & Hartley, 1991	Causal Attributions*	Depression, Satisfaction, Organizational Commitment
Vance & Kuhnert, 1988	Employment Security*	Employee Well-Being

* Indicates support for moderating effect(s)

Communal Orientation

Closely related to Blau's (1964) distinction between social exchange and economic exchange is the notion of relationship orientation in social psychology. Relationship orientation refers to the type of relationship an individual desires with another. Individuals

may engage in communal or exchange relationships (Clark & Mills, 1979; Mills & Clark, 1982). In communal relationships, people feel responsible for another's welfare. They feel obligated to meet the other person's needs, often just to please them and show concern for their welfare (Clark et al., 1987). In exchange relationships, people do not feel a special responsibility for others' needs. They extend benefits only to repay past obligations or with the expectation of repayment in the future (Clark et al., 1987). Thus, communal orientation refers to the desire or felt obligation to respond to the needs of others. While communal orientation is influenced by the situation to some degree, it is also viewed as a dispositional tendency to engage in communal relationships (Mills & Clark, 1982). Those high in communal orientation are expected to be more willing to help others (Clark et al., 1987).

The role of disposition or personality as a determinant of OCB has been widely debated in recent years. George and Brief (1992) argued strongly for the importance of mood states as determinants of organizational spontaneity, a concept closely related to OCB. Further, they suggest that affectively-toned personality traits, like positive and negative affectivity are also important predictors of OCB because they reflect a predisposition to experience positive or negative mood states (Watson & Clark, 1984). Unfortunately, Organ (1994) concluded in his review that the relationship between affectively-toned personality traits and helping behaviors, like OCB, is generally weak and nonsignificant. Findings in studies involving the Big Five personality dimensions (McCrae & Costa, 1987) are also discouraging (Organ, 1994; Konovsky & Organ, 1996).

According to Organ, the most promising dispositional determinants of OCB lie in composite personality constructs or trait constellations reflecting important facets of several

work-related personality dimensions (Konovsky & Organ, 1996; Organ, 1990, 1994). One such construct, recommended by Organ, is Hogan's (1983) notion of service orientation. Like communal orientation, service orientation reflects a disposition to be helpful, thoughtful, considerate, and cooperative on the job. Hogan and his colleagues (Hogan, Hogan, & Busch, 1984) developed and validated a 92-item measure of service orientation among a sample of nursing aides. Four additional studies indicated that the measure was indeed associated with supervisor ratings of service-related performance among nursing students ($r = .42$), practicing nurses ($r = .42$), clerical employees ($r = .25$), and truck drivers ($r = .34$). While this measure of service orientation may be useful in personnel selection, it is too lengthy for use in field research. Communal orientation, which appears to reflect the same dispositional traits as service orientation, may prove more useful in field research because it is easily measured using a 14-item scale developed and validated by Clark et al. (1987).

Few studies have investigated the relationship between communal orientation and helping behaviors. Two laboratory experiments, conducted by Clark et al. (1987) confirmed that those high in communal orientation are more likely to help others than those low in communal orientation. Moreover, recipient sadness tended to increase helping more among subjects high in communal orientation than for those low in communal orientation. Thus, preliminary evidence suggests a positive relationship between communal orientation and helping behaviors. This study offers the first known investigation of the relationship between communal orientation and OCB. This leads to the following hypothesis:

H3a: Communal orientation will be positively associated with organizational citizenship behaviors.

Another stream of research led by Dutch researchers investigated the moderating effects of communal orientation on the relationship between equity perceptions and various attitudes. VanYperen and Buunk (1991) evaluated equity and satisfaction in intimate relationships among a sample of American and Dutch college students. Equity perceptions were related to satisfaction with the relationship only for students who were low in communal orientation. Equity was not an important determinant of relationship satisfaction among students high in communal orientation. A second study by VanYperen, Buunk, & Schaufeli (1992) investigated the moderating effects of communal orientation on the relationship between perceived inequity in the nurse-patient relationship and burnout. Communal orientation moderated the relationship such that burnout was highest when inequity was high and communal orientation was low. These researchers concluded that communal orientation buffers the stress-strain relationship. A similar moderating effect was noted in a study of 469 Dutch railway employees conducted by Buunk, Doosje, Jans, and Hopstaken (1993). Communal orientation moderated the relationship between perceived inequity and negative affect such that negative affect was highest when employees felt deprived and were low in communal orientation.

Finally, VanYperen (1996) continued this line of inquiry in a study of 91 nurses working in a home for mentally retarded patients. Perceived inequity in both the nurse-patient and nurse-organization relationship was associated with increased burnout, psychological withdrawal, and intent to quit. Again, communal orientation buffered the negative effects of inequity on these outcome variables. Overall, these studies offer

consistent evidence that communal orientation buffers the negative effects of perceived inequity on work outcomes.

The buffering effects of communal orientation are particularly relevant to the relationship between job insecurity and OCB. Individuals high in communal orientation can be expected to continue behaviors benefiting their supervisor, their coworkers, and the organization despite their own feelings of job insecurity. Even at high levels of job insecurity, these individuals may be constrained from curtailing OCB's out of their strong desire to help others and the organization. On the other hand, individuals low in communal orientation who feel no special responsibility to help others may be quick to reciprocate the apparent breach of psychological contract inherent in job insecurity by curtailing OCB. This study offers the first test of the moderating effects of communal orientation on the job insecurity-OCB relationship, suggesting the following hypothesis:

H3b: Communal orientation moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when communal orientation is low and weaker when communal orientation is high.

Powerlessness

Human beings share a common desire for personal control over their environment (e.g., Bandura, 1982; Seligman, 1975; Sutton & Kahn, 1987). Empowerment, which refers to the process by which management shares power with employees, enhances personal control on the job (Conger & Kanungo, 1988). Empowered workers are more involved and committed to the organization (Ashforth, 1989; Conger & Kanungo, 1988; Kanungo, 1992). Work alienation, which refers to disconnection or separation from one's work

(Erikson, 1985), is the antithesis of empowerment. The most common conception of work alienation is Seeman's (1959) notion of powerlessness--a perceived lack of control over important work-related events that affect one's life (Heinz, 1991). This construct is also referred to as "helplessness" by some authors (e.g., Ashforth, 1989; Jacobson, 1987; Roskies et al., 1988).

While reviews by Seeman (1989) and Heinz (1991) noted a distinct decline in research concerning powerlessness, several recent studies indicate that powerlessness has detrimental effects on a variety of organizational outcomes. Ashforth's (1989) study of 206 telecommunications employees revealed a strong negative relationship between helplessness and a combined measure of job involvement and organizational commitment. Further evidence for the detrimental effects of powerlessness was provided in an extensive study of 183 industrial hygienists, auditors, and nurses conducted by Ashford, Lee, and Bobko (1989). Here, scores on a three-item powerlessness scale were moderately correlated with a variety of organizational outcomes, including trust (-.48), organizational commitment (-.40), satisfaction (-.33), and intent to quit (.36). Surprisingly, the same three-item powerlessness scale did not produce significant results in a similar study by Rosenblatt and Ruvio (1996). These researchers concluded that powerlessness had little meaning among their sample of 385 Israeli teachers who were members of strong unions. Finally, Lee and Ashforth (1993) found support for a model linking helplessness to job burnout among a sample of 169 supervisors and managers in a public welfare agency.

The experience of powerlessness is particularly relevant during periods of organizational upheaval (Greenhalgh & Sutton, 1991). Workers are denied control when

they need it most because management tends to be more secretive and seeks less input from employees during such times (Greenhalgh, 1984). Three studies conducted in downsizing organizations offered unique insight for the study of powerlessness. Half of the employees interviewed in Jacobson's (1987) case study of 233 Israeli government workers experienced a strong sense of helplessness and lack of control in the face of an impending layoff. Many of these employees adopted a surrender attitude and became very passive. A second case study conducted by Roskies et al. (1988) examined the reactions of 56 machinists to the installation of new labor saving equipment. With few exceptions, both those who stood to gain from the project and those whose jobs were threatened experienced an overwhelming sense of helplessness. Finally, a longitudinal study of manager reactions to an acquisition conducted by Fried, Tiegs, Naughton, and Ashforth (1996) revealed considerable helplessness among surviving managers. Helplessness was strongly related to psychological withdrawal ($r = .68$) and intent to leave ($r = .44$).

Overall, empirical and theoretical research supports the pervasiveness of powerlessness and its detrimental effects on psychological attachment, commitment, and job involvement during periods of organizational change. This suggests a shift away from social exchange and a relational psychological contract between employee and employer toward a more calculative, economic exchange and a transactional psychological contract. As a result, powerlessness is expected to be associated with lower levels of social exchange outcomes--organizational commitment and OCB. This leads to the following hypotheses:

H4a: Powerlessness will be negatively associated with organizational commitment.

H4b: Powerlessness will be negatively associated with organizational citizenship behaviors.

In addition to its direct effects on social exchange, powerlessness has been viewed as an important moderator of the relationship between job insecurity and employee reactions. According to Greenhalgh and his associates, employees who believe they have some control over work-related events are better at coping with the threat of job loss (Greenhalgh, 1983; Greenhalgh & Rosenblatt, 1984; Greenhalgh & Sutton, 1991). Conversely, powerlessness, which engenders a perceived lack of control, is expected to exacerbate the negative effects of job insecurity on work outcomes. Therefore, powerlessness is included in the research model as a moderator of the job insecurity-social exchange outcomes relationship.

No explicit tests of the moderating effects of powerlessness on the job insecurity-work outcomes relationship were found in the literature. A few studies, however, have assessed the moderating effects of the antithesis of powerlessness--personal control. Perhaps the most direct test of the moderating effects of personal control was Orpen's (1994) study of 129 Australian manufacturing employees. Personal control moderated the relationship between job insecurity and a measure of psychological well-being that tapped anxiety and depression. The detrimental effects of job insecurity on psychological well-being were more pronounced for employees low in personal control. A related study by Brockner et al. (1992) assessed the moderating effects of perceived control on the job insecurity-work effort relationship among 597 retail store employees who had recently survived a layoff. Perceived control referred to the extent to which employees believed management would provide for them in the event of another layoff. Brockner and his colleagues reported a significant interaction effect between perceived threat of job loss and

perceived control. Work effort was lowest in the extreme conditions of high threat/low control and low threat/high control. Unfortunately, management provision for layoff victims does not adequately tap the notion of personal control over work-related events that underlies powerlessness. Lastly, Roskies et al. (1993) investigated the moderating effects of personal control on the job insecurity-psychological distress relationship. Personal control did not emerge as an important moderator in this study of 1,081 Canadian workers.

Finally, Stassen (1994) evaluated the moderating effects of another variable related to personal control--coping strategy. According to Latack (1986), individuals respond to stressful events by engaging in control-oriented coping (taking charge of the situation) or escape coping (withdrawing from or avoiding the situation). Control-oriented coping implies personal control while escape coping is consistent with feelings of powerlessness. Stassen (1994) tested the moderating effects of coping strategy on the job insecurity-work outcomes relationship in a study of 200 unionized telecommunication technicians. Coping strategy moderated the job insecurity-turnover intention relationship and the job insecurity-performance relationship. Positive work outcomes were reported for those who adopted control-oriented coping in the face of high job insecurity. Negative work outcomes were reported for those who responded to high job insecurity by engaging in escape coping.

Overall, job insecurity theory and an emerging body of empirical research supports the notion that powerlessness exacerbates the detrimental effects of job insecurity on work outcomes. Those who feel they have no opportunity to protect their jobs from a perceived threat of job loss are more likely to withdraw psychologically and withhold beneficial citizenship behaviors than those who feel they have some power to counteract the threat.

Thus, powerlessness is expected to magnify the adverse effects of job insecurity on commitment and OCB. This study offers the first known test of the moderating effects of powerlessness on the job insecurity-social exchange outcomes relationship. This leads to the following hypotheses:

H4c: Powerlessness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.

H4d: Powerlessness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.

Situational Moderators

Investigations of the moderating effects of situational factors on the job insecurity-work outcomes relationship are seldom found in the job insecurity literature. In fact, Greenhalgh and Rosenblatt's (1984) comprehensive model of job insecurity identifies only one situational moderator--social support. Scant research in this area focuses on two situational moderators: fairness and social support.

Brockner and his associates (e.g., Bies et al., 1993; Brockner et al., 1987; Brockner et al., 1990; Brockner et al., 1992; Brockner et al., 1994) found consistent evidence that fairness impacts work outcomes among layoff survivors (those who remain after a layoff). Unfortunately, these studies assume that job insecurity is universally high among all survivors without actually measuring job insecurity. This stream of research suggests, but does not actually test the moderating effect of fairness in a layoff.

Social support, by contrast, has received considerable attention in the organizational stress literature (see Beehr, 1985 and Kahn & Byosiere, 1992 for reviews) that has spilled

over into the job insecurity literature. Nevertheless, only a few studies have investigated the moderating effects of support-based constructs in the job insecurity literature (Borg & Elizur, 1992; Dooley, Rook, & Catalano, 1987; Lim, 1996; Nauman, Bies, & Martin, 1995; Stassen, 1994). These studies suggest that social support buffers the negative effects of job insecurity on work outcomes.

This study proposes a social exchange view of job insecurity based on the premise that reactions to job insecurity depend on the nature of the social exchange relationship between employee and employer. Therefore, it is concerned with situational factors that impact social exchange. Trust, fairness, and commitment, which reflect higher-order feelings and beliefs about exchange partners, are critical determinants of relational contracts and social exchange (Blau, 1964, Clark & Mills, 1979; Holmes, 1981; Rousseau & Parks, 1993). Strong relational contracts and social exchange can be expected when employees feel their employer is trustworthy, fair, and committed to them. Such a contract is more resilient and tolerant of short-term inequities and injustices that occur in the workplace (Folger, 1986; Rousseau & Parks, 1993, Parks & Kidder, 1994). Employees involved in strong relational contracts with their employer may continue to engage in social exchange despite periodic threats to job continuity arising from changes in business conditions. Therefore, trust, fairness, and commitment of the organization to the employee (perceived organizational support) can be expected to buffer the detrimental effects of job insecurity on social exchange outcomes among its employees.

This study examines the moderating effects of three specific forms of trust, fairness, and commitment that are most relevant to relational contracts and social exchange from the

employee's perspective--trust in management, procedural fairness, and perceived organizational support. These factors are also expected to have direct relationships with organizational commitment and OCB.

Trust in Management

Mayer, Davis, and Schoorman (1995), in their review of the trust literature, noted that considerable confusion surrounds the meaning of trust. Much of the confusion, according to their review, involves the referents of trust that may include subordinates, coworkers, supervisors, top management, or the organization. Fox's (1974) distinction between lateral and vertical trust alleviates some of the confusion. Lateral trust refers to trust relations among peers or equals--coworkers. Vertical trust refers to trust relations between employees and their immediate supervisors, top management, or the organization.

The present study examines trust in the context of the social exchange relationship between employee and employer. Thus, it is concerned with vertical trust. Moreover, since this study is concerned with organizational outcomes, like commitment and citizenship behaviors, the appropriate trust referent is top management or the organization. Trust in top management and trust in the organization are closely related for two reasons. First, because top management cannot develop close relationships with most employees (Hart, 1989), employees base their perceptions of trust on appraisals of the fairness of the system created by management (Fox, 1974; Carnevale, 1988). Secondly, employees tend to personify the organization by viewing the actions of its agents (e.g., supervisors, managers, and support staff) as actions of the organization itself (Levinson, 1965). Consequently, trust in management is largely indistinguishable from trust in the organization.

Cook and Wall (1980) define trust in management as the extent to which employees ascribe good intentions to, and have confidence in, the words and actions of their employer. Their trust in management scale includes three items tapping faith in the intentions of management and three items tapping confidence in the actions of management. An alternative approach proposed by Gabarro and Athos (1976) identified several bases of trust in one's employer, including integrity, motives and intentions, behavioral consistency, openness, and discreteness. Robinson and Rousseau (1994) developed a seven-item trust in employer scale to assess these dimensions.

Trust is the basis of social exchange and relational psychological contracts (Blau, 1964; Holmes, 1981; Rousseau, 1989). It reflects the belief that the other parties to the exchange relationship will "fairly discharge their obligations in the long-run" (Konovsky & Pugh, 1994, p. 657). As long as an employee can sustain an attitude of trust in the long-term fairness of the organization, they will continue to engage in social exchange (Organ & Konovsky, 1989). Empirical evidence supporting a positive relationship between trust and social exchange outcomes is provided in several studies. Strong correlations between trust in management and organizational commitment were reported in two large studies conducted by Cook and Wall (1980). Similar findings were reported in studies conducted by Folger and Konovsky (1989) and Ashford et al. (1989). Empirical research regarding the relationship between trust and OCB was previously reviewed in the section on work attitudes and OCB (see Table 3). Overall, these studies offer consistent support for a positive relationship between trust and OCB (e.g., Deluga, 1994; Folger & Konovsky, 1989; Konovsky & Pugh, 1994; Podsakoff et al, 1996; Podsakoff et al., 1990; Puffer,

1987). Therefore, trust in management is expected to have a direct relationship with organizational commitment and OCB, leading to the following hypotheses:

H5a: Trust in management will be positively associated with organizational commitment.

H5b: Trust in management will be positively associated with organizational citizenship behaviors.

Trust, which reflects higher-order feelings and beliefs about exchange partners, is a critical determinant of relational contracts and social exchange (Blau, 1964, Clark & Mills, 1979; Holmes, 1981; Rousseau & Parks, 1993). Strong relational contracts and social exchange can be expected when employees feel their employer is trustworthy. Such contracts are more resilient and tolerant of short-term inequities and injustices that occur in the workplace (Folger, 1986; Rousseau & Parks, 1993, Parks & Kidder, 1994). Employees with high levels of trust in their employer may remain committed to the organization and engage in OCB even when they feel business conditions may pose a threat to the continuity of their jobs. Conversely, lack of trust in one's employer can be expected to intensify the negative effects of job insecurity on social exchange outcomes, like organizational commitment and OCB. Thus, social exchange theory suggests that trust in management moderates the job insecurity-social exchange outcomes relationship and that trust may be an employer's best line of defense against the inevitable effects of job insecurity.

No studies assessing the moderating effects of trust on the job insecurity-organizational commitment or job insecurity-OCB relationship were found in this review. Two studies in the emerging literature on psychological contracts, however, offer some insight into the role of trust in these relationships. Robinson and Rousseau (1994)

conducted a longitudinal study of 128 MBA alumni immediately after accepting job offers and two years hence. Over half of these alumni (54.8%) felt their employer had violated their psychological contract (failed to fulfill its obligations to them) over the first two years of employment. Perceived contract violation was strongly related to trust in the employer ($r = -.79$), which, in turn, was strongly related to intent to remain ($r = .39$). Unfortunately, the single item measure of contract violation did not specifically tap violation of the obligation to provide a secure job, nor did the study address either of the social exchange outcomes of interest in this study.

A similar study by Robinson and Morrison (1995) involved a more extensive measure of contract violations that tapped violation of the employer's obligation to provide advancement, merit pay, training, development, support, and job security. Trust mediated the relationship between contract violation and civic virtue, a dimension of OCB. Again, the unique effects of violations of the obligation to provide a secure job were not assessed. Because job insecurity was not measured in either study, these findings offer only limited insight into the role of trust in the job insecurity-social exchange outcomes relationship. This study addresses this shortcoming by providing a direct test of the moderating effects of trust in management on this relationship. This suggests the following hypotheses.

H5c: Trust in management moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when trust is low and weaker when trust is high.

H5d: Trust in management moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when trust is low and weaker when trust is high.

Procedural Fairness

The study of organizational justice is concerned with the role of fairness in the workplace. It focuses specifically on the process by which employees determine whether they have been treated fairly at work and their reactions to these determinations (Greenberg, 1987). Folger and Greenberg (1985) distinguish between two sources of organizational justice: distributive justice and procedural justice. Historically, distributive justice, which refers to the fairness of job outcomes (e.g., pay, promotion, and working conditions), has received the greatest attention in the literature (Greenberg, 1990). Equity theory (Adams, 1965) is the most popular theory of distributive justice. More recently, attention is focused on the notion of procedural justice, which refers to the fairness of the procedures used to determine job outcomes (Thibaut & Walker, 1975). Procedures are fair when they reflect (a) consistent standards, (b) lack of self-interest, (c) accurate information, (d) opportunities to correct the decision, (e) interests of all concerned parties, and (f) moral and ethical standards (Leventhal, 1980). Moreover, perceptions of procedural justice are influenced by the interpersonal treatment one receives during the enactment of formal procedures (Bies, 1987; Tyler, 1988; Tyler & Bies, 1989).

According to Greenberg (1990), distributive and procedural justice predict different work attitudes. Distributive justice influences attitudes directly related to the work outcome in question, like satisfaction with pay (Folger & Konovsky, 1989). It indicates the extent to which the organization meets short-term, transactional obligations inherent in economic exchange (Blau, 1964). Procedural fairness, by contrast, is associated with global evaluations of the extent to which organizational systems, institutions, and authorities

follow fair procedures (Lind & Tyler, 1988). Perceptions of procedural fairness reflect the belief that the organization will fairly discharge its obligations in the long run--a vital precondition for social exchange (Holmes, 1981). Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) dictate that fair treatment by the employer will be reciprocated by employees. Two of the most likely avenues for reciprocation are increased commitment (Eisenberger et al., 1986) and OCB (Organ, 1988).

Several studies investigating the relative influence of distributive and procedural fairness on social exchange outcomes support this proposition. Folger and Konovsky (1989) found that procedural fairness was a stronger predictor of organizational commitment than distributive justice. In a related study, Konovsky and Folger (1991) found that procedural justice in supervisor decision making was more strongly related to OCB than distributive justice. An elaborate study of 225 manufacturing employees and their supervisors, conducted by Moorman (1991), evaluated the comparative effects of job satisfaction and three measures of fairness (distributive, procedural, and interactional justice) on OCB. Only interactional justice, a form of procedural justice, emerged as a significant predictor of OCB. A similar study by Niehoff and Moorman (1993) using the same measures of fairness also concluded that procedural justice was the strongest predictor of OCB. Finally, a similar conclusion was reached by Konovsky and Pugh (1994) in their study of 475 hospital employees. Thus, procedural fairness is expected to have a direct relationship with organizational commitment and OCB. This leads to the following hypotheses:

H6a: Procedural fairness will be positively associated with organizational commitment.

H6b: Procedural fairness will be positively associated with organizational citizenship behaviors.

The negative effects of job insecurity on organizational commitment are well documented in the job insecurity literature (e.g., Greenhalgh, 1979; Hanlon, 1979; Brockner et al., 1987; Ashford et al., 1989; Borg & Elizur, 1992; Van Vuuren et al., 1991; Hartley, 1991). Similar effects regarding OCB, though not explicitly tested, are strongly suggested in the literature on psychological contracts (e.g., Parks & Kidder, 1994; Robinson & Morrison, 1995; Robinson & Rousseau, 1994; Wiesenfeld & Brockner, 1993). Nevertheless, considerable variation in employee reactions to job insecurity (Brockner, 1988) suggests a moderated relationship. Procedural fairness may act as an important moderator of the job insecurity-social exchange outcomes relationship. Folger (1986) presented evidence that individuals may tolerate occasional inequities or injustices in the short run if they believe the organization will fairly discharge its obligations in the long run. Thus, employees may react less strongly to job insecurity if they are confident that they will be treated fairly in the event of a layoff. This suggests that procedural fairness will mitigate the negative effects of job insecurity on social exchange outcomes.

While no direct tests of the moderating effects of fairness on the job insecurity-organizational commitment relationship were found in the literature, an important stream of research by Brockner and his associates offered considerable insight into this relationship among layoff survivors--those who remain after a layoff. Studies dealing with distributive justice revealed that survivor OC was lower among those who felt layoff victims, with

whom they were closely associated, were treated unfairly (Brockner et al., 1987; Brockner et al., 1990). Investigations involving procedural fairness clearly indicated that survivor OC is positively related to the fairness of the layoff decision rule (Brockner et al., 1990; Davy et al., 1991; Brockner et al., 1992). Layoffs based on a formal rule (e.g., merit, function, or seniority) were viewed more favorably and led to higher levels of OC than those based on unspecified rules or political considerations. Evaluations of interactional justice revealed that survivor OC is positively related to fairness of management accounts of the layoff (Brockner et al., 1990). Finally, composite measures reflecting several significant components of fairness were found to be strongly related to survivor OC (Brockner et al., 1993; Brockner et al., 1994).

Overall, this stream of research demonstrates that survivors remain committed to the organization when the layoff is viewed as fair, but organizational commitment drops sharply when the layoff process is viewed as unfair. Unfortunately, despite Brockner's (1988) assertion that survivor reactions to a layoff vary considerably, these studies assume that job insecurity is universally high among layoff survivors without actually measuring the construct. Therefore, these studies suggest but do not actually test the moderating effects of fairness on the job insecurity-organizational commitment relationship.

Similarly, no direct test of the moderating effects of fairness on the job insecurity-OCB relationship was found in the literature. An interesting study of layoff victims by Brockner and his associates (Bies et al., 1993), however, did offer some insight into the relationship. This study examined OCB during the last 60 days of employment for 147 skilled manufacturing employees scheduled for layoff. Retrospective accounts of OCB

obtained in exit interviews revealed that employees who felt the layoff was fair were more likely to remain good citizens in the interim period than those who felt it was unfair. Procedural justice was the most important determinant of OCB. Unfortunately, this study was plagued by several theoretical and methodological problems. First, those who are facing certain job loss are expected to react differently than those facing the fear and uncertainty of job insecurity (Greenhalgh, 1979; Jacobson, 1991). Secondly, all data was collected using self-report measures leaving open the possibility of common method variance. Finally, the construct validity of the three-item, retrospective measure of OCB employed in the study is questionable.

Overall, no studies have provided a direct test of the moderating effects of procedural fairness on the job insecurity-social exchange outcomes relationship. This study addresses this gap in the literature by providing an initial test of this relationship, suggesting the following hypotheses:

H6c: Procedural fairness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when fairness is low and weaker when fairness is high.

H6d: Procedural fairness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when fairness is low and weaker when fairness is high.

Organizational Support

Social exchange is governed by what Gouldner (1960) called the norm of reciprocity. The norm of reciprocity is a standard of conduct inherent in all social exchanges whereby a beneficial act by a donor creates an obligation on behalf of the recipient. According to Blau (1964), if the recipient meets this obligation, he or she is

proven to be trustworthy. Increased trust facilitates greater exchange activity, which, in turn, creates a social bond between the parties to the exchange. This social bond eventually leads to commitment between the parties whereby both parties depend exclusively on each other to meet important needs (Blau, 1964). Failure by one party to meet its obligations diminishes trust and commitment and eventually leads to a dissolution of the social exchange relationship (Blau, 1964; Gouldner, 1960; Holmes, 1981). Commitment is, therefore, an important basis for social exchange.

The commitment literature is dominated by the traditional notion of organizational commitment (Mathieu & Zajac, 1990) that refers to an employee's commitment to the organization (Mowday et al., 1982). Unfortunately, this view of commitment does not recognize an equally important aspect of commitment--employee perceptions of the organization's commitment to them. Recognizing this oversight, Eisenberger et al. (1986) introduced a social exchange view of commitment. According to this view, employees develop "global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" (p. 501). Perceived organizational support (POS) reflects employee assessments of these global beliefs and impacts the confidence employees have in the organization's intention to meet its obligations to the employees. When POS is high, employees are expected to be more attached to the organization and more willing to exert extra effort because they are confident the organization will meet its obligation to reciprocate by meeting their present and future needs (Eisenberger, et al., 1986). Consequently, POS is expected to be positively related to organizational commitment and OCB.

An impressive body of research supporting the usefulness of this new approach to commitment is emerging in the commitment literature (Eisenberger, et al., 1986; Eisenberger et al., 1990; Shore & Tetrick, 1991; Shore & Wayne, 1993). The Survey of Perceived Organizational Support (SPOS) was validated in two studies by Eisenberger et al. (1986). The construct validity of the SPOS was established in the first study, which involved a diverse sample of 361 employees working in nine different organizations ranging from a manufacturing firm to a post office. A short form of the SPOS was administered to a sample of 71 high school teachers in the second study along with a measure of the strength of the employee's exchange ideology (i.e., the extent to which they favor the trade of work effort for material and symbolic benefits). A strong negative association was observed between POS and absenteeism for those with moderate to strong exchange ideology.

Two additional studies by Eisenberger et al. (1990) provided further support for the relationship between POS and work outcomes. The first study involved an assessment of the relationship of POS to job performance and absenteeism among a diverse sample of 237 employees in six diverse occupations ranging from hourly manufacturing workers to police officers. Perceived organizational support was moderately correlated with both absenteeism and job performance in each occupational group. Correlations ranged from -.35 to -.62 for periods absent and from .24 to .64 for job performance. Performance among hourly manufacturing workers was strongly related to POS ($r = .64$). A second study by Eisenberger et al. (1990) investigated the relationship between POS and employee innovation, affective commitment, and performance-reward expectancies among a sample of

531 managerial and hourly employees in a large steel mill. Results indicated that POS is positively related to all three variables.

Significant findings in early research by Eisenberger and his colleagues prompted other researchers to question whether POS is distinct from other commitment constructs. This question was answered by Shore and her associates who evaluated both the dimensionality of the SPOS and the relationship of POS to measures of organizational commitment and OCB (Shore & Tetrick, 1991; Shore & Wayne, 1993). The dimensionality of the SPOS was evaluated in an extensive confirmatory factor analysis conducted by Shore and Tetrick (1991). This study, which involved a sample of 330 employees holding a variety of positions in a multinational firm, compared the 17-item short form of the SPOS with the Organizational Commitment Questionnaire (Mowday et al., 1979) and both the Affective Commitment Scale (ACS) and Continuance Commitment Scale (CCS) developed by Meyer and Allen (1984). Findings supported the unidimensionality of the SPOS as a measure of perceived organizational support and provided evidence that POS is empirically and conceptually distinct from affective and continuance commitment.

The relationships of POS and other forms of commitment to OCB were assessed by Shore and Wayne (1993) in a study involving 276 pairs of employees and their direct supervisors in a large multinational firm. Measures of POS, affective commitment, and continuance commitment were obtained from employees while their supervisors provided ratings of two forms of subordinate OCB--altruism and compliance. Perceived organizational support was strongly correlated with affective commitment and emerged as the strongest predictor of both forms of OCB. A similar study by Settoon, Bennett, and

Liden (1996) produced further evidence of a positive relationship between POS and organizational commitment.

Taken together, this stream of research provides preliminary support for the usefulness of Eisenberger et al.'s (1986) conceptualization of POS as a distinct commitment construct and as a predictor of social exchange outcomes, like organizational commitment and OCB. This study extends limited research in this area by providing a test of the direct relationship of POS to organizational commitment and all five dimensions of OCB suggested by Organ (1988). This leads to the following hypotheses:

H7a: Perceived organizational support will be positively associated with organizational commitment.

H7b: Perceived organizational support will be positively associated with organizational citizenship behaviors.

Because commitment is a vital precondition to social exchange (Blau, 1964; Holmes, 1981) and POS clearly reflects the organization's commitment to its employees, POS can be expected to moderate the relationship between job insecurity and social exchange outcomes. High levels of POS should mitigate the negative effects of job insecurity on social exchange outcomes. Employees who feel that the organization values their contributions and cares about their well-being (Eisenberger, et al., 1986) are more confident that they will be treated fairly even in the event of a layoff and are less likely to withdraw their own commitment and OCB in the face of job insecurity. Conversely, low levels of POS should exacerbate the negative effects of job insecurity on social exchange outcomes. Employees who feel the organization is uncaring and uncommitted to them are more likely to attribute the threat of job loss to the organization and its agents than to

unavoidable business conditions. Such employees can be expected to reciprocate this apparent violation of their psychological contract by withdrawing commitment and curtailing OCB (Parks & Kidder, 1994).

While no studies directly assessed the moderating effects of POS on the job insecurity-social exchange outcomes relationship, several studies offered some insight into this relationship. Nauman, Bies, and Martin (1995) investigated organizational commitment among 147 layoff victims during their last 60 days of employment in a manufacturing plant. Perceived organizational support, assessed with a four-item custom measure, was strongly correlated ($r = .56$) with organizational commitment among layoff victims. This study suggests that high levels of organizational commitment can be maintained even among layoff victims if the organization demonstrates concern for their well-being. Another interesting study provided a direct test of the moderating effects of POS outside the realm of job insecurity. In a study of 256 nurses conducted by George et al. (1993), POS emerged as a significant moderator of the relationship between degree of exposure to AIDS patients and negative mood states. Perceived organizational support buffered the negative effects of exposure to AIDS patients on nurses' mood states. Overall, these studies demonstrate that employees facing stressful work situations will respond less negatively if they feel the organization is concerned about their well-being.

Related to POS is the more general notion of social support. After more than a decade of research in the occupational stress literature, work-based social support, which includes support from coworkers and supervisors, has emerged as an important moderator or buffer of the relationship between stressors and strains (e.g., Beehr, 1985; Cohen &

Wills, 1985; Kahn & Byosiere, 1992; LaRocco, House, & French, 1980). This line of inquiry is also evident in the job insecurity literature. Greenhalgh and Rosenblatt (1984) predicted that social support would moderate or buffer the negative effects of job insecurity on work outcomes. Explicit tests of this buffering hypothesis were provided in three studies. Dooley, Rook, and Catalano (1987) found no evidence to suggest that social support moderates the relationship between job insecurity and psychological well-being. An international study of 100 German industrial workers conducted by Borg and Elizur (1992) demonstrated that social support and job insecurity interact to affect work attitudes. Finally, the most convincing support for the moderating effects of social support is found in Lim's (1996) mail survey of 306 employed MBA graduates. This study provides evidence that work-based social support moderates the relationship between job insecurity and several work outcomes, including job dissatisfaction, proactive job search, and noncompliant behaviors.

While these studies provide some insight into the moderating effects of POS and social support, no direct test of the moderating effects of POS on the job insecurity-social exchange outcomes relationship appears in the literature. This study is the first to investigate this relationship, leading to the following hypotheses:

H7c: Perceived organizational support moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when perceived organizational support is low and weaker when perceived organizational support is high.

H7d: Perceived organizational support moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when perceived organizational support is low and weaker when perceived organizational support is high.

Chapter Summary

This chapter provides a complete review of the job insecurity literature with particular emphasis on employee reactions to job insecurity. It provides a brief overview of the historical development of job insecurity research and distinguishes between the contemporary notion of job insecurity and its predecessor--job security. Two general models of the consequences of job insecurity are presented: the stress model and the organizational model. A general review of the stress-based and organizational outcomes of job insecurity follows.

A social exchange model of job insecurity, which serves as the foundation for this study, is then proposed, along with the research model to be tested in this study. The theoretical justification and pertinent research findings for each path of the research model are reviewed thereafter. Hypotheses to be tested for each path are presented in each section of the review. First, a detailed review of the literature pertaining specifically to the relationship between job insecurity and organizational commitment is provided. This is followed by a review of the literature concerning the relationship between job insecurity and OCB. Finally, the theoretical justification and pertinent research regarding individual difference and situational moderators of these relationships are discussed.

In total, seven major hypotheses, with several subhypotheses, are to be tested in this study. These hypotheses are summarized in Table 5. The research design and methodology for the study are described in the following chapter.

Table 5

Summary of Research Hypotheses

H1: Job insecurity is negatively associated with organizational commitment.
H2: Job inseeurity is negatively associated with organizational citizenship behavior.
H3a: Communal orientation is positively associated with organizational citizenship behavior.
H3b: Communal orientation moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when communal orientation is low and weaker when communal orientation is high.
H4a: Powerlessness is negatively associated with organizational commitment.
H4b: Powerlessness is negatively associated with organizational citizenship behavior.
H4c: Powerlessness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.
H4d: Powerlessness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.
H5a: Trust in management is positively associated with organizational commitment.
H5b: Trust in management is positively associated with organizational citizenship behavior.
H5c: Trust in management moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when trust is low and weaker when trust is high.
H5d: Trust in management moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when trust is low and weaker when trust is high.
H6a: Procedural fairness is positively associated with organizational commitment.
H6b: Procedural fairness is positively associated with organizational citizenship behavior.
H6c: Procedural fairness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when fairness is low and weaker when fairness is high.
H6d: Procedural fairness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when fairness is low and weaker when fairness is high.
H7a: Perceived organizational support is positively associated with organizational commitment.
H7b: Perceived organizational support is positively associated with organizational citizenship behavior.
H7c: Perceived organizational support moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when support is low and weaker when support is high.
H7d: Perceived organizational support moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when support is low and weaker when support is high.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research methodology employed in this study. The research design of the study is first described. A discussion of the nature and number of subjects involved in the study follows. Next, detailed descriptions of the proposed measures used in the self-report employee and supervisor questionnaires (see Appendix A and B) are provided, and the procedures used to administer these questionnaires are discussed. The chapter closes with a brief explanation of the statistical analyses to be used in testing the research hypotheses and a discussion of statistical power (see Appendix C).

Research Design

This study is concerned with employee reactions to job insecurity. The experience of job insecurity is unique in the workplace for two reasons. First, it represents a significant threat to the livelihood and well-being of employees and their families. The potentially serious consequences of job loss evoke strong emotional reactions among employees, rivaling reactions to the loss of a loved one (Greenhalgh, 1979; Strange, 1977). Secondly, job insecurity is viewed as a subjective experience or work attitude. Regardless of the objective severity of the threat to job continuity, the experience of job insecurity and employee reactions to it depend on the individual's perception of the job situation as threatening (Greenhalgh & Rosenblatt, 1984; Lazarus & Folkman, 1984).

Because the emotional intensity and personal consequences of potential job loss are not easily represented or manipulated in an experimental setting, this study relies on correlational research in a natural setting to examine employee reactions to job insecurity. Moreover, since the variables of interest in this study assess internal states (e.g., values, attitudes, and beliefs) and perceptions of events, situations, and other people, survey research is the appropriate research tool (Sackett & Larson, 1991). Therefore, correlational survey research is the appropriate research design for this study.

While the independent variable (job insecurity) and the moderator variables in this study are assessed with employee self-reports, most dependent variables in this study are assessed using supervisor ratings of employees to minimize the threat of common method variance.

Sample

The study of job insecurity requires a sample of employees who are faced with a threat of job loss. Therefore, this study was conducted in an organization that was facing an immediate threat of job cuts. The research site in this study was a downsizing state mental health hospital in the southwestern United States that was on the verge of implementing a state mandated reduction in force (RIF). Approximately 20% of the workforce was to be eliminated over a one-year period. The first phase of downsizing began immediately after data collection. Approximately 10% of the healthcare positions in this hospital were eliminated within three months of data collection. Several hospital administrators also resigned during this period. Further job cuts are planned over the next

year. One mitigating factor at this research site was the high turnover rate (10-20% annually) which allowed the organization to cut staffing primarily through attrition.

The sample was comprised of psychiatric technicians (PTs), licensed vocational nurses (LVNs), and registered nurses (RNs). Psychiatric technicians are non-licensed employees who provide general care to meet the daily needs of patients (e.g., feeding, hygiene, and exercise). Clinical services, such as giving injections, dispensing medication, and tracking vital signs, are provided by LVNs and RNs. The role of these healthcare employees differs greatly from day to night. During the day (7 a.m. to 3 p.m.), PTs and a small group of supporting LVNs are permanently assigned to a particular hospital unit. These day employees report to an RN who acts as a supervisor with both clinical and administrative responsibility for the unit. Day RNs, in turn, report to a unit nurse manager. At night (3 p.m. to 7 a.m.), staffing is reduced and all healthcare employees report to a single night shift nurse manager. Psychiatric technicians are assigned to a particular hospital unit, but night nurses work in multiple hospital units as needed during the night.

Due to budget constraints, hospital administration dictated that survey administration be conducted during regular work hours. Since PTs could not leave patients unattended, they could participate only in shifts—one group covering for the other during survey meetings. Such a process was not feasible at night due to reduced staffing levels on night shifts. As a result, only day PTs were targeted for this study. Most nurses, on the other hand, could break away for survey meetings if they were held during report time at the end of the shift. All nurses were targeted for study with the exception of day RNs who were excluded due to their role as supervisors. Thus, the sample was comprised of non-

supervisory healthcare workers in two distinct groups: (1) day technicians, and (2) night nurses. Day technicians (n=145) consist of PTs and support staff who are permanently assigned to the various hospital units. Night nurses (n=48), by contrast, are comprised entirely of LVNs and RNs who work in multiple hospital units during the night. These groups are treated as separate samples in this study because they differ greatly in terms of skill level, job duties and responsibilities, supervision, and work environment.

All employees who attended survey meetings agreed to participate in the study. Unfortunately, an elaborate system of rotating work schedules, absences, and vacations prevented access to all day technicians. Nevertheless, 81% of this group participated in the study. Night nurses were more difficult to reach because they were widely dispersed in numerous buildings across a large hospital campus. Nearly two thirds (66%) of night nurses participated in the study.

The individual characteristics of the sample regarding age, tenure, and gender differed somewhat among the day technician and night nurse groups. The mean age for day technicians was 39.1 (10.8) years. For day technicians not participating in the study, the mean age was 40.4 (11.6) years. A slightly higher mean age of 43.8 (12.4) years was found among night nurses. The mean age of night nurses not participating in the study was 43.1 (10.3) years.

Mean tenure in the organization was 6.6 (5.5) years for day technicians participating in the study and 6.9 (5.8) years for day technicians not participating in the study. Mean tenure in the organization was somewhat lower among night nurses. Those participating in

the study had a mean tenure of 4.8 (5.4) years, while those not participating in the study had a mean tenure of 4.5 (5.2) years.

Finally, as is common in the healthcare industry, most of the technicians and nurses participating in this study were females. Among day technicians, 64.1% of those participating in the study were females and 68.4% of those not participating were females. A similar distribution existed among night nurses where 79.2% of those participating in the study were females and 76.3% of those not participating were females. Overall, the relatively high rate of participation in this study and the similarity between participants and nonparticipants suggest that nonresponse bias is minimal in this study.

Measures

All studies must address the issue of construct validity (Mitchell, 1985; Sackett & Larson, 1991). According to Schwab (1980), construct validity is concerned with the correspondence between a construct and the operational procedure used to measure the construct. Because constructs are not themselves observable, scientific research infers a relationship between constructs when measures of these constructs covary (Messick, 1975). Such inferences are valid only when the construct validity of the measures is established (Schwab, 1980). To ensure construct validity, only established measures with acceptable psychometric properties and good theoretical linkage to the intended construct are included in this study. Measures used in the employee questionnaire are shown in Appendix A, while measures used in the supervisor questionnaire are shown in Appendix B.

The construct validity of each measure used in this study is discussed in the following sections. Based on Venkatraman and Grant's (1986) approach for evaluating

construct validity, each measure is evaluated in terms of (1) internal consistency—its reliability and unidimensionality, (2) convergent validity—its similarity with other measures of the same construct, (3) discriminant validity—its dissimilarity with measures of different constructs, and (4) nomological or predictive validity—how well the measure fits into a theoretical network of expected relationships (Cronbach & Meehl, 1955). This discussion is organized in terms of independent variables, moderators, dependent variables, and control variables.

Independent Variables

This study is concerned with employee reactions to job insecurity. Therefore, job insecurity is the focal independent variable in this study. The discussion in Chapter 2 noted that the organizational model of job insecurity (see Figure 3) recognizes two basic dimensions of job insecurity: severity of threat and powerlessness. This discussion presented evidence that powerlessness is not a dimension of job insecurity but a separate construct whose effects must be evaluated independently. Therefore, powerlessness is treated as a separate moderator variable in this study and job insecurity refers only to the severity of the threat to job loss. Due to the centrality of the job insecurity construct in the proposed research model, this construct is assessed using two measures of job insecurity: (1) a global job insecurity scale (Caplan et al., 1975), and (2) a modified version of Kuhnert and Lahey's (1988) job insecurity scale. Both measures of job insecurity are described in the following sections.

Global Job Insecurity Scale

The global job insecurity scale developed by Caplan et al. (1975) is the most popular measure of job insecurity (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984; Jacobson, 1991). This scale measures the degree to which respondents feel uncertain regarding the future of the job itself and their career. The convergent and discriminant validity of this scale was assessed by Ashford et al. (1989). It demonstrated good convergence with Ashford et al.'s (1989) multiplicative Job Insecurity Scale and a seven-item job insecurity subscale from Johnson, Meese, and Crano's (1984) Work Opinion Questionnaire. The scale was not related to other scales measuring dissimilar constructs, like health complaints. Several studies support the predictive validity of the scale as a significant predictor of a variety of work attitudes, like satisfaction, trust, commitment, and intent to quit (Ashford et al., 1989; Caplan et al., 1975; Lim, 1996; Schweiger & Lee, 1993). Greenhalgh and Rosenblatt (1984) noted in their review of the job insecurity literature that Caplan et al.'s (1975) scale is "perhaps the best attempt to measure the insecurity construct" (p. 438).

Reliability of the scale was enhanced by Lim (1996) who added two items assessing the likelihood of a layoff to the scale. The internal consistency reliability of the revised scale (.85) exceeded that of the original scale, which ranged from .78 to .83 across several different studies (Ashford et al., 1989; Caplan et al., 1975; Schweiger & Lee, 1993). This six-item version of the scale, shown in Appendix A (Section 2, Part A), was chosen for use in this study. Respondents indicate how certain they are about each of the items on a five-point Likert scale ranging from Somewhat Uncertain (1) to Very Certain (5). All items are positively worded with higher scores reflecting higher levels of job security. Therefore,

each item must be reverse-scored to reflect the degree of job insecurity. The total job insecurity score is obtained by adding item responses. Coefficient alpha for this measure was .82 for technicians and .74 for nurses.

Modified Kuhnert Scale

A second measure of job insecurity used in this study is the job permanence subscale of Kuhnert and Lahey's (1988) Job Security Scale. This 11-item scale assesses beliefs concerning the continuity of one's job. The reliability and predictive validity of this scale was established in a stream of research by Kuhnert and his associates (e.g., Kuhnert & Lahey, 1988; Kuhnert & Palmer, 1991; Kuhnert, Sims, & Lahey, 1989; Kuhnert & Vance, 1992). Internal consistency reliability of the scale was acceptable with coefficient alpha ranging from .79 to .85 across these studies. Moreover, these studies demonstrated that this scale is strongly related to organizational commitment and various aspects of physical and psychological health (e.g., anxiety, depression, and hostility).

Nevertheless, Kuhnert and Lahey's (1988) validation of this scale revealed that four of its 11 items do not load strongly on the intended job permanence factor. These four items were eliminated from this scale in the present study to enhance its internal consistency reliability and factorial stability. A new item that more directly taps job insecurity, "I believe my job is secure," also was added to the scale.

The modified Kuhnert job insecurity scale used in this study is shown in Appendix A (Section 2, Part B). Respondents indicate how strongly they agree or disagree with each of the items on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly

Agree (5). Positively phrased items are reverse-scored. Total scores are obtained by adding item responses. Higher scores indicate higher levels of job insecurity.

The reliability of this scale was assessed in a pretest involving a sample of 40 full-time healthcare workers. Coefficient alpha for this measure was .77 in the pretest. In the present study, coefficient alpha was .84 for technicians and .85 for nurses. Overall, the new scale demonstrated acceptable reliability.

Moderator Variables

Two sets of moderator variables are included in this study: individual differences and situational factors. Individual differences are comprised of two variables--communal orientation and powerlessness. Situational factors are comprised of three variables, including trust in management, procedural fairness, and organizational support. While each of these variables is expected to moderate the relationship between job insecurity and social exchange outcomes, these variables also are tested for direct relationships.

Communal Orientation

Communal orientation is operationalized using the Communal Orientation Scale developed by Clark et al. (1987) and revised by Buunk et al. (1993). The original 14-item scale demonstrated adequate internal reliability with coefficient alpha of .78 in a sample of American students (Clark et al., 1987) and .74 in a sample of Dutch students (VanYperen & Buunk, 1991). Factor analyses by Clark et al. (1987) and Buunk et al. (1993), however, revealed that four of the 14 items did not load strongly on the intended communal orientation factor. These items were omitted by Buunk et al. (1993) to produce a revised 10-item version of the scale with improved factorial stability and internal consistency

(coefficient alpha = .80). Buunk et al. (1993) demonstrated the discriminant validity of the revised scale by showing that it is distinct from a measure of exchange orientation, which is the antithesis of communal orientation. The predictive validity of the new scale is demonstrated in two studies that confirm the role of communal orientation as a significant moderator of the relationship between perceived inequity and a variety of work attitudes, like dissatisfaction, psychological withdrawal, burnout, and intent to quit (Buunk et al., 1993; VanYperen, 1996).

The 10-item revised version of the Communal Orientation Scale used in this study is shown in Appendix A (Section 5). Respondents indicate how strongly they agree or disagree with each of the items on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Higher scores indicate higher levels of communal orientation. Negatively phrased items are reversed-scored. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .76 for technicians and .74 for nurses.

Powerlessness

Powerlessness is operationalized using the six-item helplessness scale developed by Ashforth (1989). This scale was chosen because it specifically measures the perceived inability to influence work-related events or outcomes. Thus, it closely parallels Greenhalgh and Rosenblatt's (1984) notion of powerlessness and is well suited for use in the context of job insecurity. The psychometric quality of this scale is well documented across several studies (e.g., Ashforth, 1989; Fried et al., 1996; Lee & Ashforth, 1993). Internal consistency reliability of the scale was acceptable in these studies with coefficient alpha ranging from .81 to .87. These studies also supported the discriminant validity of the scale

by demonstrating that the scale was not strongly related to measures of fairness, role ambiguity, and job complexity. Convergent validity was established by showing that the scale was highly correlated with measures of perceived control, job autonomy, and a related powerlessness scale. Finally, the scale demonstrated good predictive validity in its relationships with job satisfaction and intent to leave (Fried et al., 1996), job involvement (Ashforth, 1989), and role stress and job burnout (Lee & Ashforth, 1993). Overall, these studies offer strong support for the construct validity this scale.

The six-item helplessness scale used in this study is shown in Appendix A (Section 2, Part C). Respondents indicate how strongly they agree or disagree with each of the items on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Higher scores reflect higher levels of powerlessness. Positively worded items are reverse-scored. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .86 for technicians and .89 for nurses.

Trust in Management

Trust in management is operationalized using a seven-item trust scale developed by Robinson and Rousseau (1994). This scale was derived from the bases of trust in business relationships identified by Gabarro and Athos (1976), which include integrity, motives and intentions, behavioral consistency, openness, and discreteness. It was chosen over more global trust scales, like Cook and Wall's (1980) trust scale, because it focuses specifically on interpersonal aspects of trust, which are expected to be more strongly related to the social exchange outcomes of interest in this study.

Robinson and Rousseau (1994) validated this scale in a longitudinal study of 128 employed graduate alumni. The scale demonstrated high internal consistency with a coefficient alpha of .93. Moreover, the scale was strongly related to perceptions of broken promises by the employer and work attitudes like job satisfaction and intent to quit. A similar study by Robinson and Morrison (1995) confirmed the internal consistency of the scale (coefficient alpha of .87) and indicated that the measure is strongly related to OCB and perceptions of broken promises by the employer. Overall, these studies offer consistent support for the psychometric quality and construct validity of this relatively new trust measure.

To avoid possible item overlap with the procedural justice scale, which assesses perceptions of supervisor fairness, the word "management" was substituted for the word "employer" in each item of the scale, and scale instructions clarified the meaning of the term as referring to top management officials (i.e., administrators, managers, and directors of the organization). This scale, shown in Appendix A (Section 3, Part A), asks respondents to indicate how strongly they agree or disagree with each of the items on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Higher scores indicate higher levels of trust in management. Negatively phrased items are reverse-scored. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .88 for technicians and .90 for nurses.

Procedural Fairness

Procedural fairness is operationalized using the eight-item procedural justice in supervisor decision making scale developed by Konovsky and Folger (1991). This measure

reflects the six procedural justice rules identified by Leventhal (1980)—consistent standards, lack of self-interest, accurate information, opportunities to correct decisions, concern for the interests of all parties, and moral and ethical standards. Konovsky and her associates (Konovsky & Folger, 1991; Konovsky & Pugh, 1994) offer consistent evidence supporting the construct validity of this scale. Collectively, these studies demonstrate that the scale is highly reliable in terms of internal consistency with coefficient alpha reaching .95. Factor analyses in these studies indicate that the items in this scale load strongly on the intended procedural justice factor. Tests of convergent validity demonstrate that the scale is strongly related to other measures of organizational justice (e.g., distributive justice). Nevertheless, it is more strongly related to social exchange outcomes, like OCB, than distributive justice. In total, these studies demonstrate the psychometric quality and construct validity of this scale.

The eight-item procedural justice scale used in this study is shown in Appendix A (Section 3, Part B). Respondents are asked to indicate how strongly they agree or disagree with each of the items describing the use of fair procedures by their supervisor on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). All items are positively worded with higher scores indicating higher levels of procedural fairness. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .96 for technicians and .95 for nurses.

Organizational Support

Organizational support is operationalized using the 17-item Survey of Perceived Organizational Support (SPOS) developed by Eisenberger et al. (1986). The construct

validity of this scale was extensively evaluated in three major studies (Eisenberger et al., 1986; Shore & Tetrick, 1991; Shore & Wayne, 1993). The scale demonstrated high internal consistency reliability in these studies with coefficient alpha ranging from .93 to .95. Factor analyses in all three studies supported the unidimensionality of the SPOS. Shore and Tetrick (1991) provided evidence that the SPOS is empirically and conceptually distinct from affective and continuance commitment, but it is moderately correlated with affective commitment and job satisfaction as predicted by social exchange theory (Blau, 1964). Shore and Wayne (1993) found that the SPOS has a stronger relationship with OCB than traditional measures of affective and continuance commitment. The scale demonstrated good predictive validity in its relationship with absenteeism (Eisenberger et al., 1986), innovation and performance (Eisenberger, Fasolo, & Davis-LaMastro, 1990), and job burnout (Lee & Ashforth, 1993). More recently, Rosenblatt and Ruvio (1996) reported a significant negative relationship between job insecurity and the SPOS. Overall, these studies offer strong support for the construct validity of the SPOS.

This scale, shown in Appendix A (Section 4), asks respondents to indicate how strongly they agree or disagree with statements describing their perceptions of the organization's concern or commitment toward them on a seven-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7). Higher scores indicate higher organizational support. Negatively phrased items are reverse-scored. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .94 for technicians and .96 for nurses.

Dependent Variables

The social exchange outcomes of organizational commitment and five dimensions of organizational citizenship behavior (OCB) comprise the dependent variables in this study. To minimize the possibility of common method variance, independent variable and dependent variable measures are obtained from procedurally independent sources where possible (Podsakoff & Organ, 1986). Because the independent variables and moderators in this study represent personality traits, individual perceptions, and psychological states, they are appropriately measured via self-report (Podsakoff and Organ, 1986; Sackett & Larson, 1991; Spector, 1994). One dependent variable, organizational commitment, also refers to an individual perception or psychological state and is assessed using a self-report measure. All self-report measures are included in the employee questionnaire in Appendix A.

The remaining dependent variables, the five dimensions of OCB, represent ratings of individual performance or behavior. The source of choice in the literature for ratings of OCB has been supervisory ratings (e.g., Bateman & Organ, 1983; Konovsky & Pugh, 1994; Moorman, 1991; Organ & Konovsky, 1989; Podsakoff et al., 1990; Podsakoff et al., 1996; Williams & Anderson, 1991). Williams (1988) specifically addressed the question of the source of OCB measures. He reached two important conclusions in his extensive analysis. First, supervisor ratings were superior to co-worker ratings of OCB because supervisors provide a more accurate and complete picture of an employee's OCB, and they are more likely to distinguish between in-role and extra-role behavior. Secondly, Williams found little difference between supervisor ratings and self-report ratings of OCB, but noted that common method variance is likely to contaminate tests of relationships between work

attitudes and self-reported OCB. Due to the centrality of OCB as a key dependent variable in this study and Podsakoff and Organ's (1986) recommendation that common method variance be dealt with in the design of studies, supervisory ratings of OCB are used in this study. These measures are included in the supervisor questionnaire in Appendix B.

Organizational Commitment

Organizational commitment is operationalized using the nine-item short version of the classic Organizational Commitment Questionnaire (OCQ) developed by Porter and his colleagues (Mowday, Steers, and Porter, 1979; Porter, Steers, Mowday, & Boulian, 1974). The construct validity of the OCQ is well established in the literature. In their extensive meta-analysis of the organizational commitment literature, Mathieu and Zajac (1990) concluded that the OCQ is, by far, the most popular measure of organizational commitment. It was used in 90 of the 174 samples evaluated in this large-scale meta-analysis involving over 124 published studies. Internal consistency reliability across these samples was impressive with an average coefficient alpha of .88.

The most extensive evidence of the construct validity of the scale, however, emerged from a series of studies conducted by Mowday et al. (1979) involving over 2,500 employees in a wide variety of jobs in nine different organizations. Internal consistency was relatively high with coefficient alpha ranging from .82 to .93, while factor analyses supported the unidimensionality of the scale. Convergent validity with other measures of commitment, intent to leave, and work motivation also was high. Acceptable discriminant validity was demonstrated in that correlations with other attitude measures (e.g., job involvement, career satisfaction, and job satisfaction) were not excessive. Finally,

predictive validity was high in this series of studies. The OCQ had significant relationships with several work outcomes (turnover, absenteeism, and performance) as suggested by commitment theory (Mowday, Porter, & Steers, 1982; O'Reilly & Chatman, 1986). Mathieu and Zajac's (1990) meta-analysis also supported the predictive validity of the scale with the OCQ most strongly related to turnover, intent to search, and intent to leave.

This scale, shown in Appendix A (Section 1), asks respondents to indicate how strongly they agree or disagree with statements describing their commitment toward their employing organization on a seven-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7). Higher scores indicate higher organizational commitment. Negatively phrased items are reverse-scored. Total scores are obtained by adding item responses. Coefficient alpha for this measure was .87 for technicians and .95 for nurses.

Organizational Citizenship Behavior

Organizational citizenship behavior was operationalized using the 24-item Organizational Citizenship Behavior Scale (OCBS) developed and validated by Podsakoff et al. (1990). The construct validity of the OCBS is well established in the literature. In fact, the OCBS was the most popular measure of OCB among the 53 studies of OCB reviewed by Van Dyne, Cummings, and Parks (1995). The most comprehensive evaluation of the construct validity of this instrument was provided in a large-scale validation study conducted by Podsakoff et al. (1990). This study reported acceptable internal consistency for each of the five scales of the OCBS with coefficient alpha ranging from .70 for civic virtue to .85 for altruism. Confirmatory factor analysis confirmed the five-factor model with scale items loading strongly on their intended factors. Results of an analysis of factor

intercorrelations in the study provided evidence supporting the convergent and discriminant validity of the five scales. Finally, several of the five dimensions of the OCBS were significantly related to work attitudes, like trust and job satisfaction, as predicted by social exchange theory (Blau, 1964). Reliability estimates and confirmatory factor analyses in a host of other studies employing the OCBS (e.g., Deluga, 1994; Konovsky & Organ, 1996; Konovsky & Pugh, 1994; Moorman, 1991, 1993; Niehoff & Moorman, 1993; Podsakoff et al., 1996) also support the psychometric soundness and construct validity of this measure.

Items in this scale, shown in Appendix B, tap the five dimensions of OCB described by Organ (1988, 1990)—altruism (Items 1, 10, 13, 15, 23), conscientiousness (Items 3, 18, 21, 22, 24), courtesy (Items 4, 8, 14, 17, 20), sportsmanship (Items 2, 5, 7, 16, 19), and civic virtue (Items 6, 9, 11, 12). Supervisors are asked to indicate how strongly they agree or disagree with statements describing the citizenship behavior of each of their subordinates on a seven-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (7). Higher scores indicate higher levels of a particular dimension of OCB. Negatively phrased items are reverse-scored. Total scores for each of the five dimensions of the OCBS are obtained by adding item responses. Among technicians, coefficient alpha was .94, .91, .91, .93, and .73 for altruism, conscientiousness, courtesy, sportsmanship, and civic virtue, respectively. Among nurses, coefficient alpha was .87, .92, .85, .91, and .84 for altruism, conscientiousness, courtesy, sportsmanship, and civic virtue, respectively.

Control Variables: Demographic Characteristics

Internal validity refers to the extent to which the results of a study are unambiguous and cannot be explained by rival hypotheses (Cook & Campbell, 1979). To ensure internal

validity, one must design a study in such a way as to rule out rival hypotheses. One such rival hypothesis in field research is that covariance among study variables is spurious—the result of covariation with extraneous variable(s) unrelated to the study. Demographic characteristics are a common source of extraneous variance in field studies (Kerlinger, 1986). To enhance the internal validity of this study, the effects of these variables must be controlled. Major reviews of the literature pertaining to organizational commitment and OCB suggest that several demographic characteristics be controlled in this study.

The largest review of the organizational commitment literature to date, conducted by Mathieu & Zajac (1990), revealed that most demographic characteristics had little effect on organizational commitment. Three of these characteristics, however, were significant at the $p < .01$ level of significance. These characteristics included age ($r = .20$), organizational tenure ($r = .17$), and gender ($r = -.15$). Older workers, according to Mathieu and Zajac, are more committed to the organization because they are typically more satisfied, they have better positions, and they have justified their remaining in the organization. Similarly, long-tenured employees are more committed to the organization because psychological attachment to the organization builds over time. While the effect is small, gender is related to organizational commitment in that women tend to be more committed to the organization than men.

Most recent studies of OCB control for the effects of the same demographic characteristics: age, organizational tenure, and gender (e.g., Deluga, 1994; Konovsky & Organ, 1996; Konovsky & Pugh, 1994; Moorman, 1991, 1993; Niehoff & Moorman, 1993; Podsakoff et al., 1996; Van Dyne et al., 1995; Williams & Anderson, 1991). No significant

relationships between these demographic characteristics and OCB were reported in these studies. Nevertheless, Organ and Ryan's (1995) review of the OCB literature presents evidence that organizational tenure and gender are significantly related to two dimensions of OCB—altruism and generalized compliance. The magnitude of these effects, however, was very small ($r < .05$). Collectively, the literature suggests that demographic characteristics explain little variance in OCB.

In summary, most studies of organizational commitment and OCB control for three demographic characteristics: age, organizational tenure, and gender. While the magnitude of these effects is greater in studies involving organizational commitment, there is sufficient evidence to suggest that these variables should also be controlled in studies involving OCB. Therefore, all three variables are measured in this study and their effects are controlled in statistical analyses. Age was determined by asking the respondent to enter his or her birth date on the signed consent form in Appendix A. The gender of each subject was noted by the researcher during survey administration. Finally, organizational tenure was obtained from hospital records.

Procedure

Data collection proceeded in two phases. In the first phase, employees who agreed to participate in this study completed the self-report employee questionnaire (Appendix A) in on-site meetings scheduled during work hours. A release form (see Appendix A) that described the purpose of the study and asked for the respondent's consent to participate was attached to the front of the employee questionnaire. A code number used to match employee data to supervisor data was printed on the release form and in the employee

questionnaire. Participants were assured of the confidentiality of their responses, and the release form was detached from the questionnaire when it was returned. A release form indicating approval of study provisions for the protection of human subjects is also included in Appendix A.

Due to the intensity of the threat of job loss, trust was a major issue in survey administration. Employee questionnaires were administered by the researcher without intervention from hospital staff in over 50 small on-site meetings held in conference rooms in employee work areas. This approach allowed the researcher to reassure employees and to gain their trust before inviting them to participate in the study. As a result, all of the employees who attended these meetings agreed to participate in the study.

The second phase of data collection provided supervisor ratings of citizenship behavior for employees who participated in the study. Copies of the supervisor questionnaire and an informed consent form (see Appendix B) were distributed to supervisors in a staff meeting where the purpose of the study and instructions for rating each employee were reviewed. Supervisors completed one questionnaire for each of their subordinates participating in the study. The subordinate's name was printed at the top of each form. A cross reference list was used to match the employee's name to the code number used in the employee questionnaire. A matched set of employee-supervisor data was obtained for each subject in the study. All participants were given an opportunity to request a copy of the results of the finished study.

Data Analysis Techniques

The two primary statistical techniques used to analyze data in this study are (1) descriptive statistics, including bivariate correlational analysis, and (2) multivariate hierarchical set regression. Descriptive statistics include the means and standard deviations for all measures and a correlation matrix to assess bivariate correlations (Pearson product moment correlations) between all control, independent, and dependent variables in the study. The reliability of each measure used in the study is indicated on the diagonal of this matrix. Moderator variables are considered independent variables in all statistical analyses.

While bivariate correlations may provide some evidence for main effects, they are misleading when independent variables are correlated as in the present study. Multiple regression analysis takes this intercorrelation into account by partialling out variance shared with the other independent variables. Partial regression coefficients indicate the unique variance in the dependent variable accounted for by a particular independent variable. Unfortunately, partial regression coefficients generated in multiple regression analysis are highly unstable and misleading for independent variables that are multicollinear or strongly correlated (Cohen & Cohen, 1983). Multicollinearity poses a problem in this study because several of the independent variables are moderately correlated. Cohen and Cohen (1983) recommend hierarchical set regression as a means to address multicollinearity. Using this approach, the researcher groups independent variables into sets of related variables and enters these sets of variables into regression analyses sequentially based on a predetermined order derived from theory and empirical research. Ideally, no independent variable entering later should be the presumed cause of an independent variable entered earlier in the analysis

(Cohen & Cohen, 1983). This approach allows for the partitioning of variance accounted for in the dependent variable (R^2) into components attributed to different sets of independent variables and interactions among these variables. Hierarchical set regression was chosen as the primary analytical tool in this study because it provides a systematic framework for identifying the unique variance accounted for by intercorrelated independent variables, and it is well suited for testing moderating effects.

The set composition and order of entry suggested by the literature reviewed for this study is shown in Table 6. As in most behavioral science studies, demographic variables are entered first. It is unlikely that any other independent variables in this study would cause a change in demographic factors. The job insecurity set is entered next. This set of variables reflects the severity of the threat of job loss. Since the organization in this study was preparing to implement a major workforce reduction, this threat had an objective basis and was not expected to be strongly influenced by the remaining independent variables in the analysis. The third set of variables entered into the analysis is the individual difference set. These variables represent relatively stable individual work attitudes and preferences and were not expected to be strongly influenced by the remaining variables in the situational factors set. Situational factors are entered into the analysis as the fourth set. Finally, the interactions of job insecurity with each of the individual difference and situational factors are entered. The nature of significant interactions were examined graphically using a technique developed by Cohen and Cohen (1983).

Table 6

Hierarchical Set Regression: Order of Entry and Set Composition

Set	Set Elements	Effect
(1) Demographics	Age Organizational Tenure Gender	Main
(2) Job Insecurity	Global Job Insecurity Modified Kuhnert Scale	Main
(3) Individual Differences	Communal Orientation * Powerlessness	Main
(4) Situational Factors	Trust in Management Procedural Fairness Organizational Support	Main
(5) Interactions	Job Insecurity with each Individual Difference and Situational Factor	Interaction

* Relationships involving communal orientation and organizational commitment not tested

Two separate hierarchical set regression analyses were performed. In Phase I of the analysis, organizational commitment was the dependent variable. In Phase II, the five dimensions of OCB comprised the dependent variable set. At each step of a given analysis, an F-test is performed to determine whether a significant change in R^2 occurred after entering a set of independent variables. If this F-test is significant, the standardized regression coefficient (β) for each independent variable in the set is evaluated using a t-test to determine statistical significance. If the F-test is not significant, no tests of the individual variables in the set is permitted. This "protected t-test" is instrumental in minimizing Type I error while affording good statistical power (Cohen & Cohen, 1983). Study hypotheses are evaluated using statistics computed for the individual variables in significant sets. Overall,

hierarchical set regression provides an effective, theory-driven framework for testing the hypotheses of this study.

The hierarchical set regression analysis in this study was performed using Cohen's (1989) SETCOR statistical package. This package is a specialized subsystem of SYSTAT designed specifically for hierarchical set regression. The program guides the researcher through the hierarchical analysis using the procedures set forth by Cohen and Cohen (1983) who devised the technique.

Power Analysis

The issue of statistical power is often overlooked in empirical studies (Mazen, Hemmasi, & Lewis, 1987). Low statistical power threatens statistical conclusion validity and lessens the probability that a statistically significant effect will be found (Cook & Campbell, 1979). A power analysis based on Cohen's (1988) method was conducted in this study to ensure adequate statistical power. Since study hypotheses are tested using hierarchical set regression, statistical power must be assessed for all steps of the analysis where hypotheses are tested (i.e., Steps 2 through 5 in Table 6). Cohen and Cohen (1983) and Cohen (1988) recommend that conservative estimates of effect size be used at each step of such a power analysis. Therefore, a conservative power analysis based on the smaller effect sizes (R^2) obtained from Phase II of the hierarchical analysis, in which OCB was the dependent variable, was conducted.

Results of power analyses for each step of the hierarchical analysis, conducted using NCSS-Power Analysis and Sample Size (Hintze, 1993) with standard alpha levels of .01, .05, and .10, estimated effect size for each step, and various sample sizes (n), are shown in

Appendix C. With $\alpha = .05$, the sample size necessary to reach an acceptable power level of .80 varies from 80 in the second step to only 50 in the final step of the analysis. Statistical power for the day technician sample (n=145) was high, ranging from .96 in the second step to .99 in the final step of the analysis. Statistical power for the night nurse sample (n=48) was modest, ranging from .54 in the second set to .79 in the final set. If effect sizes are based on Phase I of the hierarchical analysis, where organizational commitment is the dependent variable, statistical power for the night nurses is adequate in every step of the analysis, ranging from .87 to .94.

Chapter Summary

This chapter outlines the research design and methodology used in assessing the study hypotheses developed in Chapter 2. A representative sample of hourly healthcare workers and their supervisors were subjects in the study. Employees who agreed to participate completed a self-report employee questionnaire during scheduled meetings held at the work site. This questionnaire is comprised of five sections, including a demographics section measuring control variables. Supervisors were asked to rate the citizenship behavior of each of their subordinates by completing a supervisor questionnaire at their convenience. Measures used in both questionnaires were carefully selected based on their content and psychometric quality.

The chapter closed with a discussion of data analysis techniques used in the study and an analysis of statistical power. Hierarchical set regression was chosen as the primary analytical tool because it provides a systematic framework for identifying the unique effects of intercorrelated independent variables, and it is well suited for testing moderating effects.

CHAPTER 4

RESULTS

This chapter details the results of the study outlined in the previous chapters. The chapter begins with a discussion of descriptive statistics and correlation matrices for both the day technician and night nurse samples. Results of statistical tests of hypotheses are then discussed in two phases of analysis. In Phase I, organizational commitment is the dependent variable, and, in Phase II, organizational citizenship behavior (OCB) is the dependent variable. The chapter closes with a summary of findings and outcomes of hypothesis tests.

Descriptive Statistics

Correlation matrices for the day technician and night nurse samples are presented in Tables 7 and 8, respectively. An examination of the means reported in these tables reveals relatively high levels of job insecurity and powerlessness among day technicians and night nurses. Higher scores on these three scales indicate higher levels of job insecurity and powerlessness. Mean scores were above the midpoint on each of these five-point scales. Moreover, trust in management and perceived organizational support were relatively low with mean scores below the midpoint on both scales. Collectively, these findings suggest that hospital employees feel their jobs are threatened, that they can do little to change the situation, and that they cannot trust management or expect the organization to be concerned

Table 7

Correlation Matrix and Reliabilities[a] For Day Technicians

Variables	Mean[b]	SD	1	2	3	4	5	6	7	8
1. Age	39.1	10.8	-							
2. Tenure	6.61	5.54	.45 **	-						
3. Gender[c]	1.64	.48	.23 **	.20 *	-					
4. Job Insecurity (Global)	3.38	1.01	.24 **	.17 *	.15	.82				
5. Job Insecurity (Kuhnert)	3.01	.74	.23 **	.08	.13	.60 **	.84			
6. Communal Orientation	4.20	.52	.17 *	-.10	.21 *	.03	.04	.76		
7. Powerlessness	3.27	.89	.08	.07	.09	.24 **	.42 **	-.14	.86	
8. Trust in Management	2.55	.79	.07	-.07	.09	-.28 **	-.40 **	.17 *	-.45 **	.88
9. Procedural Fairness	3.48	1.06	.01	-.10	.01	-.11	-.22 **	.20 *	-.34 **	.55 **
10. Perc'd Org. Support	3.56	1.19	-.02	-.02	-.03	-.31 **	-.48 **	.07	-.66 **	.74 **
11. Org. Commitment	4.62	1.18	.08	-.01	.11	-.28 **	-.30 **	.22 **	-.47 **	.62 **
12. Altruism	5.56	1.19	.07	.09	.09	.07	.02	.26 **	-.14	.06
13. Conscientiousness	5.15	1.41	.18 *	.15	.06	.06	.05	.18 *	-.08	.08
14. Courtesy	5.21	1.28	.12	.08	.05	.11	.05	.22 **	-.12	.16
15. Sportsmanship	5.22	1.55	.01	-.08	-.09	-.03	-.07	.10	-.16	.22 **
16. Civic Virtue	4.45	.98	.07	.21 *	.05	.09	-.06	.18 *	-.17 *	.01
			9	10	11	12	13	14	15	16
9. Procedural Fairness	3.48	1.06	.96							
10. Perc'd Org. Support	3.56	1.19	.47 **	.94						
11. Org. Commitment	4.62	1.18	.43 **	.64 **	.87					
12. Altruism	5.56	1.19	.16	.05	.10	.94				
13. Conscientiousness	5.15	1.41	.08	.03	.12	.79 **	.91			
14. Courtesy	5.21	1.28	.14	.06	.11	.81 **	.80 **	.91		
15. Sportsmanship	5.22	1.55	.20 *	.14	.21 *	.63 **	.59 **	.78 **	.93	
16. Civic Virtue	4.45	.98	.09	.08	.05	.46 **	.48 **	.43 **	.23 **	.73

[a] Reliabilities are presented on the diagonal [b] N=145 [c] Male=1, Female=2

* $p < .05$ ** $p < .01$ (2-tailed)

Table 8

Correlation Matrix and Reliabilities[a] For Night Nurses

Variables	Mean[b]	SD	1	2	3	4	5	6	7	8
1. Age	43.8	12.4	-							
2. Tenure	4.82	5.44	.39 **	-						
3. Gender[c]	1.79	.41	.16	-.04	-					
4. Job Insecurity (Global)	3.44	.86	.13	-.02	.13	.74				
5. Job Insecurity (Kuhnert)	3.03	.69	-.14	.02	.05	.52 **	.85			
6. Communal Orientation	4.29	.41	.07	.01	-.04	-.38 **	-.19	.74		
7. Powerlessness	3.37	.94	-.07	.20	.11	.55 **	.58 **	-.23	.89	
8. Trust in Management	2.47	.77	.22	-.08	-.02	-.47 **	-.57 **	-.02	-.66 **	.90
9. Procedural Fairness	3.52	.96	-.11	-.09	-.13	-.21	-.51 **	-.01	-.41 **	.44 **
10. Perc'd Org. Support	3.47	1.38	.09	-.03	-.17	-.47 **	-.62 **	-.05	-.73 **	.85 **
11. Org. Commitment	4.25	1.68	.17	.02	.00	-.58 **	-.66 **	.17	-.66 **	.79 **
12. Altruism	4.95	.88	.34 *	.20	.09	.15	-.03	-.02	.09	.03
13. Conscientiousness	4.83	1.23	.37 **	.13	-.03	-.04	-.18	-.12	-.20	.36 *
14. Courtesy	4.60	.95	.26	.18	.06	.10	-.16	-.05	-.10	.16
15. Sportsmanship	6.01	1.27	.10	.03	-.01	-.20	-.52 **	.16	-.27	.33 *
16. Civic Virtue	4.28	.84	.39 **	.05	.10	-.02	-.25	-.13	-.15	.30 *

			9	10	11	12	13	14	15	16
9. Procedural Fairness	3.52	.96	.95							
10. Perc'd Org. Support	3.47	1.38	.55 **	.96						
11. Org. Commitment	4.25	1.68	.51 **	.78 **	.95					
12. Altruism	4.95	.88	-.06	-.12	.01	.87				
13. Conscientiousness	4.83	1.23	.10	.25	.26	.70 **	.92			
14. Courtesy	4.60	.95	-.06	.15	.07	.59 **	.73 **	.85		
15. Sportsmanship	6.01	1.27	.31 *	.24	.35 *	.46 **	.63 **	.62 **	.91	
16. Civic Virtue	4.28	.84	.04	.26	.26	.54 **	.62 **	.61 **	.47 **	.84

* $p < .05$ ** $p < .01$ (2-tailed)

[a] Reliabilities are presented on the diagonal [b] N=48 [c] Male=1, Female=2

with their well-being. Despite these negative attitudes toward the organization, mean scores on communal orientation were surprisingly high (on a five-point scale). Mean scores on all of these independent variables were similar among day technicians and night nurses.

Mean scores on the dependent variables differed among day technicians and night nurses. Scores for organizational commitment (seven-point scale) and four of the five OCB measures (seven-point scales) were higher among day technicians. One exception was sportsmanship, which was considerably higher among night nurses. Inspection of the distribution of OCB ratings among groups of employees rated by the same supervisor indicated that some supervisors were severe in their ratings, rating no one above the midpoint of the scale, while others were lenient, rating no one below the midpoint of the scale. While leniency was more common in this study, major differences in the leniency and severity of OCB ratings among supervisors tend to obscure the relationship between job insecurity and OCB. Therefore, supervisor ratings on the five OCB scales were centered within each supervisor group to correct for these effects. This was accomplished by subtracting the mean score of all employees in the supervisor's work group from the score of each individual in the supervisor's work group. In this manner, individual scores could be compared and aggregated. Centered OCB ratings were used in all statistical analyses.

The correlation matrices in Tables 7 and 8 also indicate that many of the variables in this study are highly correlated. The research design outlined in Chapter 3 recognizes the expected intercorrelation of many of these variables. In particular, variables that comprise the independent variable sets defined in Chapter 3 should be highly correlated. The correlation matrices in Tables 7 and 8 confirm that these sets are correctly specified in most

cases. Variables in the demographic set (age, tenure, and gender) are moderately correlated. More importantly, the two measures of job insecurity in the job insecurity set (the global scale and modified Kuhnert scale) are highly correlated among both day technicians ($r = .60$; $p < .01$) and night nurses ($r = .52$; $p < .01$), as expected. The lack of a significant correlation between the components of the individual factors set (communal orientation and powerlessness) is not surprising. These factors were grouped together because theory suggests that both reflect individual differences, not because they were expected to be highly correlated. Variables comprising the situational factors set, by contrast, were expected to be highly correlated. Correlations between trust in management, procedural fairness, and perceived organizational support (POS) exceeded .50 ($p < .01$) in most cases. These strong correlations indicate that the situational factors set is correctly specified.

Another important aspect of the correlation analysis is the relationship among dependent variables in the study. In particular, the five dimensions of organizational citizenship behavior (altruism, conscientiousness, courtesy, sportsmanship, and civic virtue) should be highly correlated. Tables 7 and 8 reveal strong correlations between these measures, as expected. One exception, however, is civic virtue. Although it is significantly correlated with all of the OCB scales, the correlations are not as high as they are between the other OCB scales. This finding is consistent with other research using these scales (e.g., Deluga, 1994; Moorman, 1991, 1993; Podsakoff et al., 1996).

Finally, Tables 7 and 8 offer tentative insight into the relationships between the independent and dependent variables in the study. It is clear from the correlation matrices

that both measures of job insecurity, powerlessness, and all three situational factors are highly correlated with organizational commitment. Since these independent variables are highly intercorrelated, bivariate correlations may be misleading (Cohen & Cohen, 1983). Therefore, these relationships will be further explored using the hierarchical set regression procedure described in Chapter 3.

While few independent variables in the study are highly correlated with OCB, several relationships involving sportsmanship are worthy of note. Job insecurity is highly correlated with sportsmanship among night nurses ($r = -.52$; $p < .01$). Trust is significantly correlated with sportsmanship among both day technicians ($r = .22$; $p < .01$) and night nurses ($r = .33$; $p < .05$). Fairness is also significantly correlated with sportsmanship among day technicians ($r = .20$; $p < .05$) and night nurses ($r = .31$; $p < .05$). These bivariate correlations must, however, be viewed with caution because many of the independent variables in this study are highly intercorrelated (e.g., trust, fairness, and perceived organizational support). Judgment regarding these relationships is, therefore, reserved until findings of the hierarchical set regression procedure are discussed.

Statistical Test Results

The statistical technique used to test hypotheses in this study is hierarchical set regression (Cohen & Cohen, 1983). The set composition and order of entry, described in Table 6 (Chapter 3), were followed. The analysis was carried out in two phases. In Phase I, set regression was used to examine relationships between the independent variables and organizational commitment. In Phase II, set regression using the same set composition and order of entry was used to examine relationships between the independent variables and

organizational citizenship behavior (OCB). Separate analyses for the day technicians and night nurses are presented for each step in the hierarchical procedure in both phases of the analysis. The marginal effects of variables added at each step of the analysis and the results of statistical tests of hypotheses are presented in each phase. The section closes with a summary of findings for statistical tests of each hypothesis.

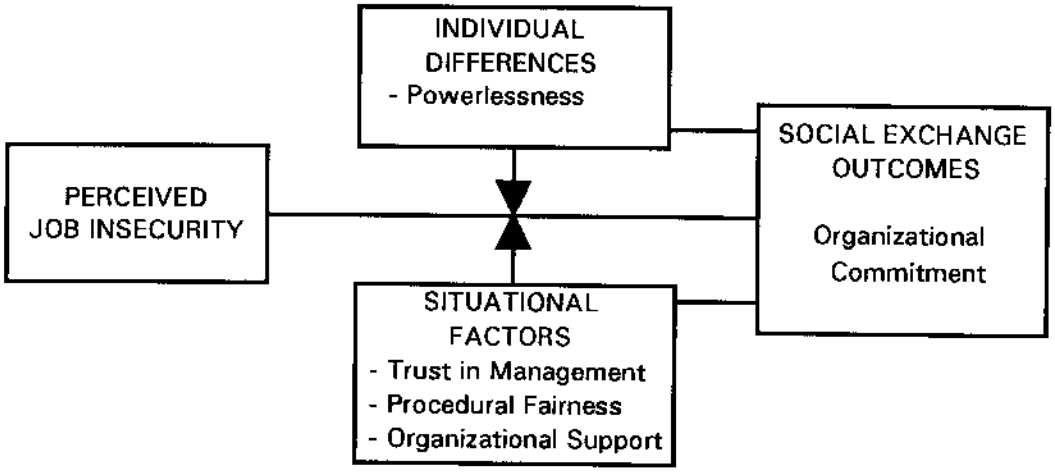
Hierarchical set regression minimizes the Type I error rate through the use of a protected t-test. A multivariate F-test for the significance of the marginal effects of entering the entire set of variables must indicate a significance level of .05 (two-tailed test) before conducting univariate t-tests for individual variables in the set at the same level of significance (Cohen & Cohen, 1983). Therefore, regression statistics for individual variables in a set are presented only when the F-statistic for the set is significant.

Phase I - Organizational Commitment

In Phase I of the analysis, organizational commitment is the dependent variable. This phase of the analysis tests only part of the research model proposed in Figure 4. The portion of the model tested in Phase I is shown in Figure 5. Order of entry and composition of the sets of independent variables in the hierarchical set regression followed Table 6 (Chapter 3). Separate hierarchical set regressions were run at each step of the analysis for the day technicians and night nurses. The marginal effects of entering each set of variables are presented at each step of the analysis. Results among the day technicians and night nurses are compared at each step in the analysis.

Figure 5

Partial Model Tested in Phase I



Step 1 - Demographics

The first step of the analysis involved entry of demographic or control variables, including age, organizational tenure, and gender, as the independent variable set and organizational commitment as the dependent variable. The set of demographic variables did not reach significance among day technicians ($F = .92$; $df = 3, 141$; $p < .43$) or night nurses ($F = .46$; $df = 3, 44$; $p < .71$). Therefore, univariate analyses of demographic variables in the set are not justified in either sample. Despite modest relationships reported in recent reviews (e.g., Mathieu & Zajac, 1990), no significant relationship was found between demographic variables and organizational commitment in this study.

Step 2 - Job Insecurity

The next step in the analysis involved entry of the two job insecurity measures—Job Insecurity (Global) and Job Insecurity (Kuhnert). This step provides a test of Hypothesis

H1, which states "Job insecurity is negatively associated with organizational commitment." The widely-used Global scale was included to provide a means to assess the relative usefulness of the Kuhnert scale, which was modified for use in this study. The results of this step for both samples are summarized in Table 9. The job insecurity set was highly significant in both samples. The job insecurity measures were significantly related to organizational commitment in both samples with the strongest relationship occurring among night nurses. Higher levels of job insecurity, especially among night nurses, are associated with lower levels of organizational commitment. In addition, examination of standardized betas for the two job insecurity measures demonstrates that the modified Kuhnert scale is more strongly related to organizational commitment than the traditional global scale. Overall, Hypothesis H1 is clearly supported.

Table 9

Set Regression Statistics for Job Insecurity with Organizational Commitment as the Dependent Variable

DAY TECHNICIANS (N=145)			
Multivariate Statistics			
$F(2,139) = 10.96$ $p < .001$ $R^2 = .134$			
Variable	B	t	p
Job Insecurity (Global)	-.175	-1.831	.07
Job Insecurity (Kuhnert)	-.235	-2.458	.01
NIGHT NURSES (N=48)			
Multivariate Statistics			
$F(2,42) = 23.36$ $p < .001$ $R^2 = .511$			
Variable	B	t	p
Job Insecurity (Global)	-.371	-2.953	.01
Job Insecurity (Kuhnert)	-.439	-3.499	.001

Step 3 - Individual Factors

In this step, one of the individual factors (powerlessness) is entered. This step provides a test of Hypothesis H4a, which states "Powerlessness is negatively associated with organizational commitment." The results of this step for both samples are summarized in Table 10. Powerlessness was significantly related to organizational commitment in both samples with the strongest relationship occurring among day technicians. Higher levels of powerlessness are associated with lower levels of organizational commitment. Therefore, Hypothesis H4a is strongly supported.

Table 10

Set Regression Statistics for Powerlessness with Organizational Commitment as the Dependent Variable

DAY TECHNICIANS (N=145)			
Multivariate Statistics			
$F(1,138) = 29.81$ $p < .001$ $R^2 = .150$			
Variable	B	t	p
Powerlessness	-.388	-5.460	.001
NIGHT NURSES (N=48)			
Multivariate Statistics			
$F(1,41) = 6.58$ $p < .01$ $R^2 = .063$			
Variable	B	t	p
Powerlessness	-.252	-2.565	.01

Step 4 - Situational Factors

The next step in the analysis involved entry of the three situational factors (trust in management, fairness, and perceived organizational support). This step tests three hypotheses which state that trust in management (Hypothesis H5a), procedural fairness (Hypothesis H6a), and perceived organizational support (Hypothesis H7a) are positively associated with organizational commitment. The results of this step for both samples are summarized in Table 11.

Table 11

Set Regression Statistics for Situational Factors with Organizational Commitment as the Dependent Variable

DAY TECHNICIANS (N=145)			
Multivariate Statistics			
$F(3,134) = 17.37$ $p < .001$ $R^2 = .192$			
Variable	B	t	p
Trust in Management	.194	2.329	.05
Procedural Fairness	.082	1.201	.23
Perc'd Org. Support	.243	3.087	.001
NIGHT NURSES (N=48)			
Multivariate Statistics			
$F(3,37) = 8.11$ $p < .001$ $R^2 = .155$			
Variable	B	t	p
Trust in Management	.237	2.145	.05
Procedural Fairness	.114	1.348	.19
Perc'd Org. Support	.135	1.188	.24

The situational factors set was highly significant in both samples. Trust in management was significantly related to organizational commitment in both samples, providing general support for Hypothesis H5a. Perceived organizational support (POS) was significantly related to organizational commitment only among day technicians, offering partial support for Hypothesis H7a. Procedural fairness was not significantly related to organizational commitment in either sample, showing a lack of support for Hypothesis H6a. Generally, these findings indicate that higher levels of trust in management and POS are associated with higher levels of organizational commitment. Employees who trust management and feel that the organization is concerned about their well-being tend to be more committed to the organization.

Step 5 - Interactions

The final step of the hierarchical procedure was designed to test hypotheses dealing with the moderating effects of powerlessness (Hypothesis H4c), trust in management (Hypothesis H5c), procedural fairness (Hypothesis H6c), and POS (Hypothesis H7c) on the relationship between job insecurity and organizational commitment. Therefore, this step of the analysis examines interactions between job insecurity and each of these four moderators. Because this study involves two measures of job insecurity (the Global and Kuhnert scales), a total of eight interactions must be tested in each sample. Interactive effects were tested according to conventional moderated regression procedures (cf. Cohen & Cohen, 1983), which call for the entry of an interaction or cross-product term only after all main effect terms in the model have been partialled.

All independent variables tested in Phase I of this analysis (see Figure 5) were entered into the hierarchical regression model in previous steps. Each interaction term was entered separately in this step of the hierarchical procedure to determine its marginal effect on variance explained (R^2). Statistical data regarding these interactions among day technicians and night nurses are reported in Tables 12 and 13, respectively. While none of the interactions were significant among day technicians, the Job Insecurity (Global) X Trust in Management interaction was significant among night nurses.

Table 12

Moderated Regression Statistics for Day Technicians with Organizational Commitment as the Dependent Variable

Interaction	**B**	**t**	**p**	**ΔR^2**
Job Insecurity (Global) X Powerlessness	.091	1.499	.14	.008
Job Insecurity (Global) X Trust in Management	-.093	-1.543	.12	.009
Job Insecurity (Global) X Procedural Fairness	-.043	-.700	.48	.002
Job Insecurity (Global) X Perc'd Organization Support	-.094	-1.554	.12	.009
Job Insecurity (Kuhnert) X Powerlessness	-.045	-.737	.46	.002
Job Insecurity (Kuhnert) X Trust in Management	-.056	-.918	.36	.003
Job Insecurity (Kuhnert) X Procedural Fairness	-.021	-.343	.73	.000
Job Insecurity (Kuhnert) X Perc'd Organization Support	-.037	-.601	.55	.001

Table 13

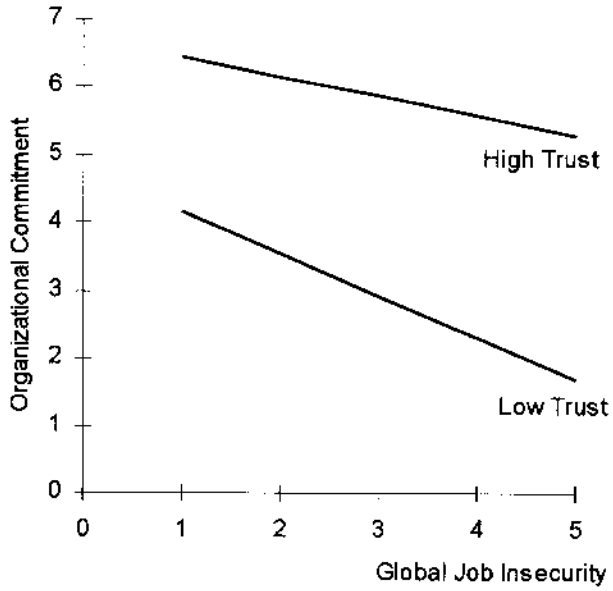
Moderated Regression Statistics for Night Nurses with Organizational Commitment as the Dependent Variable

Interaction	B	t	p	ΔR^2
Job Insecurity (Global) X Powerlessness	-.006	-.079	.94	.000
Job Insecurity (Global) X Trust in Management	.189	2.537	.01	.036
Job Insecurity (Global) X Procedural Fairness	.039	.480	.63	.001
Job Insecurity (Global) X Perc'd Organization Support	.118	1.507	.14	.014
Job Insecurity (Kuhnert) X Powerlessness	.054	.676	.50	.003
Job Insecurity (Kuhnert) X Trust in Management	.077	.968	.34	.006
Job Insecurity (Kuhnert) X Procedural Fairness	.037	.452	.65	.001
Job Insecurity (Kuhnert) X Perc'd Organization Support	.066	.826	.42	.004

Cohen and Cohen's (1983) graphical method was used to evaluate the nature of this interaction. According to this procedure, the sample is divided into two subgroups—those with trust scores one standard deviation above the mean trust score and those with trust scores one standard deviation below the mean trust score. Separate regression analyses are then performed to examine the job insecurity-organizational commitment relationship in each group. The regression lines generated from this procedure are shown in Figure 6.

Figure 6

Relationship Between Job Insecurity and Organizational Commitment for High and Low Levels of Trust in Management



Low Trust: Organizational Commitment = 4.78 + -.62 (Job Insecurity)
High Trust: Organizational Commitment = 6.73 + -.29 (Job Insecurity)

The interaction is ordinal in nature and the slope of the low trust regression line is twice as steep as that of the high trust regression line. Therefore, Hypothesis H5c, which states "Trust in management moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when trust is low and weaker when trust is high," is supported among night nurses. Trust in management, indeed, buffers the negative effect of job insecurity on organizational commitment. No support for the moderating effects of powerlessness (Hypothesis H4c), procedural fairness (Hypothesis H6c), and perceived organizational support (Hypothesis H7c) was found.

Summary of Phase I Results

In this phase of the analysis, organizational commitment was the dependent variable. Both the global and Kuhnert job insecurity measures were significantly related to organizational commitment, providing general support for Hypothesis H1. Powerlessness also was significantly related to organizational commitment, indicating support for Hypothesis H4a. Among the situational factors, trust in management was significantly related to organizational commitment in both samples, lending general support for Hypothesis H5a. Perceived organizational support (POS) was significantly related to organizational commitment only among day technicians, offering partial support for Hypothesis H7a. Procedural fairness was not significantly related to organizational commitment in either sample, showing a lack of support for Hypothesis H6a. Finally, the interaction of global job insecurity and trust in management was significantly related to organizational commitment among night nurses, providing partial support for Hypothesis H5c. The hypothesized moderating effects of powerlessness (Hypothesis H4c), procedural fairness (Hypothesis H6c), and perceived organizational support (Hypothesis H7c) were not supported.

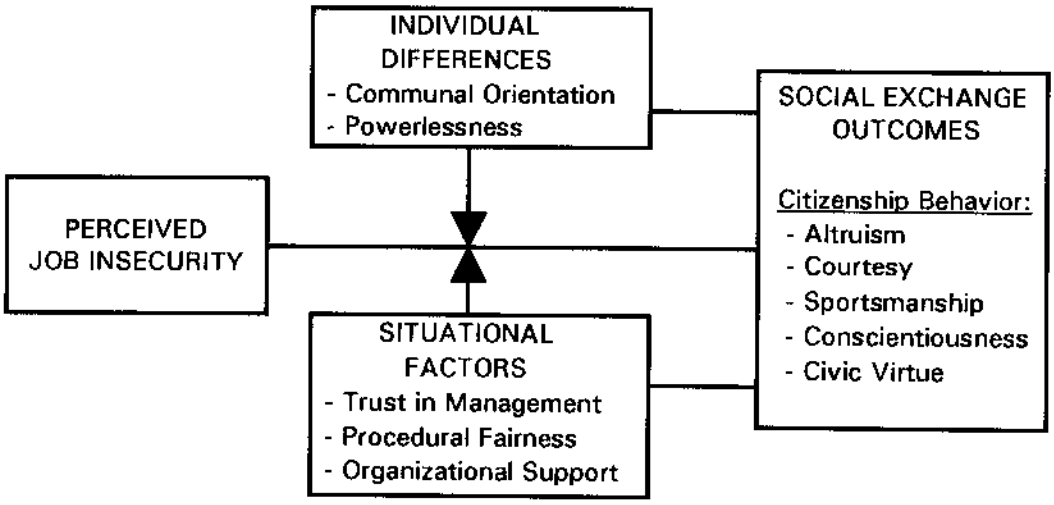
Phase II - Organizational Citizenship Behavior

In Phase II of the analysis, the five dimensions of organizational citizenship behavior (altruism, conscientiousness, courtesy, sportsmanship, and civic virtue) comprise the dependent variable set. This phase of the analysis tests only part of the research model proposed in Figure 4. The portion of the model tested in Phase II is shown in Figure 7. Order of entry and composition of the sets of independent variables in the hierarchical set

regression is identical to the Phase I analysis and follows Table 6 (Chapter 3). Separate hierarchical set regressions were run at each step of the analysis for both day technicians and night nurses. The marginal effects of entering each set of variables are presented at each step of the analysis. Results among the day technicians and night nurses are compared at each step of the analysis.

Figure 7

Partial Model Tested in Phase II



Step 1 - Demographics

The first step of the analysis involved entry of demographic or control variables, including age, organizational tenure, and gender, as the independent variable set and the five dimensions of organizational citizenship behavior (OCB) as the dependent variable set. The set of demographic variables did not reach significance among day technicians ($F = 1.61$; $df = 15, 378$; $p < .07$) or night nurses ($F = 1.07$; $df = 15, 110$; $p < .39$). Therefore,

univariate analyses of demographic variables in the set are not justified in either sample. Despite modest relationships reported in recent reviews (e.g., Organ & Ryan, 1995), no significant relationship was found between demographic variables and OCB in this study.

Step 2 - Job Insecurity

The next step in the analysis involved entry of the two job insecurity measures—Job Insecurity (Global) and Job Insecurity (Kuhnert). This step provides a test of Hypothesis H2, which states "Job insecurity is negatively associated with organizational citizenship behavior." The widely-used Global scale was included to provide a means to assess the relative usefulness of the modified Kuhnert scale. The results of this step for both samples are summarized in Table 14.

Table 14

Set Regression Statistics for Job Insecurity with OCB as the Dependent Variable

DAY TECHNICIANS (N=145)

Multivariate Statistics

$F(10, 270) = 1.00 \quad p < .44 \quad R^2 = .068$

NIGHT NURSES (N=48)

Multivariate Statistics

$F(10, 76) = 2.64 \quad p < .01 \quad R^2 = .439$

Variable	Statistic	Altruism	Conscientiousness	Courtesy	Sportsmanship	Civic Virtue
Job Insecurity	B	.146	-.024	.208	.097	.037
(Global)	t	.848	-.143	1.202	.615	.224
	p	.40	.89	.24	.54	.82
Job Insecurity	B	-.068	-.107	-.252	-.563	-.214
(Kuhnert)	t	-.396	-.633	-1.455	-3.573	-1.291
	p	.69	.53	.15	.001	.20

The job insecurity set was not significant for day technicians, but it was highly significant for night nurses. Examination of the results of univariate analyses reveal that the strong relationship between the Kuhnert job insecurity measure and sportsmanship was responsible for the significance of the multivariate F-test. Higher levels of job insecurity were associated with lower supervisor ratings of sportsmanship. Also noteworthy, is the finding that the modified Kuhnert scale, not the widely-used global job insecurity scale, is related to OCB. Overall, these findings offer modest support for Hypothesis H2.

Step 3 - Individual Factors

In this step, the two individual factors (communal orientation and powerlessness) were entered. This step tests two hypotheses: Hypothesis H3a, which states "Communal orientation is positively associated with OCB" and Hypothesis H4b, which states "Powerlessness is negatively associated with OCB." The results of this step for both samples are summarized in Table 15. The individual factors set was significant only among day technicians. Communal orientation was significantly related to all OCB dimensions, except sportsmanship. Higher levels of communal orientation among day technicians are associated with higher levels of OCB. Due to the comprehensive nature of this relationship across most OCB dimensions and the relative importance of day technicians in the total sample, these findings provide moderate support for Hypothesis H3a.

Relationships between powerlessness and OCB were in the hypothesized direction, but fell just short of statistical significance for altruism and civic virtue. While these findings suggest a promising avenue for future research, Hypothesis H4b is not supported.

Table 15

Set Regression Statistics for Individual Factors with OCB as the Dependent Variable

DAY TECHNICIANS (N=145)						
Multivariate Statistics						
F (10, 266) = 1.95 $p < .05$ $R^2 = .124$						
Variable	Statistic	Altruism	Conscientiousness	Courtesy	Sports-manship	Civic Virtue
Communal	B	.239	.160	.194	.075	.195
Orientation	t	2.905	1.908	2.326	.881	2.406
	p	.01	.05	.05	.38	.01
Powerlessness	B	-.128	-.083	-.113	-.121	-.126
	t	-1.550	-.987	-1.359	-1.424	-1.551
	p	.12	.33	.18	.16	.12
NIGHT NURSES (N=48)						
Multivariate Statistics						
F (10, 72) = 1.55 $p = .14$ $R^2 = .263$						

Step 4 - Situational Factors

The next step in the analysis involved entry of the three situational factors (trust in management, procedural fairness, and perceived organizational support). This step tests three hypotheses which state that trust in management (Hypothesis H5b), procedural fairness (Hypothesis H6b), and perceived organizational support (Hypothesis H7b) are positively associated with OCB. The situational factors set failed to reach significance among day technicians ($F = 1.18$; $df = 15, 359$; $p < .29$) or night nurses ($F = 1.26$; $df = 15, 92$; $p < .24$). Therefore, univariate analyses of these factors are not justified, and Hypotheses H5b, H6b, and H7b are not supported.

Step 5 - Interactions

The final step of the hierarchical procedure was designed to test hypotheses dealing with the moderating effects of communal orientation (Hypothesis H3b), powerlessness (Hypothesis H4d), trust in management (Hypothesis H5d), procedural fairness (Hypothesis H6d), and perceived organizational support (Hypothesis H7d) on the relationship between job insecurity and OCB. Therefore, this step of the analysis examines interactions between job insecurity and each of these five moderators. Because this study involves two measures of job insecurity (the Global and Kuhnert scales), a total of 10 interactions must be tested in each sample. Interactive effects were tested according to conventional moderated regression procedures (cf. Cohen & Cohen, 1983), which call for the entry of an interaction or cross-product term only after all main effect terms in the model have been partialled.

All independent variables tested in Phase II of this analysis (see Figure 7) were entered into the hierarchical regression model in previous steps. Each interaction term was entered separately in this step of the hierarchical procedure to determine its marginal effect on variance explained (R^2) in the set of organizational citizenship behaviors. Results of multivariate statistical tests of the significance of each interaction among day technicians and night nurses are reported in Tables 16 and 17, respectively. While none of the interactions were significant among day technicians, the Job Insecurity (Global) X Communal Orientation interaction was highly significant among night nurses ($p < .01$).

Table 16

Multivariate Tests of Interactions for Day Technicians
with OCB as the Dependent Variable

Interaction	F	df	p	ΔR^2
Job Insecurity (Global) X Communal Orientation	1.42	5, 129	.22	.048
Job Insecurity (Global) X Powerlessness	.77	5, 129	.58	.026
Job Insecurity (Global) X Trust in Management	.33	5, 129	.89	.011
Job Insecurity (Global) X Procedural Fairness	.32	5, 129	.90	.012
Job Insecurity (Global) X Perc'd Organization Support	.49	5, 129	.78	.016
Job Insecurity (Kuhnert) X Communal Orientation	1.07	5, 129	.38	.035
Job Insecurity (Kuhnert) X Powerlessness	1.64	5, 129	.15	.055
Job Insecurity (Kuhnert) X Trust in Management	.63	5, 129	.68	.022
Job Insecurity (Kuhnert) X Procedural Fairness	.68	5, 129	.64	.023
Job Insecurity (Kuhnert) X Perc'd Organization Support	.57	5, 129	.72	.020

Table 17

Multivariate Tests of Interactions for Night Nurses
with OCB as the Dependent Variable

Interaction	F	df	p	ΔR^2
Job Insecurity (Global) X Communal Orientation	3.38	5, 32	.01	.274
Job Insecurity (Global) X Powerlessness	.74	5, 32	.60	.075
Job Insecurity (Global) X Trust in Management	1.51	5, 32	.21	.121
Job Insecurity (Global) X Procedural Fairness	1.07	5, 32	.40	.110
Job Insecurity (Global) X Perc'd Organization Support	1.34	5, 32	.27	.104
Job Insecurity (Kuhnert) X Communal Orientation	1.67	5, 32	.17	.168
Job Insecurity (Kuhnert) X Powerlessness	.30	5, 32	.91	.027
Job Insecurity (Kuhnert) X Trust in Management	.45	5, 32	.81	.043
Job Insecurity (Kuhnert) X Procedural Fairness	.53	5, 32	.75	.051
Job Insecurity (Kuhnert) X Perc'd Organization Support	.03	5, 32	.99	.003

Univariate statistical tests were conducted to determine the nature of the Job Insecurity (Global) X Communal Orientation interaction with respect to each of the five dimensions of OCB. Results of this analysis are shown in Table 18.

Table 18

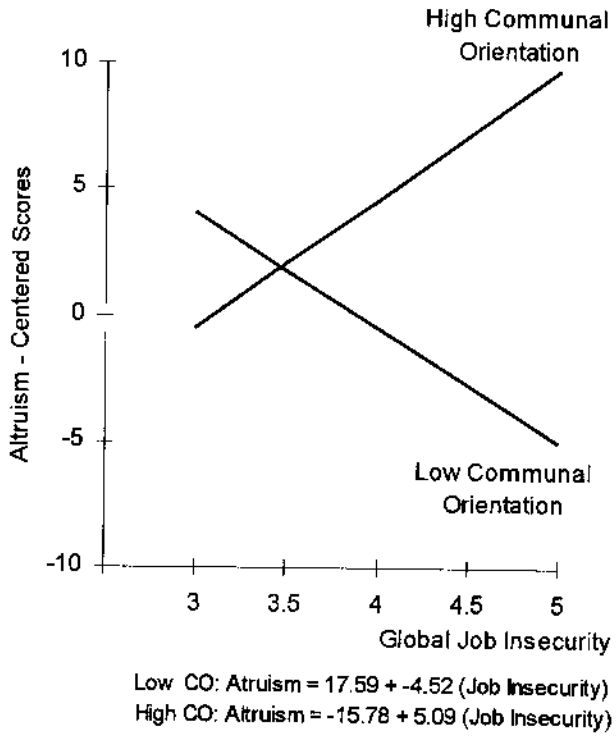
Univariate Tests of Significant Interactions with the Dimensions of OCB as the Dependent Variables

NIGHT NURSES (N=48)						
Multivariate Statistics						
$F(5, 32) = 3.38$ $p < .01$ $R^2 = .274$						
Variable	Statistic	Altruism	Conscientiousness	Courtesy	Sports-manship	Civic Virtue
Job Insecurity (Global) X	B	.419	.325	.239	.203	.006
Communal Orientation	t	3.188	2.445	1.653	1.562	.043
	p	.01	.05	.107	.13	.97

The Job Insecurity (Global) X Communal Orientation interaction was strongly related to altruism and conscientiousness. The interaction effect with courtesy fell just short of significance based on the two-tailed significance levels reported in Table 18. This relationship would have been significant in a one-tailed test, but the direction of the relationship is not as hypothesized. Cohen and Cohen's (1983) graphical method, previously described in the Phase I analysis, was used to evaluate the nature of both significant interactions. Regression lines generated by this procedure for the interactive effect of job insecurity and communal orientation on altruism are shown in Figure 8.

Figure 8

Relationship Between Job Insecurity and Centered Altruism Scores for High and Low Levels of Communal Orientation



The interaction is disordinal in nature (i.e., the slopes of the regression lines have opposite signs) indicating that nurses high in communal orientation respond to job insecurity with increased altruism, while those low in communal orientation respond to job insecurity with decreased altruism. Hypothesis H3b states "Communal orientation moderates the negative relationship between job insecurity and OCB such that the relationship becomes stronger when communal orientation is low and weaker when communal orientation is high." This hypothesis is partially supported because the negative relationship between job insecurity and altruism is, indeed, stronger when communal orientation is low. It is not supported when communal orientation is high, because the negative relationship between

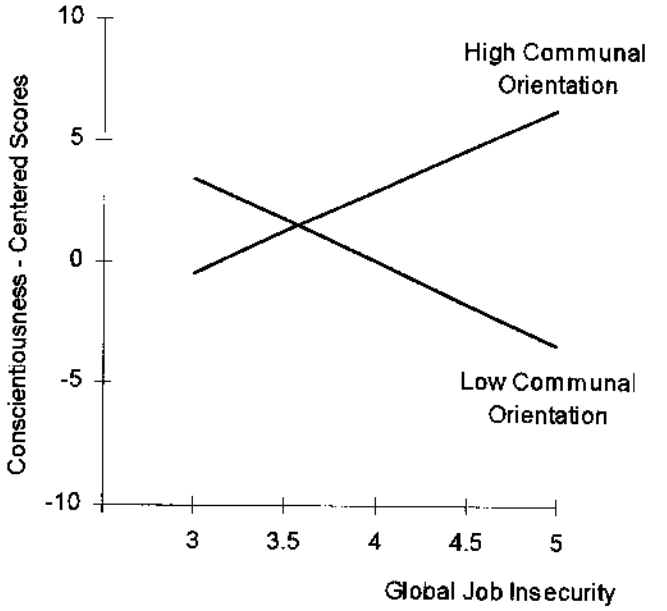
job insecurity and altruism does not become weaker, as hypothesized. Instead, it changes direction. Nevertheless, communal orientation is an important moderator of the job insecurity-altruism relationship among night nurses.

The second significant interaction effect for the Job Insecurity (Global) X Communal Orientation interaction involves conscientiousness. This interaction is graphically depicted in Figure 9. This interaction is also disordinal in nature. The relationship indicates that nurses high in communal orientation respond to job insecurity with increased conscientiousness, while those low in communal orientation respond to job insecurity with decreased conscientiousness. Hypothesis H3b, as stated above, is partially supported because the negative relationship between job insecurity and conscientiousness is, indeed, stronger when communal orientation is low. It is not supported when communal orientation is high, because the negative relationship between job insecurity and conscientiousness does not become weaker, as hypothesized. Instead, it changes direction. Nevertheless, communal orientation is an important moderator of the job insecurity-conscientiousness relationship among night nurses.

Overall, partial support was found for only one of the hypothesized moderators of the job insecurity-OCB relationship—communal orientation (Hypothesis H3b). No support for the moderating effects of powerlessness (Hypothesis H4d), trust in management (Hypothesis H5d), procedural fairness (Hypothesis H6d), and perceived organizational support (Hypothesis H7d) was found.

Figure 9

Relationship Between Job Insecurity and Centered Conscientiousness Scores for High and Low Levels of Communal Orientation



Low CO: Conscientiousness = 13.76 + -3.45 (Job Insecurity)
High CO: Conscientiousness = -10.64 + 3.38 (Job Insecurity)

Summary of Phase II Results

In this phase of the analysis, OCB was the dependent variable. The Kuhnert job insecurity measure was strongly related to sportsmanship among night nurses, providing partial support for Hypothesis H2. Communal orientation was significantly related to four of the five dimensions of OCB among day technicians, indicating moderate support for Hypothesis H3a. Powerlessness was not significantly related to OCB in either sample, showing a lack of support for Hypothesis H4b. Hypotheses dealing with the relationship between situational factors and OCB (Hypotheses H5b, H6b, and H7b) were also unsupported. Finally, partial support for the moderating effects of communal orientation on

the job insecurity-OCB relationship (Hypothesis H3b) was obtained among night nurses. The hypothesized moderating effects of powerlessness (Hypothesis H4d), trust in management (Hypothesis H5d), procedural fairness (Hypothesis H6d), and perceived organizational support (Hypothesis H7d) were not supported.

Summary of Statistical Tests and Hypothesis Outcomes

Collectively, findings in Phase I and Phase II of this analysis offer moderate support for the social exchange model of job insecurity proposed in this study. While some support was found for most of the hypothesized relationships involving organizational commitment in Phase I of the analysis, fewer hypotheses involving organizational citizenship behavior were supported in Phase II of the analysis. A summary of the outcomes of hypothesis tests for each research hypothesis in this study is provided in Table 19.

Chapter Summary

This chapter provided a detailed review of the study results. First, descriptive statistics and correlation matrices for both the day technician and night nurse samples were presented. Then, an extensive review of the results of two phases of hierarchical set regression, used to test study hypotheses, was provided. Phase I involved hypotheses in which organizational commitment was the dependent variable and Phase II involved hypotheses in which organizational citizenship behavior was the dependent variable. The chapter closed with a summary of the outcomes of all hypothesis tests.

Table 19

Summary of Tests of Hypotheses

Hypothesis	Results
H1: Job insecurity is negatively associated with organizational commitment.	S
H2: Job insecurity is negatively associated with organizational citizenship behavior.	PS
H3a: Communal orientation is positively associated with organizational citizenship behavior.	S
H3b: Communal orientation moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when communal orientation is low and weaker when communal orientation is high.	PS
H4a: Powerlessness is negatively associated with organizational commitment.	S
H4b: Powerlessness is negatively associated with organizational citizenship behavior.	NS
H4c: Powerlessness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.	NS
H4d: Powerlessness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when powerlessness is high and weaker when powerlessness is low.	NS
H5a: Trust in management is positively associated with organizational commitment.	S
H5b: Trust in management is positively associated with organizational citizenship behavior.	NS
H5c: Trust in management moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when trust is low and weaker when trust is high.	PS
H5d: Trust in management moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when trust is low and weaker when trust is high.	NS

Table 19 (continued)

Summary of Tests of Hypotheses

Hypothesis	Results
H6a: Procedural fairness is positively associated with organizational commitment.	NS
H6b: Procedural fairness is positively associated with organizational citizenship behavior.	NS
H6c: Procedural fairness moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when fairness is low and weaker when fairness is high.	NS
H6d: Procedural fairness moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when fairness is low and weaker when fairness is high.	NS
H7a: Perceived organizational support is positively associated with organizational commitment.	PS
H7b: Perceived organizational support is positively associated with organizational citizenship behavior.	NS
H7c: Perceived organizational support moderates the negative relationship between job insecurity and organizational commitment such that the relationship becomes stronger when support is low and weaker when support is high.	NS
H7d: Perceived organizational support moderates the negative relationship between job insecurity and organizational citizenship behavior such that the relationship becomes stronger when support is low and weaker when support is high.	NS

S = Supported
PS = Partially Supported
NS = Not Supported

CHAPTER 5

EVALUATION OF RESULTS

This chapter is devoted to a discussion of the results of the study. It begins with an explanation of the study results. A discussion of the theoretical contributions and practical implications of the study follows. Next, the methodological and theoretical limitations of the study are examined. The chapter closes by presenting a revised version of the research model and by exploring promising directions for future research.

Discussion of Results

The purpose of this study was to test the proposed social exchange model of job insecurity presented in Figure 4. Specifically, this study examined the direct and moderated relationships between job insecurity and the social exchange outcomes of organizational commitment and organizational citizenship behavior (OCB). The study also evaluated the direct relationships between the individual and situational moderators specified in the model and social exchange outcomes. Most of the hypotheses involving direct relationships with social exchange outcomes were supported. Moreover, the moderating effects of communal orientation and trust in management on the job insecurity-social exchange outcomes relationship were partially supported. The full model explained 58 percent of the variance in organizational commitment, but only a small portion of the variance in the organizational citizenship behaviors of altruism (14%), conscientiousness (9%), courtesy (16%),

sportsmanship (17%), and civic virtue (9%). The relatively small amount of variance accounted for in OCB is common among other studies of OCB found in the literature (e.g., Moorman, 1991; Konovsky & Pugh, 1994; Podsakoff et al., 1990; Podsakoff, et al., 1996). A discussion of the primary findings of this study follows.

Demographics

Demographic or control variables were included in this study primarily to control for extraneous sources of variance. While the set of demographic factors, including age, organizational tenure, and gender, did not reach significance in the hierarchical set regression analyses performed in this study, bivariate correlations indicate that age is positively related to conscientiousness among both day technicians (see Table 7) and night nurses (see Table 8). This suggests that older workers tend to be more conscientious than their younger counterparts. Plausible explanations for this relationship include greater work experience among older workers and generational differences in values, work ethic, and work habits among these employees.

Social exchange theory offers a final explanation of these results. According to social exchange theory (Blau, 1964; Holmes, 1981), the employee-employer relationship develops over time from a purely economic (quid pro quo) exchange to a social exchange relationship whereby individuals are willing to offer extraordinary benefits to exchange partners because they trust that other parties in the exchange relationship will fairly discharge their obligations in the long run. According to Rousseau (1989), "the longer the relationship endures...the deeper the relationship the employee perceives and the broader the array of contributions and inducements that might be involved" (p. 125). This process

of developing deeper relationships with employers over time may predispose older workers to engage in social exchange relationships and may explain their greater willingness to go above and beyond the call of duty for their employer.

Job Insecurity and Social Exchange Outcomes

Based on the research model in Figure 4, the focal relationship in this study is the job insecurity-social exchange outcomes relationship. Due to the centrality of job insecurity in this study, two measures of job insecurity were included—a global scale (Caplan et al., 1975; Lim 1996) and a modified version of Kuhnert & Lahey's (1988) job permanence scale. The reliability and predictive validity of the global and Kuhnert scales is of major importance to this study. The Kuhnert scale was more reliable than the traditional global scale, particularly among nurses. Moreover, it was more strongly related to both organizational commitment and OCB than the global scale. Thus, the modified Kuhnert scale may offer some improvement over the global scale in assessing the threat of job loss.

Another important aspect of the study results concerns the nature of the threat to job continuity. Obviously, the effects of job insecurity are strongest when employees are facing an acute threat of job loss. Unfortunately, due the sensitive nature of the topic and the secrecy that often shrouds workforce reductions, such investigations are rarely found in the literature (Jacobson & Hartley, 1991). This study provides a notable exception by offering a rare glimpse into an organization on the verge of a 20% reduction in force. Comparison of mean scores on the global job insecurity scale (Caplan et al., 1975) in this study with mean scores on the same scale found in other studies indicates that the threat of job loss in the present study was intense. Ashford et al. (1989) reported a mean score of

2.45 among a sample of hygienists, auditors, and nurses working in relatively stable organizations. Caplan and his colleagues (Caplan et al., 1975) reported a mean score of 2.73 in a sample of over 2,000 employees in a variety of jobs across many diverse organizations. A somewhat higher level of job insecurity (2.90) was reported by Lim (1996) among a sample of recent MBA graduates. The highest mean score (3.01) was reported by Schweiger and Lee (1993) who surveyed manufacturing employees who were facing the acute threat of plant closure due to a merger with another company. The mean job insecurity score in the present study was considerably higher (3.39) indicating that the employees in this study were, indeed, facing an acute threat of job loss.

The results of the study offer moderate support for the hypothesized relationship between job insecurity and social exchange outcomes. Job insecurity is strongly related to organizational commitment and, to a lesser extent, OCB. The modified Kuhnert scale was more strongly related to organizational commitment than the global scale. Correlations between the Kuhnert scale and organizational commitment among day technicians and night nurses were -.34 and -.64, respectively. These correlations, are generally higher than those observed in the literature. The improved reliability and predictive validity of the modified Kuhnert scale and the acute threat of job loss faced by employees in this study may be partly responsible for this finding. These findings add to a growing body of empirical research demonstrating that job insecurity is associated with psychological withdrawal or reduced commitment to the organization (e.g., Greenhalgh, 1979; Brockner et al., 1987; Ashford et al., 1989; Borg & Elizur, 1992; Van Vuuren et al., 1991; Schweiger & Lee, 1993;

Rosenblatt & Ruvio, 1996). Generally, the results of this study support the notion that reduced organizational attachment is a likely response to job insecurity.

An interesting finding is the strong correlation between job insecurity and organizational commitment found among night nurses ($r = -.64$). Surprisingly, this correlation is nearly twice as strong as that observed among day technicians ($r = -.34$). One explanation for this finding lies in differences in the work environment faced by these employees. Day technicians have greater access to unit RN's and unit managers who attend regular meetings with administrative staff during the day. Night nurses report to a single night shift manager who is isolated from hospital administration at night. Therefore, lack of communication, which exacerbates negative reactions among employees during times of organizational upheaval (Greenhalgh, 1991), may explain this finding.

Another explanation, offered in a study by Rosenblatt and Ruvio (1996), is that professional employees have higher expectations of secure employment than lower level employees. Higher expectations cause them to react more strongly when job security is threatened. This explanation is consistent with the literature on psychological contracts (Rousseau, 1989; Robinson & Rousseau, 1994; Wiesenfeld & Brockner, 1993), which suggests that violations of the psychological contract lead employees to psychologically withdraw from the organization. Because job security is more likely to be an expectation or component of their psychological contract with the organization, night nurses can be expected to react more strongly to a given level of job insecurity.

The relationship between job insecurity and organizational citizenship behavior (OCB) was significant for sportsmanship. This relationship was significant only for the

Kuhnert scale and not the global job insecurity scale. A strong relationship between job insecurity and supervisor ratings of sportsmanship was found among night nurses ($r = -.51$). This relationship was not significant among day technicians. One explanation for the strong relationship among night nurses is that sportsmanship can be viewed as a measure of the extent to which one complains about circumstances. Items in the sportsmanship scale refer to a person being the "squeaky wheel," making "mountains out of molehills," complaining over trivial matters, and finding fault with the organization. Since they are licensed healthcare providers, night nurses may feel greater freedom to express their displeasure with circumstances in the workplace. Moreover, the opportunity for supervisors to observe these behaviors may be greater for night nurses who are highly visible in their work as compared to day technicians who spend most of their time working directly with patients.

It is not surprising that employees who feel insecure in their jobs will curtail at least some organizational citizenship behaviors. This is consistent with social exchange theory and the literature on psychological contracts. Job insecurity will cause employees to psychologically withdraw and to curtail activities that will not further threaten their job security. Findings in this study reveal that some forms of OCB are more likely to be curtailed in response to job insecurity than others. Poor sportsmanship may have been viewed by night nurses as a relatively safe reaction to job insecurity.

Several scholars (Graham, 1991; Morrison, 1994; Van Dyne et al., 1994; Williams & Anderson, 1991) have argued strongly that the boundary between prescribed in-role behaviors and discretionary extra-role behaviors or citizenship behaviors is not as clearly delineated as Organ (1988, 1990) has suggested. These researchers claim that citizenship

behavior is in the eye of the beholder. Healthcare workers, by virtue of their close contact with patients, are more likely to view helping behaviors (altruism), conscientiousness, and courtesy toward others as prescribed in-role behaviors. These employees may fear that any curtailment of these activities will be viewed as a reduction in performance that will further jeopardize their future in the organization. Sportsmanship, on the other hand, is more discretionary in nature and less likely to be viewed as in-role behavior by employees and supervisors. This behavior, which may be curtailed with little risk to the employee, may be the most likely behavioral manifestation of job insecurity among healthcare workers. Poor sportsmanship (complaining) is a natural response to job insecurity that poses little risk to employees in a hospital setting.

Collectively, the results of this study provide some support for the basic tenets of the social exchange model of job insecurity proposed in Figure 4. The apparent violation of the employer's obligation to provide secure employment may, in fact, disrupt the social exchange relationship between employee and employer leading previously committed employees to psychologically withdraw from the organization and formerly devoted employees to curtail some citizenship behaviors.

Individual Factors

The direct and moderating effects of two individual factors were assessed in this study—communal orientation and powerlessness. First, the direct relationships of these variables with social exchange outcomes are discussed, then their moderating effects on the job insecurity-social exchange outcomes relationship are discussed.

As hypothesized, communal orientation had a significant positive relationship with organizational citizenship behavior (OCB). It was significantly related to all OCB dimensions, except sportsmanship, among day technicians who represent the majority of subjects in the study. This finding is noteworthy because this study may be the first to demonstrate a significant link between communal orientation and OCB. Moreover, these results confirm Clark et al.'s (1987) claim that individuals who are high in communal orientation are more willing to help others. In fact, the strongest relationship between communal orientation and OCB involved altruism (helping behaviors). These results suggest that further investigation of the communal orientation-OCB relationship is justified.

Powerlessness was strongly related to organizational commitment, but it was not significantly related to OCB. Study results clearly demonstrate that powerlessness has a strong negative relationship with organizational commitment. In fact, powerlessness was more strongly related to organizational commitment in this study than job insecurity. The feeling of powerlessness may be amplified during times of organizational upheaval because management often denies workers control just when they need it most by withholding information and ignoring input from workers (Greenhalgh & Sutton, 1991). Since human beings share a common desire to control their environment (Bandura, 1982; Seligman, 1975; Sutton & Kahn, 1987), powerlessness, which entails the lack of control over work-related events, may indicate a serious violation of relational psychological contracts. Such a violation triggers a shift away from social exchange and a relational psychological contract between employee and employer toward a more calculative, economic exchange and a

transactional psychological contract (Parks & Kidder, 1994). This shift leads committed employees to psychologically withdraw from the organization.

The lack of significant findings regarding the relationship between powerlessness and OCB was unexpected. One explanation for this lack of findings lies in recent work by Stassen (1994), who identified two alternative strategies for coping with powerlessness. Some may take action to gain control over the situation (control coping) while others may attempt to escape or avoid the situation (escape coping). While some researchers suggest that responses to organizational upheaval are primarily passive or escapist in nature (e.g., Jacobson, 1987; Roskies et al., 1988; Fried et al., 1996), little is know about how employees cope with chronic powerlessness. Stassen (1994) presented evidence that powerlessness is actually associated with control coping in acute settings. Employees in the present study have experienced powerlessness in the face of state-mandated job cuts several times in recent years. These employees, by virtue of their experience with chronic powerlessness, may have adopted a variety of coping strategies. Employees adopting a control coping strategy may engage in some forms of OCB, like altruism, conscientiousness, and courtesy, to support coworkers and to protect them from what they view as a threat from the organization. Therefore, powerlessness may be associated with increased levels of OCB in some cases.

In terms of moderating effects, only communal orientation was a significant moderator of the job insecurity-social exchange outcomes relationship. Specifically, communal orientation moderated both the job insecurity-altruism and the job insecurity-conscientiousness relationship among night nurses. The nature of these interactions is

graphically depicted in Figures 8 and 9. Both interactions are disordinal. Night nurses who are high in communal orientation respond to increased job insecurity with increased altruism and conscientiousness. While this reaction may seem unusual, Brockner and his associates (Brockner, Grover, Reed, and Dewitt, 1992) noted that some employees may actually work harder at moderate levels of job insecurity in hopes that their efforts may protect them from job loss. Because employees who are high in communal orientation have a strong desire to meet the needs of others (Clark et al., 1987), increased altruism and conscientiousness are likely avenues for increased work effort.

Night nurses who are low in communal orientation, by contrast, respond to increased job insecurity with decreased altruism and conscientiousness. Since these nurses have less concern for the needs of others, they are more likely to give in to the natural tendency to curtail citizenship behaviors in the face of job insecurity.

The lack of a significant interaction effect for powerlessness is unexpected. Powerlessness was specified as a moderator of the job insecurity-social exchange outcomes relationship in this study so that its effects could be assessed separately, as suggested by Jacobson (1991), rather than as a component of a composite job insecurity index consisting of powerlessness and job insecurity as recommended by Greenhalgh and Rosenblatt (1984). This approach was taken because previous studies indicated that powerlessness was weakly correlated with job insecurity and, thus, not an appropriate component of such a composite job insecurity index (Ashford et al., 1989; Rosenblatt & Ruvio, 1996). Results in the present study, however, revealed a strong correlation between powerlessness and the modified Kuhnert job insecurity measure ($r = .46$). This supports Greenhalgh and

Rosenblatt's (1984) formulation of the job insecurity construct and suggests that powerlessness may, in fact, be a dimension of job insecurity. Furthermore, this finding indicates that a composite index of job insecurity comprised of the Kuhnert job insecurity measure and the powerlessness scale used in this study may be quite useful in predicting social exchange outcomes.

Situational Factors

The direct and moderating effects of three situational factors were assessed in this study—trust in management, procedural fairness, and perceived organizational support (POS). First, the direct relationships of these variables with social exchange outcomes are discussed, then their moderating effects on the job insecurity-social exchange outcomes relationship are discussed.

As hypothesized, trust in management and POS were strongly related to organizational commitment. These results are consistent with other studies reporting a strong positive relationship between trust and organizational commitment (see Mayer, Davis, & Schoorman, 1995 for a review) and between POS and organizational commitment (Eisenberger, et al., 1986; Eisenberger et al., 1990; Shore & Tetrick, 1991; Shore & Wayne, 1993). The lack of significant findings for procedural fairness was unexpected. One explanation for this finding concerns the referent in the scales used to assess the situational factors.

The referent in the trust scale was top management (hospital administrators, managers, and directors), and the referent in the POS scale was the organization as a whole. In the procedural fairness scale, the referent was the employee's immediate supervisor.

Examination of the correlation matrices in Tables 7 and 8 reveal that mean scores for both trust and POS were relatively low (below the scale midpoint) while mean scores for fairness were considerably higher (above the scale midpoint). This indicates that employees maintained a relatively positive view of their immediate supervisors while they generally distrusted top management and felt the organization was not concerned with their well-being.

Negative appraisals of top management and the organization can be expected during downsizing because top management represents the organization to its employees and is called upon to initiate job cuts during downsizing (Greenhalgh & Sutton, 1991). Immediate supervisors, on the other hand, may be viewed by their subordinates as simply carrying out orders from top management. Thus, top management and the organization itself, not the immediate supervisor, may be viewed as the source of the violation of psychological contract that prompts psychological withdrawal or reduced organizational commitment. As a result, employees may react more strongly to feelings of mistrust toward top management and poor organizational support than to perceptions of supervisor fairness during downsizing.

Contrary to expectations, none of the situational factors were significantly related to organizational citizenship behavior (OCB). The lack of significant findings may be due, in part, to the analytical technique used in this study. Some of the situational factors are significantly correlated with other variables entered earlier in the hierarchical set regression. Specifically, trust in management and POS were strongly correlated with job insecurity and powerlessness. Therefore, any variance in OCB shared by these variables was partialled out

before the situational factors set was entered into the hierarchical set regression. Consequently, little variance in OCB remained by the time the situational factors were entered into the analysis. The correlation matrices in Tables 7 and 8 suggest that modest relationships with OCB may have been found for trust in management and fairness if these variables were entered earlier in the hierarchy. Cohen and Cohen (1983) acknowledge this shortcoming of hierarchical set regression, but stress that the researcher must adhere to an a priori hierarchy based on theory in conducting the analysis. This approach was followed in the present study.

In terms of moderating effects, only trust in management emerged as a significant moderator of the job insecurity-social exchange outcomes relationship. Specifically, trust in management moderated the job insecurity-organizational commitment relationship among night nurses. The nature of this interaction is graphically depicted in Figure 6. As hypothesized, trust in management buffers the negative relationship between job insecurity and organizational commitment. The detrimental effects of job insecurity on organizational commitment were minimized when nurses felt management was trustworthy.

This finding is consistent with social exchange theory, which states that trust is a critical determinant of relational contracts and social exchange (Blau, 1964; Holmes, 1981; Rousseau & Parks, 1993). Since strong relational contracts are more resilient and tolerant of the short-term inequities and injustices that occur in the workplace (Folger, 1986; Rousseau & Parks, 1993, Parks & Kidder, 1994), employees with high levels of trust in their employer may remain committed to the organization even when they feel business conditions may pose a threat to the continuity of their jobs. Conversely, lack of trust in

one's employer intensifies the negative effects of job insecurity on organizational commitment. This study demonstrates that maintaining high levels of trust among employees may be an employer's best line of defense against the inevitable effects of job insecurity.

Theoretical Contributions and Implications for Practice

Results of this study have implications for both theory and practice. Theoretical contributions include a new model of job insecurity, the investigation of several previously unexplored relationships, and improvements in the measurement of constructs relating to job insecurity. Since the study was conducted in an organization on the verge of a major workforce reduction, it also has profound implications for practicing supervisors and managers who are likely be called upon to manage a reduction in force at some point in their careers. Findings of this study suggest several appropriate responses for dealing with the inevitable effects of job insecurity. A discussion of the theoretical contributions of the study is followed by an examination of the implications for practice.

Theoretical Contributions

This study extends theory by introducing and testing a new model of job insecurity. The social exchange model of job insecurity proposed in this study provides a new perspective that opens the door to the investigation of unexplored relationships in the study of job insecurity. Borrowing from social exchange theory (Blau, 1964, Holmes, 1981) and the literature on psychological contracts (Schein, 1980; Rousseau, 1989; Rousseau & Parks, 1993; Parks & Kidder, 1994), the model provides a framework for assessing the direct and

moderated effects of job insecurity on vital social exchange outcomes. It offers an alternative to the dated stress (Jacobson, 1985) and organizational (Greenhalgh & Rosenblatt, 1984) models of job insecurity.

Several aspects of this study contribute to the theoretical development of the study of job insecurity. First, this study provides a rare glimpse into the effects of job insecurity in an environment where an acute threat of job loss exists. Such studies are seldom seen in the literature due to the emotional nature of the topic and the secrecy that often shrouds workforce reductions. Data collection in this study occurred within a month of a major workforce reduction. The study is also unique in that it provides the first investigation of job insecurity among healthcare workers in a mental health hospital.

Secondly, this study provides the first known test of the relationship between job insecurity and organizational citizenship behavior. Study findings offer the first evidence that reduced organizational citizenship behavior may be a behavioral manifestation of job insecurity. These findings offer further evidence that the distinction between prescribed in-role behavior and discretionary extra-role behavior may vary across people, jobs, and organizations (Graham, 1991). Healthcare workers in this study, who may have regarded altruism, conscientiousness, and courtesy as in-role behavior, reacted to job insecurity by curtailing more discretionary citizenship behaviors, like sportsmanship.

A third contribution involved the discovery of important individual and situational moderators of the job insecurity-social exchange outcomes relationship that had not been previously examined. A test of the direct effects of communal orientation provided the first evidence that communal orientation is related to organizational citizenship behavior.

Communal orientation also emerged as a significant individual difference moderator, suggesting that employees who are high in communal orientation react differently to job insecurity than do those who are low in communal orientation. Trust in management emerged as a significant situational moderator that buffered the negative effects of job insecurity on organizational commitment. These findings are important to the study of job insecurity because few moderators of the job insecurity-work outcomes relationship have been identified in the literature.

Finally, this study provides a useful new measure of job insecurity. The new eight-item scale, derived from Kuhnert and Lahey's (1988) 11-item Job Permanence Scale, proved to be a more reliable measure and was more strongly related to social exchange outcomes than the popular global scale developed by Caplan et al. (1975). This scale, which more directly assesses the severity of the threat of job loss, was strongly correlated with a measure of powerlessness ($r = .46$). The strong relationship between these two measures supports Greenhalgh and Rosenblatt's (1984) claim that job insecurity and powerlessness should be multiplicatively combined to form a composite index of job insecurity. Findings of this study suggest that the proposed social exchange model of job insecurity could be enhanced by treating powerlessness as a component of such a composite job insecurity index rather than as an individual difference moderator.

Implications for Practice

For practitioners, this study offers valuable insight into the hidden costs of job insecurity and provides some hope for mitigating these effects. Previous research, which found no significant relationship between job insecurity and traditional measures of in-role

performance, did not consider the more likely consequences of job insecurity on discretionary, extra-role aspects of performance, like organizational citizenship behaviors. This study reveals some of the hidden costs of job insecurity that may offer a partial explanation for the lack of productivity gains in two thirds of downsizing companies surveyed in a recent American Management Association study (Madrick, 1995).

While the detrimental effects of job insecurity on organizational commitment are well documented in the literature, there is little evidence to suggest that job insecurity may actually hinder performance or organizational effectiveness. Findings in this study provide some evidence that job insecurity is negatively related to work behavior. Although organizational citizenship behavior (OCB) is considered to be discretionary in nature, a decline in these behaviors may impact organizational effectiveness in two ways. First, because the distinction between prescribed, in-role behaviors and discretionary, extra-role behaviors may be fuzzy in the workplace (Graham, 1991; Morrison, 1994), the organizational citizenship behaviors tapped by the measures used in this study may be viewed as prescribed, in-role behaviors or formal work performance by some employers, particularly those in service industries. In this sense, a decline in OCB associated with job insecurity may directly impact organizational effectiveness.

Secondly, even if the decline in OCB is not related to work performance as measured by the employer, it may relate to organizational effectiveness indirectly because OCB promotes the effective functioning of the organization (Organ, 1988); so much so, that Katz and Kahn (1978) claim that exclusive reliance on formally prescribed in-role behaviors will lead to the collapse of the organization. This study suggests that the hidden

costs of job insecurity in terms of reduced commitment and OCB serve to counteract or negate potential productivity gains expected from layoffs and workforce reductions. Practitioners must effectively manage the job insecurity crisis if such gains are to be realized (Greenhalgh, 1984).

The findings of this study offer practitioners some hope for mitigating the debilitating effects of job insecurity in the workplace. First, because communal orientation is associated with higher levels of OCB and because it tends to reverse the negative relationship between job insecurity and OCB, practitioners must strive to maintain high levels of communal orientation in the workplace. Since communal orientation is largely dispositional in nature (Clark et al., 1987), this must be accomplished through the personnel selection process. Communal orientation may be assessed by administering a work-related personality test. The best known candidate for such testing is the 92-item Service Orientation Scale (Hogan et al., 1984) that has been associated with high supervisor ratings of service-related performance among nursing students, practicing nurses, clerical employees, and truck drivers. Such a selection test will enable human resource practitioners to hire employees with higher levels of communal orientation. Findings in the present study suggest this practice may not only enhance performance, but it may help build a hedge of protection against the inevitable effects of job insecurity.

Another important finding in this study indicates that employers may mitigate the detrimental effects of job insecurity on organizational commitment by building trust among employees. Since trust in management was found to buffer the negative effects of job insecurity in this study, high levels of trust in management may be the best defense against

the negative effects of job insecurity. Maintaining a high level of trust in management through fairness, communication, and involvement with employees is, perhaps, the best damage control strategy in today's turbulent workplace. But, how can supervisors and managers maintain trust during times of organizational upheaval? After a decade of independent research in downsizing organizations, Brockner (1992) and Greenhalgh (1991) concur that the best way to minimize the psychological damage and loss of trust inherent in workforce reductions is to provide early notification and full information regarding job cuts, to consistently apply a fair decision rule for determining who is laid off, to provide fair treatment and support to layoff victims, and to provide realistic assurances of continued employment to layoff survivors as soon as possible.

A final implication of this study for practitioners is the importance of powerlessness in this study. Scores on the six-item powerlessness scale used in this study were strongly associated with a variety of negative work attitudes, including low levels of trust, perceived organizational support, and organizational commitment. Other studies involving this measure report similar findings (e.g., Ashforth, 1989; Fried, et al., 1996; Lee & Ashforth, 1993). Employees who feel they have no control over work-related events have generally poor work attitudes. The experience of powerlessness is particularly relevant during periods of organizational upheaval (Greenhalgh & Sutton, 1991). Workers are denied control when they need it most because management tends to be more secretive and seeks less input from employees during such times (Greenhalgh, 1984). This suggests that empowerment (sharing information, resources, and power with employees) is a key strategy for building trust and commitment in the workforce. Supervisors and managers must make

every effort to maintain and enhance employees' sense of control over their work environment, particularly in times of organizational upheaval.

Study Limitations

No single piece of research can maximize all possible dimensions of research design and methodology (Mitchell, 1985). Therefore, conclusions drawn from any research effort must be interpreted in light of the potential limitations of the study. The present study is subject to several methodological and theoretical limitations. Methodological limitations are concerned with the validity of inferences made from study data while theoretical limitations are concerned with potential flaws in the research model itself. A discussion of the potential methodological and theoretical limitations of this study follows.

Methodological Limitations

Every research endeavor requires the researcher to make a series of tradeoffs. The goal of sound research design is to make appropriate tradeoffs to ensure that the resulting research design effectively addresses the research question at hand (Kerlinger, 1986). The methodological limitations of this study are assessed in terms of the validity of inferences made from study data. The most widely used framework for evaluating study validity was proposed by Cook and Campbell (1979). This framework involves the assessment of four distinct forms of validity--internal validity, statistical conclusion validity, construct validity, and external validity. Cook and Campbell (1979) identified potential threats to each form of validity. Unfortunately, most of these threats were more germane to experimental research than to correlational research. Mitchell (1985) used Cook and Campbell's framework to

develop a checklist for evaluating the validity of correlational research. This approach is used to evaluate the validity of the present study.

Internal Validity

Internal validity is compromised when plausible alternative explanations for the relationships between study variables exist. The most salient threat to the internal validity of correlational studies is the lack of control over study variables (Mitchell, 1985). It is possible that some of the relationships identified in this study were influenced by spurious variables that were not addressed in the study. The impact of these variables suggests several plausible rival hypotheses that must be considered in interpreting study findings.

A major issue that often plagues survey research is the impact of selection. When the participation rate is less than 100%, the possibility exists that study findings are influenced by some factor that differs between participants and non-participants. The likelihood of such an effect is minimal in the day technician group because participation was relatively high (81%), and participants were very similar to non-participants in terms of age, tenure, gender, and education. Selection bias was more likely in the night nurse group because the participation rate was somewhat lower (66%). Nevertheless, participants and non-participants in this sample were also quite similar in terms of age, tenure, gender, and education. The possibility that participants and non-participants differed in terms of some other variable not measured in the study, however, remains as a potential alternative explanation for study findings.

A second threat to the internal validity of this study involves ambiguity about the causal direction of the relationships identified in the study. Since this is a correlational

study, the causal direction of relationships identified in the research model cannot be determined. Reverse causality is a possibility for many of the significant relationships in this study. One could argue, for example, that good organizational citizens (i.e., those who tend to engage in organizational citizenship behaviors) are more valued by their employers and, as a result, are less likely to feel insecure about the future of their jobs. A similar argument could be made concerning the relationship between job insecurity and organizational commitment. Employees who are highly committed to the organization are, by definition, more willing to exert extra effort on behalf of the organization (Mowday et al., 1982). Their commitment to the organization may be valued by employers who are less willing to lay off such employees. Therefore, highly committed employees are less likely to feel insecure about the future of their jobs.

Statistical Conclusion Validity

Sources of random error variance arising from unreliability and instability of measures and the inappropriate use of statistical tests can also lead to false conclusions about the covariation of independent and dependent variables. Measures used in this study were highly reliable. All scales exceeded Nunnally and Bernstein's (1994) standard .70.

Another potential source of measurement instability in survey research arises from the lack of control over survey administration. This threat was minimized in this study by the nature of survey administration. Surveys were administered by the researcher in a series on-site meetings involving small groups of employees. Meetings were held in conference rooms in the employees' work area to minimize distractions. Clear instructions,

standardized measures, and a quiet environment during survey administration served to lessen the potential for measurement instability in this study.

Several issues concerning the nature of statistical tests in this study also may affect study validity. These include violation of the assumptions of statistical tests, inflation of Type I error, and statistical power. This study involved a large number of intercorrelated independent variables and several intercorrelated dependent variables. Multicollinearity among the independent variables violates the assumptions of traditional multivariate regression analysis. Moreover, the large number of comparisons involved in testing relationships between the independent variables and the six dependent variables inflates Type I error in regression analysis leading to significant results, for some variables, purely by chance. As a result, statistical power with such a technique would be quite low.

The hierarchical set regression procedure used in this study addresses these concerns. Evaluating independent and dependent variables as sets of related variables, as described in Chapter 3, alleviates concern over multicollinearity and substantially reduces the Type I error rate (Cohen & Cohen, 1983). An F-test for a set of variables must reach significance before examination of t-statistics for individual variables is justified. This approach significantly reduced Type I error across the study and enhanced statistical power. A post hoc power analysis indicated acceptable statistical power, in excess of Cohen's (1988) standard of .80, for both samples in most analyses. Statistical power was moderate, however, in analyses involving OCB among night nurses. Despite significant findings, these analyses should be replicated with a larger sample of nurses in future research. Overall, hierarchical set regression is well suited to this study not only because it provides a useful

framework for testing the hypotheses of this study, but because it addresses most of the potential threats to the validity of statistical inferences in this study.

Construct Validity

According to Schwab (1980), construct validity refers to the correspondence between a construct and the operational procedure used to measure that construct. Construct validity is compromised in survey research by using measures that do not adequately represent the construct of interest and by procedural shortcomings that contaminate measures, the most serious of which is common method variance. Every effort was made in this study to use only well-validated measures of the constructs of interest. Considerable evidence supporting the construct validity of each measure used in this study was presented in Chapter 3. Since the study relies upon well-validated measures of study variables, concerns over whether these measures adequately represent the intended constructs are minimized.

Perhaps the most serious threat to construct validity in survey research is common method variance. When independent and dependent variable measures are obtained from the same source, any defect in that source may contaminate both measures, giving rise to common method variance (Campbell & Fiske, 1959; Fiske, 1982). Common method concerns are largely alleviated in this study because independent variables were obtained from employees and organizational citizenship behavior (OCB) ratings were obtained from a procedurally independent source—employees' supervisors. Therefore, relationships involving OCB cannot be explained by common method variance.

Common method variance is, however, a possibility for relationships involving organizational commitment. In this case, measures of independent variables and organizational commitment were obtained from the same source giving rise to a special form of common method variance called single source bias (Avolio, Yammarino, & Bass, 1991). Moreover, because these measures were obtained using self-reports, they are also subject to mono-method bias (Cook & Campbell, 1979). Sources of mono-method bias include consistency motif, similarity in item content, transient mood states, social desirability, and cues in the study environment (Podsakoff & Organ, 1986).

While both forms of common method variance may pose a significant threat, their impact was minimized in this study. Podsakoff and Organ (1986) point out that common method variance may be addressed procedurally or statistically. Procedural safeguards in this study include reverse wording of items in most scales to minimize consistency motif, use of a variety of scale formats with different anchors and response categories to address response sets, and careful selection of scales to reduce item overlap between independent variable measures and the organizational commitment scale.

The statistical technique used in this study also mitigates the potential effects of common method variance. Partialling of common variance in regression analysis is an effective approach for statistical control of common method effects (Podsakoff & Organ, 1986). The hierarchical set regression technique used in this study lessens the potential impact of common method variance on relationships between the independent variables and organizational commitment. If common method variance among all the variables assessed on the employee survey explained the covariance between the independent variables and

organizational commitment, then a single general factor would account for most of the variance between these variables. The common variance associated with such a factor would have been partialled out after the first set of independent variables was entered into the hierarchical analysis. As a result, little variance in organizational commitment would remain to be explained in subsequent steps in the analysis making significant results in these steps unlikely. Nevertheless, significant results were obtained at every step of the analysis, including the last step in which interactions were evaluated.

The benefit of hierarchical set regression as a means of controlling common method effects is most pronounced in tests of interaction. Pierce et al. (1993) argue that common method effects are partialled out along with the main effects before inspection of the interaction in hierarchical regression analysis. Therefore, the potential impact of common method variance on relationships involving organizational commitment has been mitigated procedurally through survey design and statistically through the use of hierarchical set regression.

External Validity

A final methodological limitation of this study concerns its external validity. The major issue regarding external validity is the extent to which inferences drawn from the study may be generalized to or across times, settings, and persons (Cook & Campbell, 1979). The external validity of this study can be evaluated in terms of two broad classes of external validity defined by Bracht and Glass (1968). These include (1) population validity, which refers to the extent to which study findings can be generalized to a larger population, and (2) ecological validity, which refers to the realism of the environment in which the study

was conducted. Population validity is limited in this study because study findings are generalizable only to the target population of healthcare workers in a hospital setting. While the target population is rather narrow in scope, this study is among the first to investigate job insecurity in a hospital setting. This is significant given the recent trend toward cost control and consolidation among healthcare organizations. Despite the narrow scope of the target population in this study, Cook and Campbell (1979) argue that external validity is better established using a number of smaller studies focused on narrow target populations than by a single large study which attempts to draw a representative sample from a wide variety of populations.

Ecological validity, on the other hand, is high in this study because it provides a rare glimpse into the nature of employee reactions to an acute threat of job loss. The environmental conditions represented in this study were painfully realistic. Job insecurity researchers are rarely given access to organizations on the verge of a major workforce reduction for fear that they may tip management's hand regarding impending layoffs. This study is among the few documented in the literature that were conducted in an acute setting. Thus, it satisfies Brunswick's (1955) call for natural research in which real people experience the phenomenon of interest in a natural setting.

Cook and Campbell (1979) acknowledge the fact that researchers must make tradeoffs among the various types of validity in designing research. Nevertheless, they stress that internal validity must have priority in these tradeoffs. Such is the case in the present study. Because the experience of job insecurity is largely a contextual phenomenon, employee reactions depend on the nature of the threat of job loss and the extent to which

they are protected by collective bargaining agreements, job rights, severance packages, or early retirement incentive programs (Jacobson, 1991). Since these factors vary among organizations and at different job levels, respondents were limited to healthcare workers in a single organization to control for these effects. Thus, internal validity was enhanced at the cost of reduced external validity.

Every effort has been made to minimize the effects of the potential limitations of this study. Despite these efforts, one must acknowledge that no single study can optimize all possible dimensions of research design and methodology (Mitchell, 1985). Tradeoffs must be made in such a way as to ensure that the study effectively addresses the research question and the hypotheses to be tested (Cook & Campbell, 1979; Sackett & Larson, 1991). The research design and methodology chosen for this study meets these objectives and provides an appropriate test of the proposed social exchange model of job insecurity.

Theoretical Limitations

The study breaks out of what Daft and Lewin (1990) call the "normal science straitjacket." Because it tests a new model of a relatively under-researched phenomenon in an unique environment, it can be considered a novel inquiry. Many of the relationships specified in the social exchange model of job insecurity proposed in this study have not been explored in the job insecurity literature. When one conducts novel research with potential for new discovery and theory building, surprises are inevitable and desirable. Daft and Lewin argue that if one already knows the phenomenon well enough to predict the outcome, there is no reason to ask the question. Surprise discoveries in this study revealed two important theoretical limitations in the research model. These limitations and the model

revisions they suggest are discussed below. The discussion concludes by presenting a revised version of the research model.

The first theoretical limitation of this model involves the role of powerlessness in the proposed social exchange model of job insecurity. Results of this study indicate that powerlessness is not a moderator of the job insecurity-social exchange outcomes relationship as specified in the proposed research model. Instead, it is strongly correlated with one of the job insecurity measures—the modified Kuhnert scale. This is surprising because the relationship between powerlessness and job insecurity is very weak in other studies (Ashford et al., 1989; Rosenblatt & Ruvio, 1996). Improved measures of both constructs, and the fact that employees faced an acute threat of job loss, may explain the stronger relationship. Nevertheless, this finding supports Greenhalgh and Rosenblatt's (1984) conceptualization of job insecurity as consisting of two dimensions—the severity of the threat of job loss and powerlessness. According to these authors, job insecurity is best measured using a composite index in which scores from scales tapping both dimensions are multiplicatively combined. Since the modified Kuhnert job insecurity scale taps the severity of the threat of job loss, it may be combined with powerlessness to form a composite index of job insecurity. Overall, the findings of this study may suggest that powerlessness is better represented as a component of job insecurity than as an individual difference moderator.

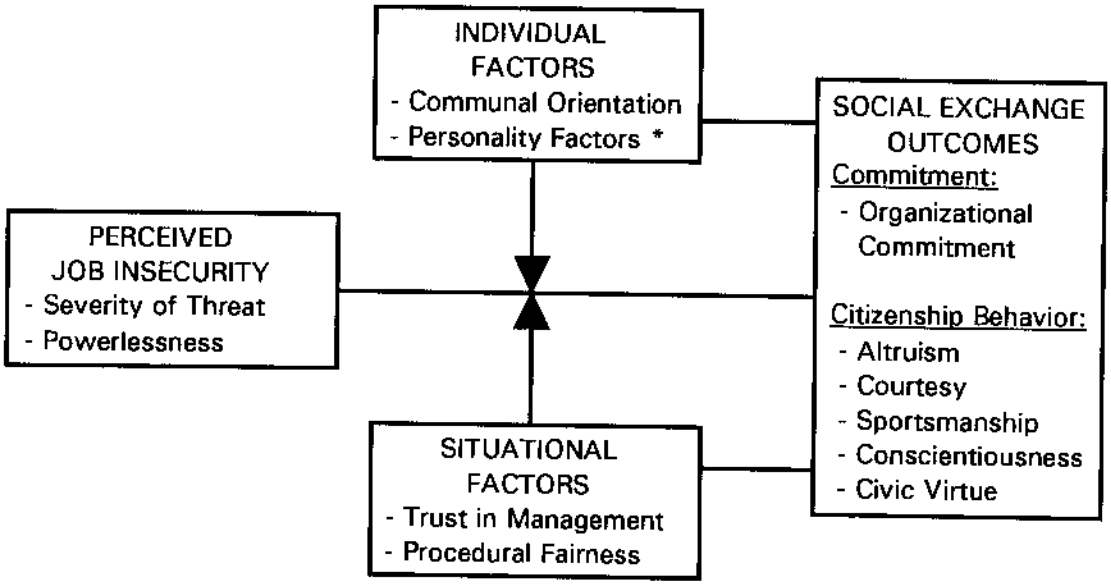
A second theoretical limitation of the research model tested in this study pertains to the situational moderators involved in the study. While the theoretical basis for expecting trust in management, procedural fairness, and organizational support to moderate the job

insecurity-social exchange outcomes relationship is sound, some practical issues argue against inclusion of all these variables in the model. These variables were viewed as a set of situational moderators because previous research had already documented that they were related constructs that were likely to be highly intercorrelated. All three variables were included in hopes that the study would reveal which variable was the stronger moderator of the job insecurity-social exchange outcomes relationship. Trust in management was so highly correlated with POS ($r = .77$) that it could serve as a surrogate for POS. Thus, the inclusion of POS in the model is redundant and may have obscured the direct and moderating effects of trust in management and procedural fairness. In the interest of parsimony, POS is removed from the revised model. Removal of the 17-item POS scale also has the practical benefit of significantly shortening the employee survey.

A revised version of the social exchange model of job insecurity, incorporating the revisions discussed above, is shown in Figure 10. According to the revised model, powerlessness is removed as an individual difference moderator and included, along with the severity of the threat of job loss, as a dimension of job insecurity. Powerlessness will be replaced by other potential individual difference moderators discussed in the next section. Situational factors include only trust in management and procedural fairness. The need to evaluate other situational moderators in future research is also discussed in the next section. No change is planned for social exchange outcomes in the model, but some improvements in measurement may be required as discussed in the next section.

Figure 10

Revised Research Model



* Proposed for future study

Directions for Future Research

This study introduced a new perspective for examining the effects of job insecurity. The social exchange model proposed in this study opens the door to renewed research in the field. Future research should focus on testing, refining, and expanding the social exchange model of job insecurity proposed in this study. Specifically, future research should replicate the present study, explore the causes and consequences of powerlessness, examine the dimensionality of job insecurity, search for new moderators of the job insecurity-work outcomes relationship, investigate intervening processes in this relationship, develop improved measures of social exchange outcomes, and expand the domain of the proposed social exchange model.

Replication of Present Study

This study provides the first test of the proposed social exchange model of job insecurity. Findings pertaining to the job insecurity-OCB relationship may be of particular interest to organizational researchers. A shortcoming of the present study is the relatively small sample size among nurses in the study. Modest statistical power in statistical tests involving nurses in this study may have rendered some important relationships insignificant. Future research should replicate the present study using larger samples of healthcare workers in downsizing hospitals. Such samples may be difficult to obtain in the presence of an acute threat of job loss, but this study suggests that the potential for discovery may be great for researchers who succeed in this effort.

Replications of this study should test the revised research model shown in Figure 10. Care must be taken in determining the order in which independent variable sets are entered into the hierarchical set regression. Based on Cohen and Cohen's (1983) recommendation, no set entered later in the analysis should be the presumed cause of sets entered previously. Since the individual difference factors in Figure 10 refer only to enduring personality traits, this set of independent variables must be entered first in the analysis--immediately after control variables are entered. The job insecurity set should be entered next, followed by the situational factors and, finally, the interactions. The revised research model facilitates a more theoretically-sound order of entry.

Causes and Consequences of Powerlessness

The lack of control over work-related events or powerlessness is a powerful determinant of negative work attitudes and outcomes (e.g., Ashforth, 1989; Fried et al.,

1996; Lee & Ashforth, 1993). The results of this study suggest that its relationship with work attitudes, like organizational commitment, may be amplified during downsizing because workers are denied control and access to important information just when they need it the most (Greenhalgh & Sutton, 1991). Yet, little is known concerning the specific factors that cause powerlessness and its consequences for employee attitudes and behavior. A promising avenue for future research is to examine the causes and consequences of powerlessness in both stable and downsizing organizations. Such research should lead to the development of models to describe the process of powerlessness. These models, in turn, may prompt field experiments in which various interventions designed to reduce powerlessness are evaluated.

Dimensionality of Job Insecurity

Job insecurity was considered to be a unitary construct in the social exchange model of job insecurity tested in this study. Nevertheless, the strong correlation between job insecurity and powerlessness in this study provides clear evidence to support the utility of Greenhalgh and Rosenblatt's (1984) conceptualization of job insecurity as consisting of two dimensions--severity of threat and powerlessness. A fruitful avenue for future research is to evaluate the dimensionality of job insecurity. Using a global job insecurity scale, which taps the severity of the threat of job loss, and the measure of powerlessness used in this study, researchers may examine the individual and joint effects of these dimensions of job insecurity. Joint effects may be evaluated by multiplicatively combining these scales to form a composite index of job insecurity. If Greenhalgh and Rosenblatt's (1984) multidimensional conception of job insecurity is supported, as suggested by findings in this

study, this 14-item composite index may emerge as a useful predictor of work attitudes and behaviors. Availability of such an improved measure may lead to the re-evaluation of previous research involving employee reactions to job insecurity.

Moderators of the Job Insecurity-Work Outcomes Relationship

Additional moderators of the job insecurity-work outcomes relationship remain to be explored. The search for additional individual difference and situational moderators offers a promising direction for future research. Among the potential individual difference factors, personality traits may be the most appealing. Significant findings for the moderating effects of communal orientation in this study should spark renewed interest in personality traits as moderators of the job insecurity-work outcomes relationship. Caution must be exercised, however, in selecting personality measures for such research. Organ (1994) argues that personality measures reflecting a constellation of personality traits, like communal orientation, are more powerful predictors of work attitudes and behaviors than individual trait measures, like extroversion. Two promising individual difference moderators are positive and negative affectivity. Like communal orientation, these constructs reflect a host of emotional states and personality traits (Watson & Clark, 1984). Both were strongly related to psychological distress in a study involving two companies that were facing job cuts (Roskies et al., 1993). Future research should seek to replicate findings regarding communal orientation and to examine the effects of positive and negative affectivity.

Another fruitful avenue for research in this area involves the evaluation of new situational moderators. Additional research is needed to test the moderating effects of

social support on the job insecurity-work outcomes relationship. Early evidence provided by Lim (1996), which indicates that social support moderates the relationship between job insecurity and nonconforming behaviors, suggests that this may be a promising direction for future research. Other situational factors, like leader behavior, quality of leader-member exchange, and even job characteristics may also emerge as important moderators of the job insecurity-work outcomes relationship. To minimize the potential effects of multicollinearity, only situational factors that are not strongly related to job insecurity and individual difference moderators in the model should be tested. Significant findings for situational moderators may provide some insight as to how managers may mitigate the negative effects of job insecurity.

Intervening Processes

The social exchange model of job insecurity proposed in Figure 1 (Chapter 1) suggests that the intervening process linking job insecurity to social exchange outcomes lies in the operation of psychological contracts. This intervening process rests on two major assumptions: (1) job insecurity represents a major violation of relational psychological contracts, and (2) violations of relational psychological contracts cause a shift from relational contracts to transactional contracts. Yet, neither assumption has been explicitly tested in the literature. Pioneering work by Robinson and her colleagues (e.g., Robinson et al., 1994; Robinson & Morrison, 1995; Robinson & Rousseau, 1994) produced new measures of transactional and relational psychological contracts and investigated the impact of violations of such contracts. Unfortunately, the validity of these measures is not well

established, and no studies have specifically addressed the role of job insecurity as a violation of psychological contracts.

Future researchers may examine this intervening process by conducting longitudinal studies in downsizing organizations. The first wave of data collection should occur before a reduction in force is announced. Baseline measures of psychological contracts, using scales like those developed by Robinson et al. (1994), and perceptions of specific violations of psychological contracts should be taken at this time. One subscale of the violation of contract measure should specifically address violations of the obligation to provide secure employment. These measures should be administered again in subsequent waves of data collection after the layoff is announced and after it is implemented. Comparison of data collected at each of these time periods would provide valuable insight into the operation of psychological contracts during downsizing.

Another potentially important intervening process in the job insecurity-work outcomes relationship concerns the mediating role of trust. While trust in management emerged as a significant moderator of the relationship between job insecurity and organizational commitment in this study, its role as a mediator of the relationship between job insecurity and work outcomes remains unexplored. Several studies demonstrate that trust mediates relationships between work attitudes and work outcomes (e.g., Konovsky & Pugh, 1994; Robinson & Rousseau, 1994; Robinson & Morrison, 1995), but no studies have assessed its role as a mediator in the job insecurity-work outcomes relationship. A particularly promising research opportunity for organizational researchers lies in investigations of the mediating effect of trust on the job insecurity-OCB relationship.

Measures of Social Exchange Outcomes

Measurement of social exchange outcomes emerged as an important issue in this study. Because organizational commitment was assessed using a self-report measure, common method variance was a concern in this study. Future research may eliminate this problem by obtaining measures of organizational commitment from an independent source. Because close relationships tend to develop among people over time (Holmes, 1981), employees may be quite familiar with the work attitudes of their closest coworkers. Therefore, peer evaluation of organizational commitment may be explored as an alternative to self-report measures of the construct.

Additional research is also necessary to develop new measures of organizational citizenship behavior (OCB) for healthcare workers. As previously stated in this chapter, OCB is in the eye of the beholder. Healthcare workers, by virtue of their close contact with patients, may not view altruism, conscientiousness, and courtesy as discretionary, extra-role behaviors. Thus, Organ's (1988) five-factor framework may not be as relevant among healthcare workers as it is for employees in other occupations. Future research should develop and test new measures of OCB that are more relevant to healthcare workers. Overall, improved measures of social exchange outcomes should lead to the discovery of more meaningful relationships between job insecurity and social exchange outcomes.

Domain of the Social Exchange Model

All theoretical models are based on a set of bounding assumptions that establish the domain within which the model operates (Bacharach, 1989; Dubin, 1976). This study represents the first test of the proposed social exchange model of job insecurity. At this

time, the model appears to be relevant to healthcare workers facing an acute threat of job loss. Whether the domain of the model extends beyond this setting is unknown at this time. Future research, which tests the model in other industries and in settings where the threat of job loss is less pronounced, is needed to expand the domain of the model.

Chapter Summary

This chapter provided an evaluation of the results of the study. First, a detailed explanation of the results was provided. A discussion of the major theoretical contributions of the study and its practical implications followed. The methodological limitations of the study were then examined in terms of threats to the internal validity, statistical conclusion validity, construct validity, and external validity of the study. A discussion of the theoretical limitations of the study and potential flaws in the research model concluded with the introduction of a revised version of research model. Finally, the chapter closed by exploring potential directions for future research.

APPENDIX A

EMPLOYEE QUESTIONNAIRE

University of North Texas
College of Business Administration
Department of Management

Employee Attitude Survey
October 1997

Dear Participant:

I truly appreciate your time and involvement in this research project, which is being conducted as part of the requirements for me to earn my Ph.D. in Human Resource Management at the University of North Texas. The purpose of this study is to increase our understanding of work attitudes in healthcare institutions. Your participation in this research involves only the completion of the attached survey, which takes about 10-15 minutes. No foreseeable risks or discomforts are expected from your participation. Benefits from your participation in this research will help in improving the work environment in healthcare institutions. Your honest responses to each statement are extremely important to the success of this project. Thank you again for your time and effort.

Please read the following statement before proceeding with the survey:
If you agree to participate in this study, please sign the consent form below and complete the survey. Your responses are completely confidential. No individual responses will be identified or published. Your survey responses will remain anonymous. All survey data will be accessible only to me and will be compiled and presented as group data only. Participation in this survey is voluntary. You may refuse to participate or stop participation at any time during completion of the survey without penalty or loss of benefits to which you are entitled. Please contact Charles Bultena, the project director, at 691-4208 if you have any questions regarding your participation in this project.

I agree to participate in this study by completing the attached survey.

Printed Name _____ Date of Birth _____

Signature _____ Today's Date _____

Directions: The attached survey contains five sections addressing your attitudes toward your work and this organization. It is very important that you respond honestly to every statement or question on all four (4) pages of this survey. Please read the instructions at the top of each section of the survey and circle the response that best describes your opinion.

Please note that this project has been reviewed and approved by the University of North Texas Committee for the Protection of Human Subjects.

P.O. Box 13677 • Denton, Texas 76203-6677
817/565-3140 • DFW Metro 817/267-3731 • FAX 817/565-4394 • TDD 800/735-2989

SECTION 1: YOUR PERSONAL FEELINGS ABOUT WORK AND THIS ORGANIZATION:

Part A: Please indicate how strongly you agree or disagree with each of the following statements by circling the appropriate number.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Moderately Agree	Strongly Agree
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3	4	5	6	7
2. I talk up this organization to my friends as a great organization to work for.	1	2	3	4	5	6	7
3. I would accept almost any type of job assignment in order to keep working for this organization.	1	2	3	4	5	6	7
4. I find that my values and the organization's values are very similar.	1	2	3	4	5	6	7
5. I am proud to tell others that I am part of this organization.	1	2	3	4	5	6	7
6. This organization really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
7. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7
8. I really care about the fate of this organization.	1	2	3	4	5	6	7
9. For me this is the best of all possible organizations for which to work.	1	2	3	4	5	6	7

Part B: Please indicate how much you agree or disagree with each of the following statements about yourself or your personal beliefs by circling the appropriate number.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. When making a decision, I take other people's needs and feelings into account.	1	2	3	4	5
2. I'm not especially sensitive to other people's feelings.	1	2	3	4	5
3. I don't consider myself to be a particularly helpful person.	1	2	3	4	5
4. I believe people should go out of their way to be helpful.	1	2	3	4	5
5. I don't especially enjoy giving others aid.	1	2	3	4	5
6. I often go out of my way to help another person.	1	2	3	4	5
7. I believe it's best not to get involved taking care of people's personal needs.	1	2	3	4	5
8. I'm not the sort of person who often comes to the aid of others.	1	2	3	4	5
9. When people get emotionally upset, I tend to avoid them.	1	2	3	4	5
10. People should keep their troubles to themselves.	1	2	3	4	5

SECTION 2: YOUR EVALUATION OF YOUR WORK ENVIRONMENT

Part A: Looking to your future in this organization, how certain are you about each of the following statements. Circle the appropriate number beside each statement.

	Somewhat Uncertain	A Little Uncertain	Somewhat Certain	Fairly Certain	Very Certain
1. How certain are you about what your future career picture looks like?	1	2	3	4	5
2. How certain are you of the opportunities for promotion and advancement which will exist in the next few years?	1	2	3	4	5
3. How certain are you about whether your job skills will be of use and value five years from now?	1	2	3	4	5
4. How certain are you about what your responsibilities will be six months from now?	1	2	3	4	5
5. How certain are you that you will not be laid off from your job in the next few years?	1	2	3	4	5
6. How certain are you about your job security with your present organization?	1	2	3	4	5

Part B: Think about the future of your job in this organization. Circle the appropriate number beside each statement to indicate the extent to which you agree or disagree with the statement.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. I'm not really sure how long my job will last.	1	2	3	4	5
2. I'm concerned about the possibility of losing my job.	1	2	3	4	5
3. It is very unlikely that my job will be terminated.	1	2	3	4	5
4. I can keep my job here for as long as I want it.	1	2	3	4	5
5. I can be sure of my job as long as I do good work.	1	2	3	4	5
6. If my present job were phased out, management would try to find me another position in this organization.	1	2	3	4	5
7. Management is planning a staff reduction.	1	2	3	4	5
8. I believe my job is secure.	1	2	3	4	5

Part C: Indicate how much you agree or disagree with each of the following statements by circling the appropriate number.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. My impact on what happens at work is very large.	1	2	3	4	5
2. I have a great deal of control over how things are done.	1	2	3	4	5
3. No matter what I do, nothing seems to have an effect.	1	2	3	4	5
4. I have little influence over what happens around here.	1	2	3	4	5
5. There is very little I can do to change things at work.	1	2	3	4	5
6. I do not have enough power to make any real changes.	1	2	3	4	5

SECTION 3: YOUR EVALUATION OF YOUR PRESENT JOB

Part A: This section deals with how you feel about the people who manage this organization. The word "management" refers to the administrators, managers, and directors of this organization as a whole.

Indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate number.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. I am not sure I fully trust management.	1	2	3	4	5
2. Management is open and upfront with me.	1	2	3	4	5
3. I believe management has high integrity.	1	2	3	4	5
4. In general, I believe management's motives and intentions are good.	1	2	3	4	5
5. Management is not always honest and truthful.	1	2	3	4	5
6. I don't think management treats me fairly.	1	2	3	4	5
7. I can expect management to treat me in a consistent and predictable fashion.	1	2	3	4	5

Part B: The following questions ask about your overall relationship with your current supervisor. The word "supervisor" refers to the person to whom you report directly, regardless of the person's actual title.

Think of recent decisions made by your supervisor. Indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate number.

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
1. My supervisor treats me politely.	1	2	3	4	5
2. My supervisor shows concern for my rights.	1	2	3	4	5
3. My supervisor gets the information needed to make a good decision.	1	2	3	4	5
4. My supervisor brings issues into the open so problems can be solved.	1	2	3	4	5
5. My supervisor is honest in what he/she says to me.	1	2	3	4	5
6. My supervisor allows me to state my views.	1	2	3	4	5
7. My supervisor gives a great deal of consideration to my views when he/she makes a decision.	1	2	3	4	5
8. My supervisor gives me a great deal of control over decisions that affect me.	1	2	3	4	5

ADDITIONAL QUESTIONS ON THE NEXT PAGE ➡ ➡ ➡

SECTION 4: YOUR FEELINGS CONCERNING SUPPORT RECEIVED FROM THIS ORGANIZATION: Please indicate how strongly you agree or disagree with each of the following statements by circling the appropriate number.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Moderately Agree	Strongly Agree
1. The organization values my contribution to its well-being.	1	2	3	4	5	6	7
2. If the organization could hire someone else to replace me at a lower salary it would do so.	1	2	3	4	5	6	7
3. The organization fails to appreciate any extra effort from me.	1	2	3	4	5	6	7
4. The organization strongly considers my goals and values.	1	2	3	4	5	6	7
5. The organization would ignore any complaint from me.	1	2	3	4	5	6	7
6. The organization disregards my best interests when it makes decisions that affect me.	1	2	3	4	5	6	7
7. Help is available from the organization when I have a problem.	1	2	3	4	5	6	7
8. The organization really cares about my well-being.	1	2	3	4	5	6	7
9. The organization is willing to extend itself in order to help me perform my job to the best of my ability.	1	2	3	4	5	6	7
10. Even if I did the best job possible, the organization would fail to notice me.	1	2	3	4	5	6	7
11. The organization is willing to help me when I need a special favor.	1	2	3	4	5	6	7
12. The organization cares about my general satisfaction at work.	1	2	3	4	5	6	7
13. If given the opportunity, the organization would take advantage of me.	1	2	3	4	5	6	7
14. The organization shows very little concern for me.	1	2	3	4	5	6	7
15. The organization cares about my opinions.	1	2	3	4	5	6	7
16. The organization takes pride in my accomplishments at work.	1	2	3	4	5	6	7
17. The organization tries to make my job as interesting as possible.	1	2	3	4	5	6	7

SECTION 5: ADDITIONAL INFORMATION: Please fill in each blank or check the appropriate response category.

1. Title of Your Current Position: _____

2. Your Current Employment Status:
   _____ (1) Part Time; Average Hours Worked per Week: _____
   _____ (2) Full Time
   _____ (3) Other (Please Specify) _____

3. Highest Level of Education Completed:
   _____ (1) High School
   _____ (2) Some College
   _____ (3) Associate/Technical Degree
   _____ (4) Four-Year College Degree
   _____ (5) Graduate Degree

Thank you very much for your time!

University of North Texas
Sponsored Projects Administration

September 18, 1997

Mr. Charles Bultena
4213 Kingsbury Dr.
Wichita Falls, TX 76309

Re: Human Subjects Application No. 97-185

Dear Mr. Bultena:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), I have conducted an expedited review of your proposed project titled "Social Exchange Under Fire: Direct and Moderated Effects of Job Insecurity on Social Exchange." The risks inherent in this research are minimal, and the potential benefits to the subjects outweigh those risks. The submitted protocol and informed consent form are hereby approved for the use of human subjects on this project.

The UNT IRB must re-review this project prior to any modifications you make in the approved project. Please contact me if you wish to make such changes or need additional information.

If you have questions, please contact me.

Sincerely,

Walter C. Zacharias, Jr., Ed.D.
Chair, Institutional Review Board

WZ:sb

cc. IRB Members

P.O. Box 305250 • Denton, Texas 76203-5250
(940) 565-3940 • Fax (940) 565-4277 • TDD (800) 735-2989
e-mail: lane@abn.unt.edu

APPENDIX B

SUPERVISOR QUESTIONNAIRE

University of North Texas
College of Business Administration
Department of Management

Employee Attitude Survey
October 1997

Dear Participant:

I truly appreciate your time and involvement in this research project, which is being conducted as part of the requirements to earn my Ph.D. in Human Resource Management at the University of North Texas. As you may already know, the purpose of this study is to increase our understanding of work attitudes in healthcare institutions. As you know, I have administered confidential surveys among most day mental health care workers and most of the nurses on each shift to assess employee attitudes toward the organization. As a final step in my study, I want to look at the other side of the coin—your evaluation of the employees who report to you.

As in the employee surveys, your ratings are completely confidential. They will be accessible only to me and will remain anonymous. Your ratings will be compiled and presented only as group data. Your participation is vital to this project because you are the only person who is qualified to rate your subordinates. Without your input, their responses will be of little value to the study. Nevertheless, your participation is voluntary and refusal to participate will not result in penalty or any loss of benefits to which you are entitled. Please contact Charles Bultena, the project director, at 689-4402 if you have any questions regarding your participation in this project.

Instructions:
For each employee, write your name at the top of the form in the space provided and record the approximate amount of time (years and months) that you have supervised this employee. Then, take a few minutes to reflect on the employee's work behavior over the past three (3) to six (6) months. Record your honest impressions of the employee for each item on the rating form. This should take about 3-5 minutes per employee. I recommend that you rate all your subordinates in one sitting, if possible, so that you can adequately distinguish between those with favorable and unfavorable work behavior. When you have finished, put the rating forms back in the envelope and seal it. To complete the study on time, envelopes must be completed by 5 p.m. on Thursday, October 30th. You may return the sealed envelope to your nurse manager or directly to me when I visit the units on Friday morning (October 31st).

Your help is greatly appreciated! I will see to it that you get a copy of the study findings when I am finished. Thank you again for your time and effort!

Please note that this project has been reviewed and approved by the University of North Texas Committee for the Protection of Human Subjects.

P.O. Box 13677 • Denton, Texas 76203-6677
817/565-3140 • DFW Metro 817/267-3731 • FAX 817/565-4394 • TDD 800/735-2989

Employee Name: _____ **Supervisor Name:** _____

How long have you supervised this employee? _____ **Years** _____ **Months**

Think of this person's behavior on the job over the past three (3) to six (6) months. Please indicate as objectively as possible how strongly you agree or disagree with each of the following statements by circling the correct number.

	Strongly Disagree						Strongly Agree
1. Helps others who have heavy work loads.	1	2	3	4	5	6	7
2. Is the classic "squeaky wheel" that always needs greasing.	1	2	3	4	5	6	7
3. Believes in giving an honest day's work for an honest day's pay.	1	2	3	4	5	6	7
4. Tries to avoid creating problems for coworkers.	1	2	3	4	5	6	7
5. Consumes a lot of time complaining about trivial matters.	1	2	3	4	5	6	7
6. Keeps abreast of changes in the organization.	1	2	3	4	5	6	7
7. Tends to make "mountains out of molehills."	1	2	3	4	5	6	7
8. Considers the impact of his/her actions on coworkers.	1	2	3	4	5	6	7
9. Attends meetings that are not mandatory, but are considered important.	1	2	3	4	5	6	7
10. Is always ready to lend a helping hand to those around him/her.	1	2	3	4	5	6	7
11. Attends functions that are not required, but help the organization's image.	1	2	3	4	5	6	7
12. Reads and keeps up with organization announcements, memos, and so on.	1	2	3	4	5	6	7
13. Helps others who have been absent.	1	2	3	4	5	6	7
14. Does not abuse the rights of others.	1	2	3	4	5	6	7
15. Willingly helps others who have work related problems.	1	2	3	4	5	6	7
16. Always focuses on what's wrong, rather than the positive side.	1	2	3	4	5	6	7
17. Takes steps to try to prevent problems with other workers.	1	2	3	4	5	6	7
18. Attendance at work is above the norm.	1	2	3	4	5	6	7
19. Always finds fault with what the organization is doing.	1	2	3	4	5	6	7
20. Is mindful of how his/her behavior affects other people's jobs.	1	2	3	4	5	6	7
21. Does not take extra breaks.	1	2	3	4	5	6	7
22. Obeys company rules and regulations even when no one is watching.	1	2	3	4	5	6	7
23. Helps orient new people even though it is not required.	1	2	3	4	5	6	7
24. Is one of my most conscientious employees.	1	2	3	4	5	6	7

APPENDIX C

POWER ANALYSIS

Power Report

Step 1: Demographic Set (R^2 = .10)

	Number of Variables	Estimated R^2
Variables of Interest	3	0.10
Variables Partialled	0	0.00

Effect Size = .111 Numerator Degrees of Freedom = 3

N	Lambda	Denominator Degrees of Freedom	Alpha	Beta	Power
50	5.5556	46	0.01	0.782338	0.217662
50	5.5556	46	0.05	0.551024	0.448976
50	5.5556	46	0.10	0.416832	0.583168
60	6.6667	56	0.01	0.712309	0.287692
60	6.6667	56	0.05	0.465704	0.534296
60	6.6667	56	0.10	0.336801	0.663199
70	7.7778	66	0.01	0.639735	0.360265
70	7.7778	66	0.05	0.388222	0.611778
70	7.7778	66	0.10	0.268742	0.731258
80	8.8889	76	0.01	0.567203	0.432797
80	8.8889	76	0.05	0.319627	0.680373
80	8.8889	76	0.10	0.212035	0.787966
90	10.0000	86	0.01	0.496852	0.503148
90	10.0000	86	0.05	0.260188	0.739812
90	10.0000	86	0.10	0.165599	0.834402
100	11.1111	96	0.01	0.430325	0.569675
100	11.1111	96	0.05	0.209619	0.790381
100	11.1111	96	0.10	0.128141	0.871859
110	12.2222	106	0.01	0.368774	0.631226
110	12.2222	106	0.05	0.167281	0.832719
110	12.2222	106	0.10	0.098320	0.901680
120	13.3333	116	0.01	0.312901	0.687100
120	13.3333	116	0.05	0.132329	0.867672
120	13.3333	116	0.10	0.074856	0.925144
130	14.4444	126	0.01	0.263030	0.736970
130	14.4444	126	0.05	0.103833	0.896167
130	14.4444	126	0.10	0.056584	0.943416
140	15.5556	136	0.01	0.219181	0.780819
140	15.5556	136	0.05	0.080863	0.919137
140	15.5556	136	0.10	0.042489	0.957511
150	16.6667	146	0.01	0.181146	0.818854
150	16.6667	146	0.05	0.062534	0.937466
150	16.6667	146	0.10	0.031709	0.968291

Power Report

Step 2: Job Insecurity Set (R^2 = .10)

	Number of Variables	Estimated R^2
Variables of Interest	2	0.10
Variables Partialled	3	0.10

Effect Size = .125 Numerator Degrees of Freedom = 2

N	Lambda	Denominator Degrees of Freedom	Alpha	Beta	Power
50	5.875	44	0.01	0.705968	0.294032
50	5.875	44	0.05	0.456163	0.543838
50	5.875	44	0.10	0.328010	0.671990
60	7.125	54	0.01	0.615722	0.384278
60	7.125	54	0.05	0.362353	0.637647
60	7.125	54	0.10	0.246772	0.753228
70	8.375	64	0.01	0.527291	0.472709
70	8.375	64	0.05	0.283035	0.716965
70	8.375	64	0.10	0.182947	0.817053
80	9.625	74	0.01	0.444089	0.555911
80	9.625	74	0.05	0.217816	0.782184
80	9.625	74	0.10	0.133888	0.866112
90	10.875	84	0.01	0.368351	0.631649
90	10.875	84	0.05	0.165417	0.834584
90	10.875	84	0.10	0.096868	0.903133
100	12.125	94	0.01	0.301291	0.698709
100	12.125	94	0.05	0.124135	0.875865
100	12.125	94	0.10	0.069367	0.930633
110	13.375	104	0.01	0.243295	0.756705
110	13.375	104	0.05	0.092157	0.907843
110	13.375	104	0.10	0.049216	0.950784
120	14.625	114	0.01	0.194154	0.805846
120	14.625	114	0.05	0.067748	0.932252
120	14.625	114	0.10	0.034626	0.965374
130	15.875	124	0.01	0.153255	0.846745
130	15.875	124	0.05	0.049360	0.950640
130	15.875	124	0.10	0.024175	0.975826
140	17.125	134	0.01	0.119754	0.880246
140	17.125	134	0.05	0.035667	0.964333
140	17.125	134	0.10	0.016759	0.983241
150	18.375	144	0.01	0.092699	0.907301
150	18.375	144	0.05	0.025577	0.974423
150	18.375	144	0.10	0.011543	0.988457

Power Report

Step 3: Individual Factors Set (R^2 = .10)

	Number of Variables	Estimated R^2
Variables of Interest	2	0.10
Variables Partialled	5	0.20

Effect Size = .143 Numerator Degrees of Freedom = 2

N	Lambda	Denominator Degrees of Freedom	Alpha	Beta	Power
50	6.4286	42	0.01	0.672198	0.327802
50	6.4286	42	0.05	0.417226	0.582774
50	6.4286	42	0.10	0.292696	0.707304
60	7.8571	52	0.01	0.569469	0.430531
60	7.8571	52	0.05	0.317707	0.682293
60	7.8571	52	0.10	0.209659	0.790342
70	9.2857	62	0.01	0.471575	0.528425
70	9.2857	62	0.05	0.237010	0.762990
70	9.2857	62	0.10	0.147524	0.852476
80	10.7143	72	0.01	0.382567	0.617433
80	10.7143	72	0.05	0.173665	0.826335
80	10.7143	72	0.10	0.102205	0.897795
90	12.1429	82	0.01	0.304648	0.695352
90	12.1429	82	0.05	0.125250	0.874750
90	12.1429	82	0.10	0.069849	0.930152
100	13.5714	92	0.01	0.238546	0.761454
100	13.5714	92	0.05	0.089065	0.910935
100	13.5714	92	0.10	0.047161	0.952840
110	15.0000	102	0.01	0.183944	0.816056
110	15.0000	102	0.05	0.062536	0.937464
110	15.0000	102	0.10	0.031498	0.968502
120	16.4286	112	0.01	0.139865	0.860135
120	16.4286	112	0.05	0.043408	0.956592
120	16.4286	112	0.10	0.020831	0.979169
130	17.8571	122	0.01	0.104991	0.895009
130	17.8571	122	0.05	0.029818	0.970182
130	17.8571	122	0.10	0.013655	0.986346
140	19.2857	132	0.01	0.077884	0.922116
140	19.2857	132	0.05	0.020289	0.979712
140	19.2857	132	0.10	0.008878	0.991122
150	20.7143	142	0.01	0.057147	0.942853
150	20.7143	142	0.05	0.013684	0.986316
150	20.7143	142	0.10	0.005729	0.994271

Power Report

Step 4: Situational Factors Set (R^2 = .15)

	Number of Variables	Estimated R^2
Variables of Interest	3	0.15
Variables Partialled	7	0.30

Effect Size = .273 Numerator Degrees of Freedom = 3

N	Lambda	Denominator Degrees of Freedom	Alpha	Beta	Power
50	11.7273	39	0.01	0.450035	0.549965
50	11.7273	39	0.05	0.212210	0.787790
50	11.7273	39	0.10	0.126154	0.873846
60	14.4545	49	0.01	0.304927	0.695073
60	14.4545	49	0.05	0.120090	0.879910
60	14.4545	49	0.10	0.064771	0.935229
70	17.1818	59	0.01	0.195392	0.804608
70	17.1818	59	0.05	0.064811	0.935189
70	17.1818	59	0.10	0.031908	0.968092
80	19.9091	69	0.01	0.119345	0.880655
80	19.9091	69	0.05	0.033611	0.966389
80	19.9091	69	0.10	0.015184	0.984817
90	22.6364	79	0.01	0.069931	0.930069
90	22.6364	79	0.05	0.016847	0.983153
90	22.6364	79	0.10	0.007014	0.992986
100	25.3636	89	0.01	0.039515	0.960485
100	25.3636	89	0.05	0.008198	0.991802
100	25.3636	89	0.10	0.003158	0.996842
110	28.0909	99	0.01	0.021623	0.978377
110	28.0909	99	0.05	0.003887	0.996113
110	28.0909	99	0.10	0.001391	0.998610
120	30.8182	109	0.01	0.011500	0.988501
120	30.8182	109	0.05	0.001801	0.998199
120	30.8182	109	0.10	0.000600	0.999400
130	33.5455	119	0.01	0.005961	0.994039
130	33.5455	119	0.05	0.000818	0.999182
130	33.5455	119	0.10	0.000254	0.999746
140	36.2727	129	0.01	0.003020	0.996980
140	36.2727	129	0.05	0.000364	0.999636
140	36.2727	129	0.10	0.000106	0.999894
150	39.0000	139	0.01	0.001498	0.998502
150	39.0000	139	0.05	0.000160	0.999840
150	39.0000	139	0.10	0.000044	0.999956

REFERENCES

Abramis, D. J. (1994). Relationship of job stressors to job performance: Linear or an inverted-u? Psychological Reports, 75, 547-558.

Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2, pp. 267-299). New York: Academic Press.

Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. Academy of Management Journal, 32, 803-829.

Ashforth, B. E. (1989). The experience of powerlessness in organizations. Organizational Behavior and Human Decision Processes, 43, 207-242.

Avolio, B. J., Yammarino, F. J., & Bass, B. M. (1991). Identifying common method variance with data collected from a single source: An unrelated sticky issue. Journal of Management, 17, 571-587.

Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. Academy of Management Review, 14, 496-515.

Bandura, A. (1982). Self-efficacy mechanism in human agency. American Psychologist, 37, 122-147.

Barnard, C. I. (1938). The functions of the executive. Cambridge, MA: Harvard University Press.

Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press.

Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee citizenship. Academy of Management Journal, 26, 587-595.

Becker, H. S. (1960). Notes on the concept of commitment. American Journal of Sociology, 66, 32-42.

Beehr, T. A. (1985). The role of social support in coping with organizational stress. In T. A. Beehr & R. S. Bhagat (Eds.), Human stress and cognition in organizations (pp. 375-398). New York: Wiley.

Beehr, T. A. (1990). Stress in the workplace: An overview. In J. W. Jones, B. D. Steffy, & D. W. Bray (Eds.) Applying Psychology in Business. Lexington MA: Lexington.

Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. Personnel Psychology, 31, 665-699.

Bies, R. J. (1987). The predicament of injustice: The management of moral outrage. In L. L. Cummings & B. M. Staw (Eds.), Research in organizational behavior (Vol. 9, pp. 289-319). Greenwich: JAl Press.

Bies, R. J., Martin, C. L., & Brockner, J. (1993). Just laid off, but still a good citizen? Only if the process is fair. Employee Responsibilities and Rights Journal, 6, 227-238.

Blau, P. M. (1964). Exchange and power in social life. New York: Wiley.

Borg, I., & Elizur, D. (1992). Job insecurity: Correlates, moderators, and measurement. International Journal of Manpower, 13, 13-26.

Bracht, G. H., & Glass, G. V. (1968). The external validity of experiments. American Educational Research Journal, 5, 437-474.

Brayfield, A. H., & Crockett, W. H. (1955). Employee attitudes and employee performance. Psychological Bulletin, 52, 396-424.

Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. Academy of Management Review, 10, 710-725.

Brief, A. P., & Roberson, L. (1987). Job attitude organization: An exploratory study. Paper presented at Annual Meeting of the Academy of Management, New Orleans.

Brockner, J. (1988). The effects of work layoffs on survivors: Research, theory, and practice. In B. M. Staw & L. L. Cummings (Eds.), Research in organization behavior (Vol. 10, pp. 213-255). Greenwich, CT: JAI Press.

Brockner, J. (1992). Managing the effects of layoffs on survivors. California Management Review, 34, 9-28.

Brockner, J., Davy, J., & Carter, C. (1985). Layoffs, self-esteem, and survivor guilt: Motivational, affective, and attitudinal consequences. Organizational Behavior and Human Decision Processes, 36, 229-244.

Brockner, J., DeWitt, R. L., Grover, S., & Reed, T. (1990). When it is especially important to explain why: Factors affecting the relationship between managers' explanations of a layoff and survivors' reactions to the layoff. Journal of Experimental Social Psychology, 26, 389-407.

Brockner, J., Grover, S. L., O'Malley, M., Reed, T., & Glynn, M. (1993). Threat of future layoffs, self-esteem, and survivors' reactions: Evidence from the laboratory and the field. Strategic Management Journal, 14, 153-166.

Brockner, J., Grover, S. L., Reed, T., & DeWitt, R. (1992). Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. Academy of Management Journal, 35, 413-425.

Brockner, J., Grover, S. L., Reed, T., DeWitt, R. & O'Malley, M. (1987). Survivors' reactions to layoffs: We get by with a little help for our friends. Administrative Science Quarterly, 32, 526-541.

Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C., & Bies, R. (1994). Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. Academy of Management Journal, 37, 397-409.

Brunswik, E. (1955). Representative design and probabilistic theory in a functional psychology. Psychological Review, 62, 193-217.

Buunk, B. P., Doosje, B. J., Jans, L. G., & Hopstaken, L. E. (1993). Perceived reciprocity, social support, and stress at work: The role of exchange and communal orientation. Journal of Personality and Social Psychology, 65, 801-811.

Burke, R. J. (1991). Job insecurity in stockbrokers: Effects on satisfaction and health. Journal of Managerial Psychology, 6, 10-16.

Cameron, K., Freeman, S. J., & Mishra, A. (1991). Best practices in white-collar downsizings: Managing contradictions. Academy of Management Executive, 5, 57-73.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-105.

Caplan, R. D. (1983). Person-environment fit: Past, present, and future. In C. L. Cooper (Ed.) Stress research: Where do we go from here? (pp. 35-77). London: Wiley.

Caplan, R. D., Cobb, S., French, J. R. P., Van Harrison, R., & Pinneau, S. R. (1975). Job demands and worker health. Washington D.C.: U.S. Department of Health, Education, and Welfare, National Institute for Occupational Safety and Health.

Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment. Newbury Park: Sage.

Carnevale, D. G. (1988). Organizational trust: A test of a model of its determinants. Unpublished doctoral dissertation. Florida State University.

Catalano, R., Rook, K., & Dooley, D. (1986). Labor markets and help-seeking: A test of the employment security hypothesis. Journal of Health and Social Behavior, 27, 227-287.

Caudron, S. (1996). Will the future promise job security? Personnel Journal, 75, 48.

Chant, S. N. (1932). Measuring factors that make a job interesting. Personnel Journal, 11, 1-4.

Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. Journal of Personality and Social Psychology, 37, 12-24.

Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. Journal of Personality and Social Psychology, 53, 94-103.

Cobb, S. & Kasl, S. V. (1977). Termination: The consequences of job loss. Cincinnati: U.S. National Institute for Occupational Safety and Health.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cohen, J. (1989). SETCOR: A supplementary module for SYSTAT and SYSGRAPH. Evanston, IL: SYSTAT, Inc.

Cohen, J. & Cohen, P. (1983). Applied multiple regression/correlational analysis for the behavioral sciences (2nd ed.). Hillsdale, N.J.: Lawrence Erlbaum Associates.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. Academy of Management Review, 13, 471-482.

Cook, T. D., & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues for field settings. Boston: Houghton Mifflin Company.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. Journal of Occupational Psychology, 53, 39-52.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, 297-334.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. Psychological Bulletin, 52, 281-302.

D'Aunno, T., & Sutton, R. I. (1988). Organizational structure and job characteristics under financial threat: A partial test of the threat-rigidity thesis. Paper presented at the Annual Meeting of the Academy of Management, Anaheim, CA.

Daft, R. L., & Lewin, A. Y. (1990). Can organization studies begin to break out of the normal science straitjacket: An editorial essay. Organization Science, 1, 1-9.

Davy, J. A., Kinicki, A. J., & Scheck, C. L. (1991). Developing and testing a model of survivor responses to layoffs. Journal of Vocational Behavior, 38, 302-317.

Davy, J. A., Kinicki, A. J., Scheck, C. L., & Kilroy, J. (1989). Acquisitions make employees worry. Personnel Administrator, 34, 84-90.

Deluga, R. J. (1994). Supervisor trust building, leader-member exchange and organizational citizenship behavior. Journal of Occupational and Organizational Psychology, 67, 315-326.

Dijkhuizen, N. van (1980). From stressor to strains: Research into their interrelationships. Lisse: Swets and Zeitlinger.

Dooley, D., Rook, K, & Catalano, R. (1987). Job and non-job stressors and their moderators. Journal of Occupational Psychology, 60, 115-131.

Dubin, R. (1976). Theory building in applied areas. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 17-40). Chicago: Rand McNally.

Edwards, J. R., & Cooper, C. L. (1990). The person-environment fit approach to stress: Recurring problems and some suggested solutions. Journal of Organizational Behavior, 11, 293-307.

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. Journal of Applied Psychology, 75, 51-59.

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, 500-507.

Erikson, K. T. (1985). On work and alienation. American Sociological Review, 51, 1-8.

Farh, J., Podsakoff, P. M., & Organ, D. W. (1990). Accounting for organizational citizenship behavior: Leader fairness and task scope versus satisfaction. Journal of Management, 16, 705-722.

Festinger, L. (1957). A Theory of Cognitive Dissonance. Stanford: Stanford University Press.

Fiske, D. W. (1982). Convergent-discriminant validation in measurements and research strategies. In D. Brinberg & L. H. Kidder (Eds.), Forms of validity in research (pp. 77-92). San Francisco: Jossey-Bass.

Folger, R. (1986). Rethinking equity theory. In H. W. Bierhof, R. L. Cohen, & J. Greenberg (Eds.), Justice in social relations (pp. 145-162). New York: Plenum Publishing.

Folger, R., & Greenberg, J. (1985). Procedural justice: An interpretive analysis of personnel systems. In K. Rowland & G. Ferris (Eds.), Research in personnel and human resources management (Vol. 3, pp. 141-183). Greenwich, CT: JAI Press.

Folger, R., & Konovsky, MA (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. Academy of Management Journal, 32, 115-130.

Fox, F. V., & Staw, B. M. (1979). The trapped administrator: Effects of job insecurity and policy resistance upon commitment to a course of action. Administrative Science Quarterly, 24, 449-471.

French, J. R. P., Caplan, R. D., & Harrison, R. V. (1982). The mechanisms of job stress and strain. London: Wiley.

French, J. R. P. & Kahn, R. L. (1962). A programmatic approach for studying the industrial environment and mental health. Journal of Social Issues, 18, 1-47.

French, J. R. P., Rogers W., & Cobb, S. A. (1974). A model of person-environment fit. In G. V. Coelho, D. A. Hamburgh, & J. E. Adams (Eds.) Coping and adaptation. New York: Basic Books.

Fried, Y., Tiegs, R. B., Naughton, T. J., Ashforth, B. E. (1996). Managers' reactions to a corporate acquisition: A test of an integrative model. Journal of Organizational Behavior, 17, 401-427.

Fox, A. (1974). Beyond contract: Work, power, and trust relations. London: Faber and Faber.

Gabarro, J. J., & Athos, J. (1976). Interpersonal relations and communications. New York: Prentice-Hall.

Ganster, D. C. & Schaubroeck, J. (1991). Work stress and employee health. Journal of Management, 17, 235-271.

George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. Journal of Applied Psychology, 76, 299-307.

George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. Psychological Bulletin, 112, 310-329.

George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS patients as a source of work-related distress: Effects of organizational and social support. Academy of Management Journal, 36, 157-171.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25, 161-178.

Graham, J. W. (1986). Organizational citizenship informed by political theory. Paper presented at Academy of Management meetings, Chicago, Ill.

Graham, J. W. (1991). An essay on organizational citizenship behavior. Employee Responsibilities and Rights Journal, 4, 249-270.

Greenberg, J. (1987). A taxonomy of organizational justice theories. Academy of Management Review, 12, 9-22.

Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. Journal of Management, 16, 399-432.

Greenhalgh L. (1979). Job security and the disinvolvement syndrome: A exploration of patterns of worker behavior under conditions of anticipatory grieving over job loss. Unpublished doctoral dissertation. Cornell University.

Greenhalgh, L. (1982). Maintaining organizational effectiveness during organizational retrenchment. Journal of Applied Behavioral Science, 18, 155-170.

Greenhalgh, L. (1983). Organizational decline. In S. B. Bacharach (Ed.), Research in the Sociology of Organizations (Vol. 2, pp. 231-276). Greenwich, Conn.: JAI Press.

Greenhalgh, L. (1984). Managing the job insecurity crisis. Human Resource Management, 22, 431-444.

Greenhalgh. L. (1991). Organizational coping strategies. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 172-198). London: Sage.

Greenhalgh, L. & Jick, T. D. (1979). The relationship between job insecurity and turnover, and its differential effects on employee quality level. Paper presented at the Annual Meeting of the Academy of Management, Atlanta, GA.

Greenhalgh, L. & Jick, T. D. (1989). Survivor sense making and reactions to organizational decline. Management Communication Quarterly, 2, 305-327.

Greenhalgh, L., Lawrence, A., & Sutton, R. (1988). Determinants of work force reduction strategies in declining organizations. Academy of Management Review, 13, 241-254.

Greenhalgh, L. & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. Academy of Management Review, 9, 438-448.

Greenhalgh. L. & Sutton, R. (1991). Organizational effectiveness and job insecurity. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds), Job insecurity: Coping with jobs at risk (pp. 151-171). London: Sage.

Hall, D. T., & Mansfield, R. (1971). Organizational and individual response to external stress. Administrative Science Quarterly, 16, 533-547.

Hackman, J. R. & Oldham, G. R. (1974). The job diagnostic survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects. Technical Report No. 4, Department of Administrative Sciences, Yale University, May 1974.

Hanlon, M. D. (1979). Primary groups and unemployment. Unpublished doctoral dissertation, Columbia University.

Hardin, P. (1995). Job security continues to plummet. Personnel Journal, 74, 19.

Harrison, R. V. (1985). The person-environment fit model and the study of job stress. In T. A. Beehr & R. S. Bhagat (Eds.), Human stress and cognition in organizations (pp. 23-55). New York: Wiley.

Hart, K. M. (1989). A requisite for employee trust: Leadership. Psychology, A Journal of Human Behavior, 25, 1-7.

Hartley, J. (1991). Industrial relations and job insecurity: Learning from a case study. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 123-150). London: Sage.

Heaney, C. A., Israel, B. A., & House, J. S. (1994). Chronic job insecurity among automobile workers: effects on job satisfaction and health. Social Science and Medicine, 38, 1431-1437.

Heinz, W. R. (1991). Changes in the methodology of alienation research. International Journal of Sociology and Social Policy, 11, 213-221.

Hersey, R. B. (1936). Psychology of workers. Personnel Journal, 8, 291-296.

Herzberg, F. (1966). Work and the nature of man. Cleveland: World.

Herzberg, F., Mausner, D., & Snyderman, B. B. (1959). The motivation to work. New York: Wiley.

Hintze, J. L. (1993). NCSS: Power analysis and sample size. Kaysville, UT: J. L. Hintze.

Hogan, R. (1983). A socioanalytic theory of personality. In M. Page (Ed.), Nebraska symposium on motivation. Lincoln: University of Nebraska Press.

Hogan, J., Hogan, R., & Busch, C. M. (1984). How to measure service orientation. Journal of Applied Psychology, 69, 3-11.

Holmes, J. G. (1981). The exchange process in close relationships: Microbehavior and macromotives. In M. J. Lerner & S. C. Lerner (Eds.), The justice motive in social behavior (pp. 261-284). New York: Plenum.

Homans, G. (1974). Social Behavior: Its Elementary Forms. New York: Harcourt, Brace, Jovanovich.

Hrebiniak, L. G., & Alutto, J. A. (1972). Personal and role-related factors in the development of organizational commitment. Administrative Science Quarterly, 17, 555-573.

Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. Psychological Bulletin, 97, 251-273.

Jacobson, D. (1985). Determinants of job at risk (JAR) behavior. Paper presented at the Western European Conference on the Psychology of Work and Organization, Aachen, Germany.

Jacobson, D. (1987). A personological study of the job insecurity experience. Social Behaviour, 2, 143-155.

Jacobson, D. (1991). The conceptual approach to job insecurity. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 23-39). London: Sage.

Jacobson, D. & Hartley, J. (1991). Mapping the content. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 1-22). London: Sage.

Jick, T. D. (1979). Process and impacts of a merger: Individual and organizational perspectives. Unpublished doctoral dissertation. Cornell University.

Johnson, C. D., Messe, L. A., & Crano, W. D. (1984). Predicting job performance of low income workers: The work opinion questionnaire. Personnel Psychology, 37, 291-299.

Jurgensen, C. E. (1978). Job preferences: what makes a job good or bad. Journal of Applied Psychology, 63, 267-276.

Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). Organizational stress: Studies in role conflict and ambiguity. New York: Wiley.

Kahn, R. L. & Byosiere, P. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of Industrial and Organizational Psychology (Vol. 3, pp. 571-650). Palo Alto, CA: Consulting Psychologists Press.

Kanungo, R. N. (1992). Alienation and empowerment: Some ethical imperatives in business. Journal of Business Ethics, 11, 413-422.

Karambayya, R. (1990). Contextual predictors of organizational citizenship behavior. Academy of Management Best Papers Proceedings (pp. 221-225). San Francisco, CA.

Kasl, S. V., Gore, S., & Cobb, S. (1975). The experience of losing a job: Reported changes in health, symptoms, and illness behavior. Psychosomatic Medicine, 37, 106-122.

Katz, D. (1964). The motivational basis of organizational behavior. Behavioral Science, 9, 131-133.

Katz, D. & Kahn, R. L. (1978). The social psychology of organizations. New York: Wiley.

Kerlinger, F. N. (1986). Foundations of behavioral research (3rd ed.). New York: Harcourt Brace Jovanovich.

Kerr, S. & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. Organizational Behavior and Human Performance, 22, 375-403.

Klandermans, B., Van Vuuren, T., & Jacobson, D. (1991). Employees and job insecurity. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 40-64). London: Sage.

Konovsky, M. A., & Folger, R. (1991). The effects of procedural and distributive justice on organizational citizenship behavior. Paper Presented at the Annual Meeting of the Academy of Management, Miami.

Konovsky, M.A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. Journal of Organizational Behavior, 17, 253-266.

Konovsky, M.A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. Academy of Management Journal, 37, 656-669.

Kuhnert, K. W. & Lahey, M. A. (1988). Technological innovation and its impact on employee well-being. Paper presented at the national meeting of the Operations Research Society of America, Institute for Management Science, Washington, D.C.

Kuhnert, K. W. & Palmer, D. R. (1991). Job security, health, and the intrinsic and extrinsic characteristics of work. Group and Organizational Studies, 16, 178-192.

Kuhnert, K. W., Sims, R. R., & Lahey, M. A. (1989). The relationship between job security and employee health. Group and Organization Studies, 14, 399-410.

Kuhnert, K. W. & Vance, R. J. (1992). Job insecurity and moderators of the relation between job insecurity and employee adjustment. In J. C. Quick, L. R. Murphy, & J. J. Hurrell (Eds.), Stress and well-being at work: Assessments and interventions for occupational mental health (pp. 48-63). Washington, D.C.: American Psychological Association.

LaRocco, J., House, J., & French, J. (1980). Social support, occupational stress, and health. Journal of Health and Social Behavior, 21, 202-218.

Latack, J. C. (1986). Coping with job stress: Measures and future directions for scale development. Journal of Applied Psychology, 71, 377-385.

Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.

Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

Leana, C., & Ivancevich, J. (1987). Addressing the problem of involuntary job loss: Institutional interventions and an agenda for research. Academy of Management Review, 12, 301-312.

Lee, R. T., & Ashforth, B. E. (1993). A further examination of managerial burnout: Toward an integrated model. Journal of Organizational Behavior, 14, 3-20.

Leventhal, G. S. (1980). What should be done with equity theory? In K. J. Gergen, M. S. Greenberg & R. H. Willis (Eds.), Social exchange: Advances in theory and research (pp. 27-55). New York: Plenum.

Levinson, H. (1965). Reciprocation: The relationship between man and organization. Administrative Science Quarterly, 9, 370-390.

Lim, V. K. (1996). Job insecurity and its outcomes: Moderating effects of work-based and nonwork-based social support. Human Relations, 49, 171-194.

Lind, E. A. & Tyler, T. (1988). The social psychology of procedural justice. New York: Plenum.

Madrick, J. (1995). Corporate surveys can't find a productivity revolution, either. Challenge!, 38, 31-34.

Mandel, M. J. (1996). Is all that angst misplaced? Business Week, March 11, 52-56.

March, J. G., & Simon, H. G. (1958). Organizations. New York: Wiley.

Margolis, B. L., Kroes, W. H., & Quinn, R. P. (1974). Job stress: An unlisted occupational hazard. Journal of Occupational Medicine, 16, 659-661.

Maslow, A. H. (1954). Motivation and personality. New York: Harper.

Matthews, K., Cottington, E., Talbott, E., Kuller, L., & Siegel, J. (1987). Stressful work conditions and diastolic blood pressure among blue collar factory workers. American Journal of Epidemiology, 126, 280-291.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychological Bulletin, 108, 171-194.

Mayer, R. C., Davis, J. H., Schoorman, F. D. (1995). An integrative model of organizational trust. Academy of Management Review, 20, 709-734.

Mazen, A. M., Hemmasi, M., & Lewis, M. F. (1987). Assessment of statistical power in contemporary research. Strategic Management Journal, 8, 403-410.

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. Journal of Personality and Social Psychology, 52, 81-90.

McGregor, D. (1960). The human side of enterprise. New York: McGraw-Hill.

Messick, S. (1975). The standard problem: Meaning and values in measurement and evaluation. American Psychologist, 30, 955-966.

Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. Journal of Applied Psychology, 69, 372-378.

Mills, J., & Clark, M. (1982). Exchange and communal relationships. In L. Wheeler (Ed.), Review of personality and social psychology (pp. 121-144). Beverly Hills: Sage.

Mitchell, T. R. (1985). An evaluation of the validity of correlational research conducted in organizations. Academy of Management Review, 10, 192-205.

Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? Journal of Applied Psychology, 76, 845-855.

Moorman, R. H. (1993). The influence of cognitive and affective-based job satisfaction measures on the relationship between satisfaction and organizational citizenship behavior. Human Relations, 46, 759-776.

Moorman, R. H., & Blakely, G. L. (1995). Individualism-collectivism as an individual difference predictor of organizational citizenship behavior. Journal of Organizational Behavior, 16, 127-142.

Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. Academy of Management Journal, 37, 1543-1567.

Morrow, P. (1983). Concept redundancy in organizational research: The case of work commitment. Academy of Management Review, 8, 486-500.

Motowidlo, S. J. (1984). Does job satisfaction lead to consideration and personal sensitivity? Academy of Management Journal, 27, 910-915.

Mowday, R. T., Porter, L. W. & Steers, R. M. (1982). Employee-organizational linkages. New York: Academic Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. Journal of Vocational Behavior, 14, 224-247.

Naumann, S. E., Bies, R. J., & Martin, C. L. (1995). The roles of organizational support and justice during a layoff. Academy of Management Best Papers Proceedings (pp. 89-93).

Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. Academy of Management Journal, 36, 527-556.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric Theory (3rd ed.). New York: McGraw-Hill.

O'Reilly, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. Journal of Applied Psychology, 71, 492-499.

Oldham, G. R., Kulik, C. T., Ambrose, M. L., Stepina, L. P., & Brand, J. F. (1986). Relations between job facet comparisons and employee reactions. Organizational Behavior and Human Decision Processes, 38, 28-47.

Oldham, G. R., Nottenburg, G., Kassner, M. K., Ferris, G., Fedor, D., & Masters, M. (1982). The selection and consequences of job comparisons. Organizational Behavior and Human Performance, 29, 84-111.

Organ, D. W. (1977). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis. Academy of Management Review, 2, 46-53.

Organ, D. W. (1988). Organizational citizenship: The good soldier syndrome. Lexington, MA: Lexington Books.

Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior (Vol. 12, pp. 43-72). Greenwich, CT: JAI Press.

Organ, D. W. (1994). Personality and organizational citizenship behavior. Journal of Management, 20, 465-478.

Organ, D. W., & Konovsky, M. A. (1989). Cognitive versus affective determinants of organizational citizenship behavior. Journal of Applied Psychology, 74, 157-164.

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. Personnel Psychology, 48, 775-802.

Orpen, C. (1993). Job dependence as a moderator of effects of job threat on employees' job insecurity and performance. Psychological Reports, 72, 449-450.

Orpen, C. (1994). The effects of self-esteem and personal control on the relationship between job insecurity and psychological well-being. Social Behavior and Personality, 22, 53-56.

Parks, J. M. (1992). The role of incomplete contracts and their governance in delinquency, in-role, and extra-role behaviors. Paper presented at the Society for Industrial and Organizational Psychology, Montreal, Canada.

Parks, J. M., & Kidder, D. L. (1994). Till death do us part... Changing work relationships in the 1990's. In C. L. Cooper and D. M. Rousseau (Eds.), Trends in Organizational Behavior (Vol. 1, pp. 111-136). New York: Wiley & Sons.

Pfeffer, J., & Baron, J. N. (1988). Taking the workers back out: Recent trends in the structuring of employment. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior (Vol. 10, pp. 257-303). Greenwich, CT: JAI Press.

Pierce, J. L., Gardner, D. G., Dunham, R. B., & Cummings, L. L. (1993). Moderation by organization-based self-esteem of role condition-employee response relationships. Academy of Management Journal, 36, 271-288.

Podsakoff, P. M., & MacKenzie, S. B. (1989). A second generation measure of organizational citizenship behavior. Indiana University.

Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. Journal of Management, 22, 259-298.

Podsakoff, P. M., MacKenzie, S. B., & Fetter, R. (1993). Substitutes for leadership and the management of professionals. Leadership Quarterly, 4, 1-44.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. Leadership Quarterly, 1, 107-142.

Podsakoff, P. M., Niehoff, B. P., MacKenzie, S. B., & Williams, M. L. (1993). Do substitutes for leadership really substitute for leadership? An empirical examination of Kerr and Jermier's situational leadership model. Organizational Behavior and Human Decision Processes, 54, 1-44.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of Management, 12, 531-544.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. Journal of Applied Psychology, 59, 603-609.

Puffer, S. M. (1987). Prosocial behavior, noncompliant behavior, and work performance among commission salespeople. Journal of Applied Psychology, 72, 615-621.

Raber, M. J., Hawkins, M. J., & Hawkins, W. E. (1995). Organizational and employee responses to surviving the downsizing. Employee Assistance Quarterly, 10, 1-11.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. Academy of Management Journal, 37, 137-152.

Robinson, S. L., & Morrison, E. (1995). Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. Journal of Organizational Behavior, 16, 289-298.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. Journal of Organizational Behavior, 15, 245-259.

Roethlisberger, F. G. & Dickson, W. J. (1946). Management and the worker. Cambridge: Harvard University Press.

Rosenblatt, Z. & Ruvio, A. (1996). A test of a multidimensional model of job insecurity: the case of Israeli teachers. Journal of Organizational Behavior, 17, 587-605.

Roskies, E, Liker, J. K., Roitman, D. B. (1988). Winners and losers: Employee perceptions of their company's technological transformation. Journal of Organizational Behavior, 9, 123-137.

Roskies, E. & Louis-Guerin, C. (1990). Job insecurity in managers: Antecedents and consequences. Journal of Organizational Behavior, 11, 345-359.

Roskies, E., Louis-Guerin, C., & Fournier, C. (1993). Coping with job insecurity: How does personality make a difference? Journal of Organizational Behavior, 14, 617-630.

Rousseau, D. M., (1989). Psychological and implied contracts in organizations. Employee Responsibilities and Rights Journal, 2, 121-139.

Rousseau, D. M., (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. Journal of Organizational Behavior, 11, 389-400.

Rousseau, D. M., & Parks, J. M. (1993). The contracts of individuals and organizations. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior (Vol. 15, pp. 1-43). Greenwich, CT: JAI Press.

Saal, F. E. & Knight, P. A. (1995). Industrial/Organizational Psychology (2nd ed.). Pacific Grove, CA: Brooks/Cole Publishing.

Sackett, P. R., & Larson, J. R. (1991). Research strategies and tactics in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), Handbook of Industrial and Organizational Psychology (Vol. 1, pp. 420-489). Palo Alto, CA: Consulting Psychologists Press.

Schein, E. (1980). Organizational Psychology (3rd. ed.). Englewood Cliffs: Prentice-Hall.

Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. Human Relations, 44, 735-759.

Scholl, R. W., Cooper, E. A., & McKenna, J. F. (1987). Referent selection in determining equity perceptions: Differential effects on behavioral and attitudinal outcomes. Personnel Psychology, 40, 113-124.

Schwab, D. P. (1980). Construct validity in organizational behavior. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior (Vol. 2, pp. 3-43). Greenwich, CT: JAI Press.

Schweiger, D. L., & Lee, C. (1993). Longitudinal effects of merger and behavioral interventions on job insecurity. Academy of Management Best Papers Proceedings (pp. 262-266). Atlanta, Georgia.

Seeman, M. (1959). On the meaning of alienation. American Sociological Review, 24, 783-791.

Seeman, M. (1989). Alienation motifs in contemporary theorizing: The hidden continuity of the classic themes. In D. Schweitzer & R. F. Geyer (Eds.), Alienation theories and de-alienation strategies. Northwood: Science Reviews.

Seligman, M. E. (1975). Helplessness: On depression, development, and death. San Francisco: Freeman.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. Journal of Applied Psychology, 81, 219-227.

Shore, L. M., & Tetrick, L. E. (1991). A construct validity study of the Survey of Perceived Organizational Support. Journal of Applied Psychology, 76, 637-643.

Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework in the employment relationship. In C. L. Cooper and D. M. Rousseau (Eds.), Trends in Organizational Behavior (Vol. 1, pp. 91-109). New York: Wiley.

Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. Journal of Applied Psychology, 78, 774-780.

Skarlicki, D. P., & Latham, G. P. (1995). Organizational citizenship behavior and performance in a university setting. Canadian Journal of Administrative Sciences, 12, 175-181.

Sloan, A. (1996). The hit men. Newsweek, February, 26, 44-48.

Smith, C.A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. Journal of Applied Psychology, 68, 653-663.

Spector, P. E. (1988). Development of the work locus of control scale. Journal of Occupational Psychology, 61, 335-340.

Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. Journal of Organizational Behavior, 15, 385-392.

Stassen, M. A. (1994). Coping with transition: A study of layoff survivors. Journal of Organizational Behavior, 15, 597-621.

Staw, B. M., Sandelands, L. E., & Dutton, J. E. (1981). Threat-rigidity effects in organizational behavior: A multilevel analysis. Administrative Science Quarterly, 26, 501-524.

Strange, W. (1977). Job loss: A psychological study of worker reaction to a plant closing in a company town in Southern Appalachia. Unpublished doctoral dissertation. Cornell University.

Super, D. E. (1957). The psychology of careers. New York: Harper & Brothers.

Sutton, R. I. (1983). Managing organizational death. Human Resource Management, 22, 391-412.

Sutton, R. I. (1987). The process of organizational death: Disbanding and reconnecting. Administrative Science Quarterly, 32, 542-569.

Sutton, R. I., & Kahn, R. L. (1987). Prediction, understanding, and control as antidotes to organizational stress. In J. W. Lorsch (Ed.), Handbook of organizational behavior (pp. 272-285). Englewood Cliffs: Prentice-Hall.

Tansky, J. W. (1993). Justice and organizational citizenship behavior: What is the relationship? Employee Rights and Responsibilities Journal, 6, 195-207.

Thibaut, J., & Walker, L. (1975). Procedural justice: A psychological analysis. Hillsdale, NJ: Erlbaum.

Tyler, T. R. (1988). What is procedural justice? Law and Society Review, 22, 301-335.

Tyler, T. R., & Bies, R. J. (1989). Beyond formal procedures: The interpersonal context of procedural justice. In J. Carroll (Ed.), Advances in applied social psychology: Business settings (pp. 77-98). Hillsdale: Erlbaum Associates.

U.S. Bureau of Labor Statistics (1994). Employment and Earnings (Vol. 41). Washington D.C.: U.S. Department of Labor.

Van Dyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity. In B. M. Staw and L. L. Cummings (Eds.), Research in Organizational Behavior (Vol. 17, pp. 215-285). Greenwich, CT: JAI Press.

Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. Academy of Management Journal, 37, 765-802.

Van Vuuren, T., Klandermans, B., Jacobson, D., & Hartley, J. (1991). Employees' reactions to job insecurity. In J. Hartley, D. Jacobson, B. Klandermans, & T. Van Vuuren (Eds.), Job insecurity: Coping with jobs at risk (pp. 79-103). London: Sage.

Van Yperen, N. W. (1996). Communal orientation and the burnout syndrome among nurses: A replication and extension. Journal of Applied Social Psychology, 26, 338-354.

Van Yperen, N. W., & Buunk, B. P. (1991). Equity theory and exchange orientation and communal orientation from a cross-national perspective. Journal of Social Psychology, 131, 5-20.

Van Yperen, N. W., Buunk, B. P., & Schaufeli, W. B. (1992). Communal orientation and the burnout syndrome among nurses. Journal of Applied Social Psychology, 22, 173-189.

Vance, B. V., & Kuhnert, K. W. (1988). Job insecurity and employee health. In K. W. Kuhnert (Chair), Well-being at work: Profits, programs, and prevention. Symposium conducted at the American Psychological Association Convention, Atlanta, GA.

Venkatraman, N., & Grant, J. H. (1986). Construct measurement in organizational strategy research: A critique and proposal. Academy of Management Review, 11, 71-87.

Vroom, V. H. (1964). Work and Motivation. New York: Wiley.

Warr, P. B. (1987). Work, unemployment, and mental health. Oxford: Oxford University Press.

Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. Psychological Bulletin, 96, 465-490.

Wiesenfeld, B., & Brockner, J. (1993). Procedural unfairness and the psychology of the contingent worker. Paper presented at the Academy of Management Meetings, August, 1993, Atlanta, GA.

Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. Journal of Management, 17, 601-617.