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Organizational Climate and Job Satisfaction for Employees

Who Remain After Downsizing

BY

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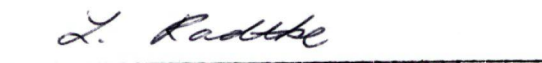
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "Organizational Climate and Job Satisfaction for Employees Who Remain After Downsizing," submitted by Michael S. Ross in partial fulfillment of the requirements for the degree of Master of Science.

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ABSTRACT

A study was conducted to examine how the process of downsizing affects those individuals who remain within the organization. Four areas of organizational behavior were examined: job satisfaction, organizational climate, organizational culture, and burnout. Participants of the study consisted of two groups of factory laborers and two group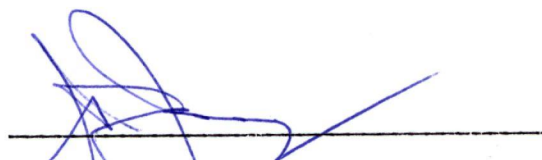s of government clerical workers. Within the factory laborer groups, one group (n=38) had been undergoing layoffs and were faced with further staff reductions. The second laborer group (n=25) served as a comparison group. Of the clerical samples, one group (n=78) had experienced a downsizing three months prior to data collection, while the other had never experienced a downsizing (n=58).

Two-way ANOVA's indicated that of the several facet satisfactions and overall satisfaction, only satisfaction with job security was influenced by the downsizing experience. Both layoff groups felt significantly less satisfied with their job security as compared to their respective control groups. Comparisons of burnout levels indicated that the layoff groups did not differ in terms of severity or assignment to an eight-phase burnout model.

Perceptions of organizational climate and culture dimensions varied considerably and consistently as a function of the downsizing experience. Much like job satisfaction and burnout, those dimensions related to job characteristics or organizational structure (e.g., standards, responsibility for work) did not appear to be affected. Climate dimensions which appeared to be sensitive to a downsizing included reward, warmth, support, and identity. Differences in perceptions of culture dimensions were found for the use of power and amount of felt shared values. These latter climate and culture dimensions appear to tap the relationship between worker and management, and worker and the overall organization.

Based on these findings, it appears that a downsizing does not influence a worker's job satisfaction or burnout levels because their job characteristics and demands are not influenced. Such an interpretation is further supported by the absence of layoff versus control group differences on certain culture and climate dimensions which reflect organizational characteristics. When climate and culture dimensions tap the relationship between workers and management, however, consistent affects were found as a function of the downsizing experience.

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I am grateful to those individuals who participated in this research project, without whose efforts would not have made this thesis possible. And finally, I extend my deepest thanks to my family for their undaunted and continual support throughout my graduate career. My dear family, I would most surely have not succeeded without you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

INTRODUCTION

The field of Industrial and Organizational (I/O)
Psychology has involved the application of psychological
principles and theory (e.g., motivation, learning),
measurement techniques (i.e., psychometrics), and
hypothesis testing (e.g., quasi-experimentation) to the
study of behavior in work-settings. Researchers have
addressed a variety of areas such as satisfaction gained
from work, personnel selection, performance measurement,
how the working environment affects individuals' behavior,
and many other topics too numerous to mention.

Several recent phenomena in North America have made
job insecurity a particularly important variable for
organizational behavior researchers. First, the general
economic downturn beginning in the mid 1970's resulted in
the highest rates of job loss since the Great Depression of
the 1930's. Second, an upsurge of mergers and acquisitions
(Luce, 1983) has often led to position redundancy, and
subsequent removal of the personnel holding those
positions. Third, the rapidly changing industrial
structure is continuing to make certain jobs obsolete
(Naisbitt, 1982). And finally, changes in specific
industries, e.g., the recent decrease in oil prices, has

1

forced a number of organizations to reduce their workforce. Any one, or combination, of such pressures have forced management to reconsider their practices and the need for their current workforce. Such trends have also given rise to an important area in need of attention by I/O researchers. Specifically, how layoffs influence those individuals who have survived the process and remain within the organization.

The present study was designed to examine how the process of downsizing, i.e., a reduction in the number of personnel within an organization, affects those individuals who survive the process. Four topics in the organizational behavior literature were selected for examination: job satisfaction, organizational climate, organizational culture, and psychological burnout. Each area will be discussed in turn, but first, the available research on downsizing will be presented.

Downsizing

Previous research into the effects of downsizing has been devoted almost exclusively to either managerial behavior (Glassberg, 1978; Whetton, 1981; Mitnick, 1978), or the effects of unemployment (e.g., Eisenberg & Lazarsfeld, 1983; Fineman, 1979; Harrison, 1976; Jahoda, 1979).

The phenomena of layoffs within an organization has been referred to as Human Resource Retrenchment (HRR), Cutback Management, or in the popular media as Downsizing. Five issues will be addressed: (1) a determination of what HRR and downsizing is; (2) an examination of the nature of job insecurity; (3) factors which may influence an organization to conduct layoffs; (4) the affects that layoffs, and hence job insecurity, have on employees; and (5) the management of layoffs. The reader should be forewarned that no empirical research could be found which has methodically assessed the effects of layoffs on personnel, rather what is available are observations based on personal experiences and/or essentially theoretical propositions.

What is Downsizing? Clear distinctions should be made between HRR, downsizing, and job insecurity, as they have been used interchangably at times. For the purposes of the present study, human resource retrenchment (HRR) refers to "any reduction of human resource management costs, including (1) staff reductions, such as layoffs, hiring restraints, selective dismissals of staff, early retirement programs, work sharing, and leaves of absence; (2) work reorganization and working condition changes in areas such as rationalization and automation, hours and location of

work, and performance standards; (3) human resource program cost reductions in such areas as training and development; and (4) compensation cost reductions in such areas as wages or salaries, benefits, merit or bonus pay, and perquisites" (Luce, 1983, p. X). Based on this view, workforce reductions (i.e., layoffs or downsizing) are but one aspect of several possible HRR tactics. Heightened job insecurity is considered here to be a result of experiencing the downsizing process. As mentioned above, the present research was designed to examine the specific HRR tactic of downsizing, and subsequent felt job insecurity, primarily through large scale layoffs and continuous layoffs.

Of the three areas, HRR, downsizing, and job in/security, the latter concept has received the most attention. Job security has been defined "to include those features of the job situation which lead to assurance for continued employment, either within the same company or within the same type of work or profession" (Herzberg, Mausner, & Snyderman, 1959, p. 41). Job insecurity, which is the focus of the present research, can thus be viewed as a "lack of assurance" for continued employment, as evidenced by the experience of ongoing and previous layoffs within the organization by which an individual is employed.

A Model of Job Insecurity. A useful model to explain individual perceptions of job insecurity was offered by Greenhalgh and Rosenblatt (1984), and is outlined in Figure 1. Their model addressed the causes, effects, and organizational consequences of perceived job insecurity. Employees have three basic sources of data upon which perceptions of job insecurity are based: (1) official organizational announcements; (2) unintended organizational clues evident to employees (e.g., budget reductions); and (3) rumors. Although these authors did not include actual layoffs, it would be safe to assume that such an occurrence would be a fourth source of insecurity. This situation leads to the experience of subjective threat, which were grouped into two basic dimensions: (1) severity of the threat; and (2) powerlessness to counteract the threat.

Within each dimension, different aspects of job insecurity sources were proposed. Within the "severity of threat" category, factors include: nature of the loss (loss of present job or of certain job features); and the sources of threat (e.g., reorganization, decline). Feelings of powerlessness can include: lack of protection, unclear expectancies, an authoritarian culture, and the standard operating procedures for employee dismissal.

Figure 1

Summary of the Causes, Nature, Effects, and

Organizational Consequences of Job Insecurity

INDIVIDUAL DIFFERENCES

-locus of control
-conservatism
-work orientation
-attribution tendencies
-need for security

INTENDED
ORGANIZATIONAL
MESSAGES

OBJECTIVE   UNINTENDED   SUBJECTIVE THREAT   REACTIONS TO
THREAT TO →   ORGANIZAITONAL →   -severity of threat →   JOB INSECURITY
INDIVIDUAL   CLUES   -powerlessness   -effort
                                                                                          -propensity to
                                                                                            leave
                                                                                          -resistance to
                                                                                            change

RUMORS   SOCIAL
                                                                             SUPPORT

DEPENDENCE

OCCUPATIONAL   ECONOMIC
MOBILITY   INSECURITY

REDUCED
ORGANIZATIONAL
EFFECTIVENESS
-productivity
-turnover
-adaptability

9

Within the model of job insecurity, individual differences are hypothesized as moderating the relationship between experienced job insecurity and individuals' reactions to it. These individual differences are: (1) locus of control, i.e., powerlessness will bother individuals whose locus of control is internal; (2) conservatism, i.e., conservative individuals are more likely to be averse to loss of continuity; (3) work orientation, i.e., job insecurity will evoke stronger reactions in individuals for whom the work situation is more important; (4) attribution tendencies, i.e., those who tend toward internal blame are more vulnerable to organizational career discontinuity; and (5) need for security. A second dimension of potential moderators are dependence on the current position, which includes consideration of: (1) individual skills which are in low demand; (2) a highly needed current income; (3) individual high fixed obligations; and (4) supplementary sources of income. Social support was also hypothesized as a moderator variable, which has been found to increase an individual's ability to cope with the stress of job insecurity (Blau, 1981; LaRocco, House, & French, 1980; Seers, McGee, Serey, & Graen, 1983). Table 1 offers a variety of dimensions, or outcomes, resulting from severity and sources of threat and powerlessness.

Table 1: Dimensions of Job Insecurity

Severity of threat	Nature of loss	Lose present job	-Indefinite job loss -Temporary job loss -Demotion
		Keep present job but lose job features	-Career progress -Income stream -Status/self-esteem -Autonomy -Resources -Community
	Sources of threat		-Decline/shrinkage -Reorganization -Technological change -Physical danger
Powerlessness			-Lack of protection -Unclear expectancies -Authoritarian environment -Dismissal SOPs

Although this model has not been tested in any way, it does provide a conceptual framework to understand that (1) there are different sources of subjective job insecurity, and (2) there are situational factors which may influence the degree of insecurity felt by an individual.

Environemtal Factors in Downsizing. In an economic climate shaped first by a downturn of unexpected severity, followed by revised expectations for little or no growth for the remainder of the 1980's, the stage was set for most companies to consider how to reduce human resource costs most effectively. Staff reductions became the focus of

retrenchment because other cost-cutting measures did not
produce sufficient savings (Luce, 1983). For most
organizations, it was no longer a question of whether they
would reduce the numbers of permanent staff, it was merely
a question of how it would be done. While some
organizations appeared to have foreseen and prepared for
the downturn, others did not. "The fact that companies
would be dumping people was not seen even six or seven
months ago [as of 1983], and as a consequence, they didn't
do anything until they were hit right between the eyes"
(Luce, 1983, p. 5).

There actually appear to have been several factors, in
addition to economic changes, which led to the need for
downsizing. One often cited factor has been a pervasive
managerial thrust toward organization growth (Lippitt &
Lippitt, 1971) and/or diversification (Luce, 1983).
"Achieving growth has been equated with success, lack of
growth with stagnation, and retrenchment with failure"
(Luce, 1983, p. 11). The lack of preparation for the
recession may have been caused by the mental set created by
this growth ideology. Some organizations went into the
1980's "fat", i.e., with too many personnel and/or too many
levels in the hierarchy. Hartman and Hill (1983) argued
that large organizations, while internally efficient, were
less able to respond to environmental change--slower to

react and less able to nurture innovation. In many instances managers quickly had to "invent" their programs, restraint policies and layoff practices because the prevailing value system had made retrenchment planning unthinkable. To illustrate, a recent survey by Training magazine (1986) indicated that of 184 organizations, only 12% actually have established policies and procedures for dealing with a forced downsizing.

Management of Downsizing. It's fairly clear that managers often respond to crises by relying on proven programs, seeking less council from subordinates, concentrating on ways to improve efficiency, and shunning innovative solutions (Bozeman & Slusher, 1980; Smart & Vertinsky, 1977). These responses appear to run counter to the prescriptions of effective organization management (Hedberg, Nystrom, & Starbuck, 1976; Peters & Waterman, 1982; Weick, 1977; Starbuck, Greve, & Hedberg, 1978); although, some have argued that maintaining such an ideal organizational profile is extremely difficult under decline induced stress (e.g., Billings, Milburn, & Schaalman, 1980).

These same response tendencies appear to be adopted when organizations are faced with the need to downsize. A common first response was often a "wait and see" attitude,

whereby management hesitated to prepare for downsizing based on (1) the hope that the situation could not get worse, and (2) the lack of ever before having to actually "reduce" their workforce (the strategy had always been grow, grow, grow). Once cutbacks were considered absolutely necessary, a common strategy was the removal of frills (e.g., curtailment of unessential programs), but for the most part permanent employees remained unaffected. As the situation worsened, this was generally followed by cuts in temporary staff and summer students. If insufficient savings resulted from these tactics, a downsizing program was implemented.

There are strategic choices that an organization must make about confronting, planning, targeting, and distributing layoffs. First, will management resist making cuts and run the risk of being forced later to take even more dramatic measures, or should cuts be made and smoothed out by limiting their impact on the organizations most important functions, procedures and long-term capacity? Second, should layoffs be on a large scale, or in small decrements? The utility of taking deep cuts initially is limited by the risk of not having needed resources to build back to capacity later. The alternative strategy is to take the cuts on a periodic basis in small decrements to minimize their impact in the hope that conditions will

improve and the cuts will stop. A third consideration is whether to "share the pain" by allocating cuts across-the-board, or target the cuts. These are some of the issues that management have had to address when downsizing was considered.

In addition to the adoption of particular layoff tactics, there are difficulties inherent in trying to change an organization. Levine (1979) offered several problems which confront management in a declining organization. The first problem is that an organization cannot be reduced piece-by-piece by simply reversing the sequence of activities and resource development through which it was built. The second problem is how to deal with key personnel who will simply leave the organization once difficulties begin. During contraction, organizations should find ways to limit free exiters, i.e., people who seek to avoid sharing the "collective bads" produced by the need to make sacrifices, by either leaving the organization or avoiding its sacrifices. Management has to design mechanisms to limit free exiters and reward valuable people for remaining in the organization through its difficult times. The third problem deals with how organizational members respond to economic decline. As mentioned above, the early stages of decline are often met with undue optimism where people are not willing to believe that a

crisis is at hand. The preferred tactical response is to delay taking action and wait for the situation to remedy itself. Such response delays could leave a threatened organization with minimal time to develop effective downsizing strategies.

A fourth problem deals with performance improvement. Under conditions of austerity, it is very difficult to find and justify funds to invest in productivity improvement, especially if these funds can only be made available by laying off personnel or failing to fill vacancies. And the final problem deals with the possible differential effects of retrenchment on performance levels of particular groups of workers. It is easier to cut inefficient and poorly managed organizations (e.g., with lots of slack and waste) than those which are efficient and well run (i.e., with little slack, highly efficient). These five management problems are likely only a part of those actually experienced by management faced with the need to downsize.

Although virtually no empirical research has examined how different downsizing strategies affect individual and organizational variables, some authors have discussed the various downsizing tactics used by management (Lippitt & Lippitt, 1982; Mitnick, 1978). Luce (1983) conducted a study to examine how large organizations have managed their cost reduction-programs, through interviews with senior

human resource and other executives from 178 organizations ranging in size from 600 to nearly 20,000 employees. The data indicated that over half of the organizations had restraints in hiring or promotions (78%), pay (70%), short-term employment (66%), or had laid employees off (57%). The remaining strategies included: reorganization (45%), restraint in training and development programs (38%), early retirement (35%), bonus pay restraints (33%), temporary operation shutdowns (32%), and work sharing (22%). Interestingly, a high percentage of employers used multiple retrenchment programs. A third of the respondents had eight or more programs; over half had six or more; and over three-quarters had four or more programs. There are a variety of reduction programs which management could employ. As to which one, or combination, of the available strategies are more effective remains to be determined. Furthermore, "effective" can mean different things. Should an "effective" downsizing result in maximal cost reductions regardless of its impact on personnel, or should employees' welfare be taken into account? While cost reductions are measured relatively easily, the effect of downsizing on personnel both immediately and in the long run may be more difficult to assess, and yet result in outcomes that affect the organization in important ways.

Some researchers have argued that there are "good" and "bad" ways of managing a downsizing (Lippitt & Lippitt, 1971; Luce, 1983). While there are only so many options available to conduct the downsizing, how the process is handled may have differential impact on those personnel who survive the process. One important area appears to be the need to communicate with organization members, and involve them in the decision-making and implementation of a downsizing program (Greenhalgh, 1982; Hall & Mansfield, 1971; Luce, 1983; Levine, 1978). By sharing the stress and responsibility for coping with the situation, personnel are likely to identify more with the organization, and support management's decisions. Lippitt and Lippitt (1984) offered more specifics with regards to this issue. They proposed that downsizing can be humanized by: (1) explaining the rationale for change, to achieve some commitment; (2) provide opportunities for participation in assessment (i.e., where we are and how things should be different); (3) allowing all who would be affected to present and discuss ways in which necessary change should be brought about; (4) clarification of the strengths, traditions, and identity of the organization which should be retained; and (5) encourage the articulation of concerns, anxieties, fears, hopes, wishes, and expectations. "In almost all cases significant involvement includes an invitation to the

participants to be influential and assurance that their input has been heard and evaluated. The consequences of neglecting such a process are disasterous in varying degrees. At best there will be only halfhearted commitment to and participation in the downsizing effort; at worst there will be neglect, irresponsibility, subversion, and alienation from the power structure" (p. 19).

One interesting area of downsizing is the role that organizational culture may play in the process of reducing the negative consequences. For instance, Luce (1983) observed that some companies deliberately develop philosophies that foster a culture which supports the organization's objectives, which in turn helped develop less devastating downsizing programs. "Employees view retrenchment as an indicator of the firm's human resource management philosophy...retrenchment practices show employees how they are valued when hard choices and deliberate distinctions have to be made. This is specifically indicated by: (1) the degree to which human resources, as opposed to other organization resources, were seen to bear the brunt of restraint; (2) the degree to which staff reductions were avoided in favour of other human resource cost-cutting measures; (3) the type of staff protected from or selected for dismissal; (4) the degree to which voluntary versus selective programs were used to

reduce staff; (5) the benefits and compensation provided to dismissed or retired employees" (p. XV).

The actions of management during the downsizing process may have not only immediate repercussions, but long term effects on the organization as a whole. The present researcher, in interviewing over 30 managers of organizations which had retrenched from one year to over three years previously, was consistently informed that "we still feel the effects". To facilitate long run organizational survival, one needs to develop in both management and employees, "...strong feelings of organizational loyalty and loyalty to clients, to provide disincentive to easy exit, and to encourage participation so that dissenting views on the location of cuts could emerge from the ranks of middle management, lower level employees, and clients " (Levine, 1978, p. 322). Again, the critical issue here appears to be one of communication and involvement.

There appears to be some agreement that the manner in which downsizing is conducted may have important implications for the future of an organization. The distinction between good versus bad downsizing may be a function of two, not entirely independent issues: (1) relative to cost reductions, management needs to consider "what" is the best tactic to adopt, and (2) relative to

personnel concerns, management needs to consider "how" they will be conducted. Both concerns appear to potentially have both short- and long-term implications.

Once a downsizing has been conducted, a critical part of an organization's assessment would be an examination of the retrenchment practices as seen by its employees (Luce, 1983). "Its culture and its values, or its human resource philosophy, must be re-examined" (p. 68). Firstly, to determine whether the organization's culture is still appropriate. And second, to determine how employees perceive the philosophy and values of management now that they have witnessed their behavior during a crisis. How the retrenchment was handled, who was removed and who were kept, all reflect management's philosophy towards their employees. The criteria for protection from or selection for dismissals or retirement reflect how employees are implicitly valued. If employees' perceptions do not accurately reflect the philosophy, then efforts should be made to change the views of employees. If the philosophy thus reflected is no longer desirable to the organization, then efforts will have to be made to change the culture.

The Effects of Downsizing. While there has not been any empirical research into the effects of downsizing per se, there are some data to suggest that job insecurity has

particular individual and organizational consequences.
Generally speaking, most outcomes of downsizing are
considered to be negative.

The reader should be warned that research into the
relationship between job insecurity and other variables are
mostly based on personal experiences, not empirical
examination. This situation warrants caution in making any
conclusions regarding downsizing outcomes. Three
exceptions to this appears to be a fairly consistent
finding of (1) an inverse relation between job security and
propensity to leave (Gow, Clark, & Dossett, 1974;
Greenhalgh, 1982; Ronana, 1967; Smith & Kerr, 1953); (2) a
positive relationship between job insecurity and resistence
to change (Fox & Straw, 1979; Rothman, Schwartzbaum, &
McGrath, 1971); and (3) a positive relation between job
insecurity and managerial conservatism (Whetton, 1981;
Smart & Vertinsky, 1977; Bozeman & Slusher, 1978). Note
that only item (1) pertains to the effects on personnel;
items (2) and (3) relate to managerial behaviors.
Furthermore, the inverse relationship between job security
and turnover would likely diminish when a particular
occupational group is being layed off industry wide.
Clearly, the impact of downsizing upon personnel has really
not been assessed.

While a downsizing will generally cause negative
reactions amongst an organization's workforce, the approach
through which management conducts the process may aggravate
or cushion such reactions. For instance, management which
handled a previous downsizing "poorly", will be faced with
having to repair the damage. Conversely, a creative
approach "...can produce such benefits as greater
motivation, less duplication of effort, reduced overhead,
discovery of underutilized resources, and elimination of
low priority (even unneeded) services and materials from
outside suppliers" (Lippitt & Lippitt, 1984, p. 10).

The closest a study has come to the empirical
assessment of downsizing was conducted by Hall and
Mansfield (1971). These researchers examined three
organization responses to decreases in available financial
resources. The researchers used their own measures to
assess: reward structure, job characteristics, need
importance, need satisfaction, job involvement, job
challenge, intrinsic motivation, and organization climate
(activity, intellectual competence, and supportiveness).
Of the three organizations, some staff were cut back by
attrition for two of them, while the other dismissed a
small number of staff. Their findings indicated that: (1)
little change occurred in perceived reward, i.e., pay and
promotions; (2) management was perceived as less supportive

and competent; (3) felt opportunities for security,
self-esteem, and self-actualization were reduced; (4) job
satisfaction was considerably reduced, although
satisfaction with autonomy and relationships did not
decrease significantly; (5) no changes in job involvement,
self-image, need importance, self-rated performance or
effort; and (6) identification with the organization
decreased. In addition, "...there seemed to be a general
increased tendency for persons to protect their own work,
to watch out for number one rather than to share resources
with other people and departments...The researchers [also]
felt far removed from the organizational decision
making...(Hall & Mansfield, 1971, p. 542). This study is
the single piece of research that is directly relevant to
the present study, in that various sources of satisfaction,
climate, and culture were assessed. Whereas Hall and
Mansfield's study primarily assessed financial cutbacks
with subjective reductions in job security as a result, the
participants in the present study experienced drastically
reduced job security through large scale layoffs.

Summary. In light of the current industrial and
economic trends occurring in North America, further
research on downsizing is a must. Given the complexities
of the business world, there may always be an organization

faced with the need to downsize, whether due to a general economic downturn, or more industry-specific occurrences such as decreased oil prices. Further research needs to examine: (1) the nature of job insecurity; (2) how different degrees of job insecurity influence individuals; (3) how such individual effects in turn influence the overall functioning of an organization; and (4) based on such findings, the development of effective and yet "humane" methods of downsizing. While there is some theory and data to assist management in deciding upon "what" strategies should be adopted, there appears to be a tremendous need for helping management decide on "how" a downsizing should be conducted. One area which may be of substantial help in this area is the concept of good versus bad organizational cultures.

Job Satisfaction

The study of job satisfaction can be traced back to the Hawthorne studies in the late 1920's (productivity relative to work environment and schedule changes) and Hoppock's research in 1935 (the examination of job satisfaction for different occupational levels). Thousands of research articles have since been published on the nature, measurement, and correlates of job satisfaction.

A review of the literature has revealed three general
orientations toward the study of job satisfaction: (1) to
develop conceptual models which explain what job
satisfaction actually represents; (2) how such feelings or
attitudes can be numerically represented and subsequently
combined and analyzed; and (3) an examination of the
relationship between satisfaction and other individual,
job, and organizational variables to determine whether
satisfaction is a determinant or consequence of these
variables. This section will address the important issues
within each category of job satisfaction research as they
pertain to the present study.

What is Job Satisfaction?. Job satisfaction has been
defined in different ways. The definition adopted for the
present research was "a pleasurable or positive emotional
state resulting from the appraisal of one's job or job
experiences" (Locke, 1976, p. 1304). Satisfaction and
dissatisfaction were thus viewed as a function of the
perceived discrepancy between what is wanted from one's job
and what one perceives it as offering or entailing (Locke,
1969).

Although there is a preponderance of job satisfaction
research, a common conceptual understanding has not been
firmly established. This situation is apparently due to

the manner in which past research has generally been conducted (Locke, 1969; Wanous & Lawler, 1972). The predominant use of correlations without explanation has hindered our ability to explain and predict behavior. A conceptual analysis should precede explanation and measurement; an approach evidently not followed in the examination of job satisfaction. This conclusion has been reached by other researchers, such as Wanous and Lawler (1972) who stated that there remains a lack of good theory about the precise meaning of job satisfaction.

Models of Job Satisfaction. Various models have been proposed to describe the nature of job satisfaction and/or the process(es) through which it is experienced; most of which were derived from the motivation literature. Job satisfaction models can be assigned to two categories: content theories, and process theories (Gibson, Ivancevich, & Donnelly, 1985). Content theories focus on "the factors within the person that energize, direct, sustain, and stop behavior" (p. 102), and thus identify specific needs that motivate people. Examples of content theories include Maslow's Need Hierarchy and Herzberg's Dual Factor theory (Herzberg, Mausner, & Snyderman, 1959). Process theories provide a "description and analysis of how behavior is energized, directed, sustained, and stopped" (Gibson et

al., 1985, p. 102). These theories focus upon how satisfaction or dissatisfaction is determined by an individual. Examples of process theories include Locke's Value theory (1969, 1975, 1976), Lawler (1973), and Hackman and Oldham's Job Characteristics model (1975, 1976, 1980).

Hackman and Oldham (1975, 1976, 1980) developed a model to explain how employees respond to the characteristics of their jobs. The Job Characteristics model in turn led to the development of the Job Diagnostic Survey (JDS). As this measure was employed in the present study, some discussion will be devoted to this model.

The job characteristics model is based on a theory of internal work motivation. The model was developed by Hackman and Oldham, who derived it from the earlier work of Turner & Lawrence (1965) and Hackman & Lawler (1971). This theory proposed that particular job characteristics influence an individual's psychological states which in turn lead to positive personal and work outcomes.

There are six components to the job characteristics model: (1) job characteristics, (2) experienced psychological states, (3) the motivating potential score, (4) individual growth need strength, (5) context satisfactions, and (6) affective outcomes. The Job Characteristics Model is presented in Table 2.

Table 2: Hackman and Oldham's Job Characteristics Model

Core Job Characteristics	Critical Psychological States	Outcomes
Skill variety		
	Experienced meaningfulness of the work	High internal work motivation
Task identity		
Task significance		
		High "growth" satisfaction
Autonomy	Experienced responsiblity for outcomes of the work	High general job satisfaction
Feedback from job	Knowledge of the actual results of the work activities	High work effectiveness
	Moderators:	
	1/ Knowledge and skill	
	2/ Growth need strength	
	3/ "Context" satisfaction	

Of the five core job characteristics, three are shown as contributing to the experienced meaningfulness of work, one contributes to experienced responsibility, and one contributes to knowledge of results. As the job characteristics are quite self-explanatory, their actual definitions will be cited only in the measurement instruments discussion of the method section.

Although there are several ways for work to be personally meaningful to an individual: skill variety, task identity, and task significance have all been shown to be quite influential (Hackman & Oldham, 1975). An employee is likely to experience the work as meaningful when a job: (1) requires a variety of skills, i.e., "skill variety"; (2) permits the worker to complete the job to a visible outcome, i.e., "task identity"; and (3) is viewed as having substantial impact on other people, i.e., "task significance". A job need not be high on all three characteristics, however, for an employee to experience the work as meaningful. Since the three characteristics contribute to overall experienced meaningfulness, one or perhaps two of these characteristics may be low.

An employee is predicted to experience personal responsibility for work outcomes if sufficient autonomy is present. As autonomy increases, individuals tend to feel more personally responsible for both work outcomes and failures. The final job characteristic, amount of feedback received from doing the work, directly affects an employee's knowledge of the outcomes of the work activities.

Since a job can be high on some characteristics while low on others, a summary index which combines all five characteristics was developed (the actual formula is given

in the method section). The Motivating Potential Score (MPS) reflects the overall potential of a job to foster internal work motivation. Hackman and Oldham stress the point that a high MPS does not cause employees to be internally motivated, but merely sets the stage for high internal work motivation.

The core job characteristics are proposed to foster three critical psychological states which are experienced by an employee: (1) experienced meaningfulness of work, (2) experienced responsibility for work outcomes, and (3) knowledge of results. The extent to which a worker experiences these three states is said to influence the internal work motivation and overall satisfaction of the employee. The more a person feels that the work is meaningful, the more responsibility that is perceived, and the better informed the person is about his/her performance level, the greater the individual's internal work motivation (and satisfaction) will be.

Included within the job characteristics model are three characteristics of employees to account for individual differences in responses to job characteristics and the critical psychological states. Specifically, the following factors have been identified as moderating conditions to high MPS jobs: (1) knowledge and skill, (2) growth need strength, and (3) "context" satisfactions.

Hackman and Oldham (1980) have proposed that an essential property of internal work motivation is that a high performance leads to positive feelings while poor performance leads to negative feelings. When a job is low in motivating potential, neither high nor low performances will have much affect upon a worker's feelings, and hence internal motivation. Under such circumstances, an employee's knowledge and skill play no role in work motivation or satisfaction. However, knowledge and skill become quite important when a job has a high MPS. A good performance will be highly reinforcing while a poor performance will lead to very unhappy feelings. Hence, with high MPS jobs, people with sufficient knowledge and skill to perform well will experience positive feelings as a result of their work activities. People who are not competent enough to perform satisfactorily will experience unhappiness and frustration at work, because they do poorly at a job that is meaningful to them.

Hackman and Oldham (1980) have stated that "the psychological needs of people are critical in determining how vigorously an individual will respond to a job high in motivating potential" (p. 85). This "Growth Need Strength" likely varies across individuals, whereby some may have strong needs for personal accomplishment while others do not. Those individuals with strong growth needs are

predicted to develop higher internal motivation, will experience the psychological states more strongly, and will respond more positively to them. Those with less strong needs for growth will have a lower internal work motivation, and will experience and respond to the psychological states less strongly.

The extent to which people are satisfied with aspects of their work context may also affect how they respond to a high MPS job. Five context satisfactions are considered: (1) job security; (2) pay and other compensation; (3) peers and co-workers, i.e., "social" satisfaction; (4) supervision; and (5) opportunity for personal growth and development on the job, i.e., "growth" satisfaction. Individuals satisfied with pay, job security, co-workers, and supervisors are expected to respond more positively to a job with a high motivating potential. If satisfied employees also have a relatively strong growth need strength, then a very high level of work motivation is expected.

Included within the job characteristics model are three additional outcomes of work activities: two personal outcomes and one organizational outcome. Personal outcomes associated with the motivating potential of jobs include "growth" satisfaction, and "general" satisfaction. General satisfaction is defined as "an overall measure of the

degree to which the employee is satisfied and happy with the job" (1975, p. 162). Hackman and Oldham (1980) have reported that with a high MPS job, employees report feelings of personal satisfaction with their opportunities for learning and growth while at work. The third additional work outcome is work effectiveness (an organizational outcome). The job characteristics model specifies that employee work effectiveness is high when jobs are high in motivating potential. Given a high MPS job, workers tend to experience positive affect when they perform well (i.e., produce high-quality work and/or a greater quantity of work).

The job characteristic model is thus complete. By improving the motivational properties of work (via appropriate levels of the five core job characteristics and hence the critical psychological states), one can usually count on increases in internal work motivation, general satisfaction, growth satisfaction, and work effectiveness.

Hackman and Oldham's job characteristics model, in terms of representing the processes by which an individual determines satisfaction or dissatisfaction, has not been tested. However, the specific core dimensions have been related to overall satisfaction (Dunham, 1976; Hackman & Oldham, 1975; Oldham, Hackman, & Pearce, 1976; Spencer & Steers, 1981), and to specific context satisfactions (Brief

& Aldag, 1975). While a variety of "conceptual isolations" of job dimensions have been conducted (e.g., Hackman & Oldham, 1975, 1980; Locke, 1976), there remains an absence of evidence to support job satisfaction models. Based on the literature available to date, job satisfaction appears to be an emotional response to the experience of person-job interactions as well as an attitude toward the work situation as determined from previous experiences.

The Measurement of Job Satisfaction. Although a considerable number of job satisfaction measurement instruments are available (at least five different overall measures and three facet measures), there does not appear to be a "best" way to measure satisfaction. A "global" (or overall) measure is composed of a given number of statements which refer to how much an individual is satisfied with his/her job. The responses to each item are summed to produce an overall estimate of an individual's degree of job satisfaction. The number of items within a measure can vary from a single statement (e.g., rate how satisfied you are with the job you currently hold, from 1=very dissatisfied to 5=very satisfied) to multiple items relating to satisfaction. Regardless of the number, a single composite score is computed and considered to reflect overall satisfaction. Brayfield and Rothe's (1951)

Job Satisfaction Blank is a measure of this type, and was employed in the present research.

A "facet" measure of job satisfaction generates a number of satisfaction estimates for different components, or facets, of a job. Facets often measured include satisfaction with supervision, co-workers, pay, and the work itself. As noted above, the JDS (based on Hackman & Oldham's model) is a facet measure of satisfaction and was also employed in the present study.

There has been a considerable amount of expressed concern over possible differential validity between single-item overall, multiple-item overall, and facet measures of job satisfaction. Overall job satisfaction has been defined as "the sum of the evaluations of the discrete elements of which the job is composed" (Locke, 1969, p. 330). The issue is essentially whether an overall measure of satisfaction taps all the individual sources of satisfaction so as to give an accurate composite score. Empirical evidence has indicated that while there are high correlations between single item overall satisfaction (e.g., Weaver, 1980) and different job facet satisfactions (e.g., Evans, 1968), facet combinations do not correlate highly with overall measures (Scarpello & Campbell, 1983; Smith, Kendall, & Hulin, 1969). This would seem to indicate that global measures include consideration of

other variables which have not been used as unique sources
of satisfaction (e.g., satisfaction with occupational
choice). Thus, the "whole" appears to be more complex than
the sum of the presently measured parts.

There is presently no solution to the issue of whether
overall and facet measures tap the same areas of job
satisfaction. Different approaches to satisfaction
measurement, as well as satisfaction with different job
facets, have been shown to have differential correlations
with various dependent variables (Wanous & Lawler, 1972).
Since some measures may be better related to certain
dependent and independent variables, it is possible to
measure satisfaction validly with different job facets, and
hence different measures. Wanous and Lawler's contention
that some measures are better suited to certain job
situations certainly warrants consideration when selecting
a measure of job satisfaction.

Directly related to sum of facet measurement is the
issue of how facet scores should be combined to give an
overall estimate. Different models of combining facets
have been proposed, such as simple summation, weighting
scores by importance to the appraisee, and treating scores
with logarithmic or exponential functions. Earlier
researchers (during the 1960's) had suggested that
weighting facet scores by importance produced more accurate

satisfaction estimates (e.g., Evans, 1969). A number of studies have assessed the results of adopting these different methods of combining facet scores, and the outcome is quite clear. Weighting facet scores by their importance to the appraisee (Blood, 1971; Ewen, 1967; Mikes & Hulin, 1968; Wanous & Lawler, 1972), or using nonlinear models (Aldag & Brief, 1978; Ferratt, 1981), produce equivalent estimates of job satisfaction. Locke (1975) has shown that to weight an individual's job satisfaction rating by importance is redundant, since importance is already reflected in these ratings. Importance was shown to not affect the satisfaction estimate, but rather the range of affect that a given value can produce (i.e., more important perception-value discrepancies lead to greater variability in affect as opposed to less important values). For the present research, both a simple summation of satisfaction scores, and several facet satisfaction scores were used to represent job satisfaction.

The Correlates of Job Satisfaction. The majority of job satisfaction research has examined the relationship between satisfaction and other variables. These studies can be grouped into several categories: those which examined the relationships between satisfaction and individual characteristics, job characteristics, and

organizational characteristics. Only certain relationships between satisfaction and individual and job characteristics will be presented. Within each category, those noteworthy variables previously examined will be presented individually.

Individual characteristics which have been related to job satisfaction, but will not be discussed here, include occupational level, sex, and race. Those relationships which may have potential relevance to the present study include job tenure, age, and job choice. To date, no relationship has been established between job tenure and satisfaction (Weaver, 1980). There is, however, consistent evidence to conclude that age is positively related to job satisfaction (Altimus & Tersine, 1973; Carrell & Elbert, 1974; Weaver, 1980).

Why an individual has chosen a particular job also appears to be related to subsequent satisfaction. O'Reilly and Caldwell (1980) examined the relationship between intrinsic and extrinsic factors in one's job choice. They concluded that if an individual perceives himself as having chosen his/her job because of external constraints (e.g., financial or labor market pressures), s/he may be less satisfied and commited to the job. Conversely, if decisions were predicated on intrinsic job features and made for internal reasons, they would be associated with

increased feelings of satisfaction and attitudinal commitment.

Relationships between job satisfaction and job characteristics of relevance to the present study are job tension, pay, and work autonomy. Satisfaction appears to be inversely related to tension experienced from the job situation (e.g., Bateman & Strausser, 1983). Bedeian and Armenakis (1981) reported that two role stressors (conflict and ambiguity of work) have negative effects on job satisfaction through the experience of job tension.

Pay has been examined in terms of its relation to overall job satisfaction and as a unique source of satisfaction, i.e., is viewed as a facet (Dyer & Theriault, 1976; Weiner, 1980). The relationship between pay and overall satisfaction has been shown to be a positive one, although literature reviews by Weaver (1977, 1980) concluded that the correlations are substantially reduced when the effects of other variables are controlled. There is a considerable amount of empirical support to conclude that satisfaction and work autonomy are positively correlated (e.g., Locke, 1975; Weaver, 1977). In fact, several measures have incorporated satisfaction with job autonomy as one of the factors used to determine sum of facet satisfaction (e.g., the Job Diagnostic Survey).

Summary. Theories of job satisfaction were
categorized as either content or process types. Although
such theories have been useful in identifying important job
facets, the processes they have proposed have little
empirical support and hence require further testing. There
appears to be a need for an integration of process with
content, akin to Hackman and Oldham's model, which first
identifies important satisfaction sources and then
describes how these are used by an individual to determine
satisfaction or dissatisfaction.

This section has also described how satisfaction is
generally measured, with specific reference to the global
versus facet issue. Although this issue has not been
clearly resolved, one can offer some useful conclusions.
Global and facet satisfaction measures seem to correlate in
some instances, and not in others. It has been suggested
that this is due to situational factors. At times, a facet
measure will tap the majority of important satisfaction
sources, and subsequently correlate highly with a global
measure. However, when facet measures are not well suited
for a given job situation, the facet-global correlation is
low. One suggestion is that unless the critical sources of
satisfaction are accurately identified, a conservative
approach would be to employ both a global and facet
measure, as was done in the present study. In this manner,

the suitability of those facets used can be assessed, and greater confidence can be placed on the findings.

Satisfaction scores have been correlated with at least eight individual, seven job, and three organizational variables. Only those relevant to the present study were addressed. In terms of individual differences, satisfaction appears to be a function of reasons for an individual's job choice. There are no established relationships between satisfaction and job tenure, sex, or level of education. Satisfaction also appears to be related to the following job characteristics: job tension, pay, and work alienation.

Likely the most critical argument about satisfaction research is the over-use of correlational techniques. To more clearly understand the various relationships between satisfaction and the numerous individual, job, and organizational characteristics, more informative experimental designs must be employed. Various quasi-experimental and longitudinal designs are essential before satisfaction researchers will fully understand the relationships between satisfaction and important organizational behaviors--particularly if causal relationships are to be discerned. The present study examined how drastically reduced job security, through

previous layoffs and ongoing layoffs, affected overall satisfaction and satisfaction with several job facets.

Organizational Climate

The study of organizational climate can be traced back to the 1930's, when Kurt Lewin attempted to link human behavior with the environment. Lewin's model was represented by the formula $B=f(P,E)$, where behavior is a function of, or is influenced significantly by, the personality or person (P) characteristics and the environment or climate (E). Over the past 50 odd years, a variety of theories have been offered to explain this link between an individual's on-the-job behavior and the work environment.

Much like the study of job satisfaction, the concept of organizational climate has received much attention and debate as to what it actually represents. The discussions which follow examine five important issues in the study of organizational climate. First, is a conceptual examination of climate so as to establish a useful, and accurate, definition. The second issue pertains to how this construct has been measured, with specific reference to the issues of unit(s) of measurement and dimensionality of climate. The third section presents a model of climate,

which is to be viewed in light of the previous discussions on measurement issues. The fourth section describes the measurement of climate, followed by some suggestions to improve future measurement. Some examples of how climate has been modified will then be presented. And finally, an examination of the relationships which have been investigated between climate and a number of organizational and individual variables, in addition to the issue of whether climate is a determinant or consequent of these variables.

What is Organizational Climate? The concept of organizational climate originated from the discovery that an organization can be a "psychologically meaningful environment for its members" (Payne & Pugh, 1976, p. 1126). Climate is generally viewed as representing the different properties of a work environment as perceived by its members (Gibson, Ivancevich, & Donnelly, 1973; Hellriegel & Slocum, 1974).

The term "organizational" implies that climate represents an overall organizational construct. Early climate studies viewed the entire organization as the natural unit of theory in organizational research (Argyris, 1958; Forehand & Gilmer, 1984; Litwin & Stringer, 1968). Several researchers have since argued that in addition to

an overall climate, there are potentially several additional and different climates within a single organization (Guion, 1973; Hellriegel & Slocum, 1974; James, 1982; James & Jones, 1974; Mossholder & Bedeian, 1983; Powell & Butterfield, 1978). A distinction was proposed between "psychological" and organizational climate as representing different units of theory (Drexler, 1977; James, 1982; James & Jones, 1974; Powell & Butterfield, 1978). Researchers concerned with individual perceptions focused on psychological climate, while organizational climate was viewed through organizational attributes. This area has been referred to as the "unit of theory" controversy.

The units of theory issue pertains to how researchers should view, and subsequently measure, the concept of climate. If in addition to an overall climate, there exist one or more subclimates, which climate should be the focus of research? This area has also been referred to as degree of perceptual agreement (Abbey & Dickson, 1983; Drexler, 1977; James, 1982; Jones & James, 1979). When perceptual agreement amongst organizational members is low, an overall organization climate may be composed of several different climates. There may be groups of members with high perceptual agreement (i.e., subclimates), but such a low perceptual agreement across the organization suggests that

there exists no organizational climate (Glick, 1985).
Furthermore, different levels of climate may have different
relationships with--and possibly different impacts
upon--other organizational and individual factors, and
hence should be operationalized independently.

Researchers are now in general agreement that there
may exist at least three levels of climate: psychological,
subunit, and organizational (Gibson, Ivancevich, &
Donnelly, 1979; Glick, 1985; Powell & Butterfield, 1978;
Payne & Pugh, 1976). Psychological climate refers to
individual perceptions, subunit reflects group perceptions
(e.g., by department), and organizational climate reflects
the overall collective climate. This contention has since
received empirical support. Researchers have found
differences in climate perceptions of employees grouped by
level in the organizational hierarchy (Friedlander &
Greenberg, 1971; Payne & Mansfield, 1973; Pheysey, Payne &
Pugh, 1971; Schneider, 1972; Gorman & Malloy, 1973; Gavin,
1975); and department/subunit (Litwin & Stringer, 1968;
Pheysey, Payne, & Pugh, 1971; Pritchard & Karasick, 1973;
Stern, 1970).

To argue that the units of analysis must remain
consistent in climate research does not imply that the
different levels are unrelated. Cross-level relationships
should also be examined between psychological, subunit, and

organizational climate (Glick & Roberts, 1984). In addition, studies should employ separate measures appropriate for each unit of theory (Glick, 1985). By aknowledging the importance of the unit of analysis in climate research, a more consistent operationalization of climate should aid in our understanding of the concept, and its relation to other important organizational behaviors.

In light of the above issues, this study adopted the following definition of climate. The concept of climate refers to the pervasive characteristics of a work environment as perceived by an organization's members. The manner by which these perceptions are combined, based on degree of perceptual agreement, reflects different levels of the construct. A single individual's perception reflects what is termed psychological climate. When perceptions are combined in some logical fashion, by workgroup, department, etc, this reflects subunit climate. When the perceptions of all personnel are combined to produce a summary description of climate, this value represents the overall organizational climate.

Dimensionality of Climate. A further concern for climate researchers has been the selection of appropriate dimensions to assess and represent climate. The multidimensional nature of climate allows it to encompass

numerous organizational or psychological dimensions (Pritchard & Karasick, 1973; Schneider & Snyder, 1975), but it also has contributed to the general fuzziness of the construct (Guion, 1973). This situation has been aggravated by the numerous climate measures which employ a variety of dimensions.

Researchers have offered at least 20 different classifications of climate factors, or dimensions, which vary in their degree of appropriateness to different organizational settings (e.g., Halpin, 1967; Schneider & Bartlett, 1968). This study has adopted the climate dimensions offered by Litwin and Stringer (1968), which taps the following areas: structure, challenge and responsibility, warmth and support, reward, tolerance for conflict, performance standards and expectations, and organizational identity.

Given the variety of climate dimensions, Glick (1985) has suggested that one should not simply adopt a commonly used instrument which may or may not tap the dimensions of interest to the researcher, but rather limit the number of dimensions to those that are likely to influence or be associated with the study's criteria of interest (akin to the personnel selection practice of using criterion referenced variables). For instance, prior to data collection, the researcher could first conduct a pilot

study whereby the relevant dimensions characterizing a given organization are identified. An appropriate measure, or combination of dimensions from different measures, would then yield data that is more meaningful to the organization and to the research as a whole. This approach has been successful in the study of safety climates (Zohar, 1980) and work on climates in banks (Schneider, Parkington, & Buxton, 1980).

A Model of Organizational Climate. The model presented below represents Litwin and Stringer's (1968) approach to understanding and subsequently measuring climate. Their measure, the Organizational Climate Questionnaire, was employed in the present study.

Litwin and Stringer (1968) used the concept of climate to demonstrate the value of understanding and explaining organizational behavior. They identified the objective organization features of management practices, decision-making processes, technology, and formal structure as influencing climate perceptions. Climate was viewed as an intervening variable, mediating between organizational system factors and motivation tendencies. The perceptions and subjective responses which comprise the organizational climate are seen as stemming from a variety of factors, as illustrated in Table 3.

As shown in Table 3, organization system features are seen as generating an organizational climate, which in turn arouses (or suppresses) particular motivational tendencies. The motivated behaviors are determinants of productivity, satisfaction, retention (or turnover), and adaptibility. Each dimension is said to influence three particular types of motivation: n-Power, n-Achievement, and n-Affiliation. For example, structure "...acts to reduce either the challenge of the job or the perceived worth of succeeding on the job. The expectations and incentives characteristic of the situation do not arouse the achievement motive" (p. 47). Structure also influences an individual's need for power. "In situations where there is a hierarchy of status and authority, and where there are cues that suggest competition for recognition and status...,n-Power will be aroused and power-related behavior will be generated" (p. 48).

Table 3

Litwin and Stringer's Motivation and Climate Model

of Organizational Behavior

Organization System	Perceived Organizational Environment	Aroused Motivation	Emergent Behavior	Consequences for Organizations
Technology		Achievement		Productivity
Organizational structure	Dimensions of organi- zational climate (or role-set expectations)	Affiliation	Activities	Satisfaction
Social Structure		Power	Interactions	Retention (turnover)
		Aggression	Sentiments	
Leadership		Fear		Innovation
Management assumptions and practices				Adaptability
		interaction		Reputation (image)
Decision-making processes				
Needs of members				
		feedback		

Each of the dimensions have been similarly proposed to affect the three motivation types. For instance, one climate dimension is the emphasis on reward versus punishment. A "...climate oriented toward giving reward, rather than dealing out punishment, is more likely to arouse expectancies of achievement and affiliation and to reduce the expectancies of fear of failure" (p. 54). Furthermore, different kinds of rewarding climates are proposed to affect different kinds of motivation. "If it is perceived that the reward system is 'objective', specific, prompt, and performance-oriented, then the achievement motive will be aroused. Rewards for excellent performance and 'fair appraisal' of all performance stimulate individuals high in n-Achievement to strive for these rewards as symbols of their success and personal achievement" (p. 54). When climates are characterized by approval, where rewards are prevalent but not specifically performance-based, the motivational implications are reversed. "The high achiever will not be interested in general approval and reward unrelated to his accomplishment. Such approval--like friendliness--should not be expected to arouse n-Achievement" (p. 55).

Another climate dimension deals with organizational identity and group loyalty. It was proposed that high group loyalty and group goals will increase group identity

and lead to improved performance, less concern about
personal rewards, more mutual trust, and less strain in
interpersonal relations (the opposite is said to occur when
group goals are de-emphasized). This type of climate also
leads to high needs for affiliation, emphasizing the need
for close, interpersonal relationships. It was also
proposed that this climate would foster high
achievement-oriented activity, and low power motivation.
The effects of each climate dimension on achievement,
affiliation, and power motivation is illustrated in Table
4. The authors noted that the model is simplified in that:
interactions of climate dimensions, the potential
interdependence of the three motivations, and the
possibility that similar behaviors can be all aroused by
any three motives, were all not addressed.

Table 4: Litwin and Stringer's Hypotheses Concerning
the Effects of Organizational Climate on
Three Motives

Proposed Dimensions	Effect on Achievement Motivation	Effect on Affiliation Motivation	Effect on Power Motivation
Structure	reduction*	reduction	arousal
Responsibility	arousal**	no effect	arousal
Warmth	no effect***	arousal	no effect
Support	arousal	arousal	no effect
Reward	arousal	arousal	no effect
Conflict	arousal	reduction	arousal
Standards	arousal	no effect	no effect
Identity	no effect	arousal	reduction
Risk	arousal	no effect	no effect

* "reduction" effects are related to "the current level of aroused motivation. If a motive is already aroused, the level of aroused motivation will be reduced or decreased. If a motive is not aroused, it will remain so" (Litwin & Stringer, 1968, p. 64).

** "arousal" refers to "an enhancement or increase in the level of aroused motivation, as measured through thematic apperceptive methods" (p. 64).

*** "no effect" means that "there is no reason to expect that aroused motivation will be affected in either direction" (p. 64).

Through the adoption of Litwin and Stringer's model, and the use of their measure, the downsizing process will be assessed as to its impact on perceptions of climate.

Climate Measurement. The intent of climate measures is to "...clearly evoke perceptual, rather than attitudinal or other types of responses; that is, they stimulate, or intend to stimulate, the responding participant to orient himself with specific facts and express his opinion as to how he perceives those facts, not whether he likes them or not" (Hellreigel & Slocum, 1974, p. 256, cited from Stimson & LaBelle, 1971). Thus, climate instruments are intended to describe work environments, not evaluate them.

As mentioned earlier, there are a variety of dimensions offered by different climate measures. Generally speaking, climate instruments can be used in any type of organization; however, it would be wise to assess the degree of appropriateness of the particular dimensions tapped by the measure considered for use. As noted above, the present study employed Litwin and Stringer's Organizational Climate Questionnaire.

Determinants of Climate. There have been at least
four sources related to the development of climate. First
is the organization's structural characteristics (Payne &
Pugh, 1976; Schneider & Reichers (1983). Second, are the
characteristics of the organization's members, which
through selection, attraction, and attrition often. result
in a homogeneous group (Schneider & Reichers, 1983).
Third, the influences of management, including leadership
styles, organizational policies, and managerial values
(Gibson et al., 1979). This particular source shares
considerable overlap with the concept of organizational
culture, and will receive more attention shortly. And
fourth, a variety of variables external to the organization
have been suggested to have possible impacts upon climate
(Gibson et al., 1979; Payne & Pugh, 1976). For instance,
many of the proposed properties or organization climate
could be influenced by the condition of the economy.
Perceptions of risk, rewards, and conflict might vary
depending on how the organization is affected by upturns
and downturns in the economy. Obviously, this is an area
directly relevant to the present study.

Organizational Climate and Job Satisfaction.
Organizational climate has been consistently found to
exhibit a direct relationship with job satisfaction

(LaFollette & Sims, 1975; Pritchard & Karasick, 1973; Schneider & Snyder, 1975; Friedlander & Margulies, 1969). This trend led Johannesson (1973) to formulate the climate/satisfaction redundancy hypothesis. He argued that since the description of one's environment or situation is directly affected by the satisfaction with that environment, climate cannot be viewed as a different construct from job satisfaction. This conclusion generated quite a landslide of refutations from a number of climate researchers.

The climate/satisfaction redundancy theory has been challenged both theoretically and empirically. On the theoretical level, climate and satisfaction are argued as being different because: (1) satisfaction focuses on the job while climate refers to broader work environment characteristics (Payne, Fineman, & Wall, 1976); (2) satisfaction concerns a person's affective response/evaluation to his job, while climate is derived from a person's description of what the organization is like (Hellreigel & Slocum 1973; Payne et al, 1976; Schneider & Snyder, 1975); and (3) high correlations between climate and satisfaction does not prove redundancy (LaFollette & Sims, 1975).

In addition to theoretical arguments, several researchers have provided empirical evidence which have

refuted the satisfaction/climate redundancy hypothesis
(LaFollette & Sims, 1975; Friedlander & Margulies, 1969;
Schneider & Snyder, 1975; Payne & Pugh, 1976). There is
sufficient theoretical argument and empirical evidence to
seriously question this hypothesis. However, further
research is warranted to confidently put this theory to
rest. Given the number of variables that appear to
moderate this relationship, correlational data seem likely
to be of little potential help for future research.
Researchers will have to employ either more experimental
and/or longitudinal research designs to clarify the
relationship between satisfaction and climate so that
causal inferences may ultimately be drawn.

Further Correlates with Organizational Climate. While
climate has been related to a variety of individual, job,
and organizational variables, few are relevant to the
present study. Those relationships which are noteworthy
include job choice and certain work-related variables.

Schneider (1972) addressed the extent to which
organizational employees enter occupational environments
which have work climates congruent with what they, as
employees, prefer and expect the climate to be. He
explored the extent to which prospective employee's
perceptions of the work climate of the organization they

will join is related to the way people already in the
organization describe it. The results indicated that
people do tend to enter organizations with climates that
are consistent with their expectations, not the perceptions
of climate by established personnel. Upon employment, new
personnel modify their preferences so that their
expectations are more congruent with the particular
organization they have joined. The only noteworthy
work-related variable is position in the organization
hierarchy, which has been found to influence climate
perceptions (e.g., Gavin, 1975).

Changing Organizational Climate. One important area
in the study of organizational climate has been the extent
to which it is amenable to modification. One of the
earliest attempts to manipulate climate was accomplished by
Litwin and Stringer (1968). They demonstrated that a given
leadership style produced a characteristic climate which,
in turn, aroused a particular motive. Several field
studies have also shown that climate can be modified
through systematic change strategies. For instance, Gordon
and Goldberg (1977) found that by making managers aware of
the climate they had created, as well as the aspects of
their own behavior that had created the climate,

significant changes (e.g., in responsibility, role clarity, team spirit) were accomplished at the work group level.

Another approach to climate modification has been the application of different organization development (OD) strategies. Golembiewski (1970) reported that an OD program reduced the difference between an individual's perceptions of current and ideal climate. In another study, T-group training helped to induce and maintain changes in the employees' perceptions of climate over a longitudinal period of 10 months (Golembiewski & Carrigan, 1970). A second application of T-group training again was found to be effectual in changing employees' climate perceptions (Golembiewski, Munzenrider, Blumberg, Carrigan, & Mead, 1971).

This line of research is an important and promising development in the study of climate. Although there is insufficient evidence to propose that climate modification will improve such variables as job satisfaction and performance, surely a close in the gap between current and ideal climate perceptions would have a positive impact on those individuals. Such research is also relevant to the present study. If there are important organizational consequences of downsizing, effective climate change strategies could be a useful tool in minimizing those negative downsizing outcomes.

Summary. The review of the literature on organizational climate suggests a variety of conclusions. To summarize, future research into climate calls for: (1) assessing perceptual agreement and thus recognizing multiple units of theory; (2) defining organizational, subunit, and psychological climates independently of one another; (3) studying the social and organizational determinants of climate over time and through direct or indirect manipulation; and (4) recognizing the diversity of climate dimensions.

It is safest--and offered far too often--to conclude that climate influences certain variables to varying degrees: these relationships being modified by a variety of individual, internal-organizational, and external environmental factors. Although climate research appears to remain in some degree of confusion, one cannot overlook the positive outcomes of climate research such as successful climate change programs. Organizational climate remains a viable approach to understanding important organizational behaviors, but there remain a number of critical issues which must be resolved.

The present study has examined how climate perceptions change as a result of a downsizing. For instance, perceptions of management support and warmth toward personnel, or the extent to which individuals identify with

their employer, may change through their experiences of witnessing their fellow co-workers eliminated from their work environment.

Organizational Culture

The term "culture", as an anthropological concept, has been applied to the study of organizations. Culture has been broadly defined as representing "all aspects of a group's social behavior, including their formal laws and technical know-how" (Gregory, 1983, p. 359). The notion that business organizations have a cultural quality has become a popular topic amongst management and corporate executives (witness the success of the book In Search of Excellence, Peters & Waterman, 1982).

Culture has been used as a basis for comparison of different organizations. Cultures are believed to underlie the characteristic behaviors that lead to successful or unsuccessful organization performance (Ouchi, 1981). This growing conviction that particular configurations of values contribute to organization success has led researchers to examine and compare various american companies according to their cultures (e.g., Baker, 1980; Deal & Kennedy, 1982; Peters & Waterman, 1982; Schwartz & Davis, 1981).

This area of research is referred to as organizational culture, or in the popular press as corporate culture. Its

major distinction from organizational climate is: (1) the anthropological orientation by which organizational culture has been theorized and researched; and (2) the focus on ideologies, values, and philosophies as underlying managerial behaviors. While culture does not address certain climate dimensions (e.g., structure), there appears to be some degree of overlap between the two concepts (e.g., risk versus innovation, identity versus shared values).

The discussions which follow examine the concept of organizational culture. The concept is quite new, as evidenced by few models to explain the phenomena, and a scarcity of empirical research. This discussion has been broken into seven areas: (1) an examination of culture as a concept; (2) a model of culture; (3) unit of theory; (4) culture determinants and consequences; (5) measurement; (6) the relationship between culture and other organizational behaviors; and (7) culture management and change strategies.

What is Organizational Culture. Although definitions of organizational culture vary to some extent, they are reasonably consistent enough to feel a degree of confidence that culture research is addressing the same issues (Business Week, 1980; Baker, 1980; Janz, 1984). The most

common aspect of culture definitions is the component of established values/philosophies/beliefs which are reflected in the behaviors of management. These established values are proposed to in turn influence the behavior of all members of the organization. Organizational culture is here defined as representing the set of values which predominate an organization as to how all members should behave. This definition can be extended to include how management treat their personnel, and how personnel treat each other.

A Model of Culture. Models designed to explain the dynamics of organizational culture are scarce. Researchers have approached the study of culture from different perspectives (primarily anthropological), and have used different sources of information. For instance, research from an anthropological orientation has examined such culture artifacts as organizational stories (Martin, Feldman, Hatch, & Sitkin, 1983), managerial ideologies (e.g., Meyer, 1981), myths, legends, and rituals (e.g., Deal & Kennedy, 1982), and the use of specialized language (Pettigrew, 1979). It has been argued that such "...cultural artifacts, and even the art of management itself, are powerful symbolic means of communication. They can be used to build organizational commitment, convey a

philosophy of management, rationalize and legitimate activity, motivate personnel, and facilitate socialization" (Smircich, 1983, p. 345). All of these artifacts are considered to firstly help shape the culture, and secondly used as indicators of the type of culture within a given organization.

The model of culture adopted for the present research was developed by Janz (1984), whereby culture is viewed as an important source of employee motivation. Through Janz's efforts to understand and explain culture, combined with his development of a validated measure, three dimensions of culture were identified. Each culture dimension represents a tool by which management motivates their personnel. The first dimension is "rules and regulations", and refers to the development and enforcement of "acceptable" and "unacceptable" behaviors. Although a traditional element of personnel management, this approach is considered to inhibit innovators in an organization by focussing on what people cannot do instead of encouraging them to expand the areas of what they can do.

The second culture dimension was called "power", whereby personnel are made to do things because an individual (e.g., a boss) exerts his/her personal power (e.g., coercion, intimidation, etc) over them. Janz has argued that while people can be made to do things by this

approach, they cannot be made to want to do these things. In addition, the application of power leaves people resentful and wanting to "get even". The third dimension was called "shared values", and reflects the establishment and common understanding amongst all organization members of what needs to be accomplished. This dimension is most consistent with the propositions of numerous researchers as to what constitutes a good culture (e.g., Harrison, 1972). The consequences of a culture represented by high shared values are proposed to increase personnel commitment, innovative behaviors, and members who want do do the things that need to be done.

Janz has argued that a "good" culture is one represented by high shared values, minimal use of any form of power, and as little emphasis as possible on adherence to rules and regulations. Support for this model is rapidly accumulating and the findings are quite encouraging. Probably one of the most powerful forms of support for this model are the feelings expressed by organization members as to what they feel constitutes an "ideal" culture to work in. Time and again, Janz (personal communication) has found that individuals consider an ideal culture as one that represents high shared values, very low power, and varying amounts of rules which appear to be in part a function of the nature of the organization. For

instance, bank tellers prefer a moderate amount of rules, whereas car salesmen prefer virtually none. Further empirical support is accumulating, such as the relation between this pattern of culture and performance indices.

Unit of Theory. As with organizational climate, there has been some concern of the possible existence of more than a single culture within an organization (Gregory, 1983). "Societies, and many organizations, can more correctly be viewed in terms of multiple, cross-cutting cultural contexts changing through time, rather than a stable, bounded, homogeneous culture" (p. 365). The term "integration" has been used to refer to the extent to which a culture in homogeneous. Cultures can be strong (e.g., homogeneous) or weak (heterogeneous). Heterogeneous cultures that deviate from management philosophy are said to lack integration (Deal & Kennedy, 1982; Peters & Waterman, 1982). This argument is the same as that in the climate literature, which was termed "unit of analysis". One cannot assume that there is a single, all-encompassing culture; nor for that matter should there necessarily be one. Culture should complement the particular functions of a work environment (Riley, 1983). Within large organizations, departments may differ dramatically in their

function, which may in turn warrant a somewhat different
culture (Wilkins & Ouchi, 1983).

Culture Determinants and Consequences. The culture of
an organization is generally considered to be a function of
management ideologies and subsequent behaviors (Harrison,
1972; Deal & Kennedy, 1982), and to some extent the
function of the organization (Barber, 1980). Some
researchers have proposed that when a culture does not
complement an organization's purpose, the effectiveness of
the organization is adversely affected. Baker (1980)
reported that diversification failures are sometimes due to
management's failure to change their culture when entering
a market that fosters a culture that differs from their
current one. For example, one company with fairly mature
product lines tried to enter a new market that was loosely
related to its current market. Management, however, did
not realize that a different culture was needed. The
resulting culture mismatch with the parent organization
eventually killed the new business. Company aquisitions
also create culture problems. For instance, mergers have
sometimes resulted in a clash from two very different
organizational cultures. "Some observers feel that one
major reason the [U.S.] federal Department of Energy got
off to such a difficult start is because it was created by

merging a number of different groups from different parts
of the government. The resultant culture clash, they say,
virtually immobilized the new agency" (Baker, 1980, p. 10).

In addition to mismatching cultures, there is an
obvious concern for what constitutes good versus bad
cultures, and their subsequent impact on the organization
and its members. Baker (1980) observed the following
commonalities across organizations that represented a poor
culture: more and more formal rules and procedures;
increased job specialization and employee isolation from
each other, from top management, and from key decisions
affecting their work; perceptions of employees that
management does not care or value their ideas. This leads
to decreased communication among employees, declined
performance expectations, and a tendency to blame others
when something goes wrong. Employees may begin to identify
more with their immediate department or work groups, and
less with other groups and the organization overall.

On the positive side, "good" cultures have been
reported to have major impacts on individual behaviors and
organizational effectiveness (Baker, 1980; Peters &
Waterman, 1982). "Good cultures are characterized by norms
and values supportive of excellence, team-work,
profitability, honesty, a customer service innovation,
pride in one's work, and commitment to the organization.

Most of all, they are supportive of adaptability--the capacity to thrive over the long run despite new competition, new regulations, new technological developments, and the strains of growth" (Baker, 1980, p. 10). Culture, conceived as shared key values and beliefs, has been proposed to fulfill several important functions. First, it conveys a sense of identity for organizational members (Deal & Kennedy, 1982; Peters & Waterman, 1982). Second, it facilitates the generation of commitment to something larger than the self (Peters & Waterman, 1982). Third, culture enhances social system stability (Smircich, 1983). And fourth, culture serves as a sense-making device that can guide and shape behavior (Meyer, 1981). Such a view suggests that culture can be a powerful tool to influence personnel behavior and ultimately direct the course of an organization. "The belief is that firms that have internal cultures supportive of their strategies are more likely to be successful...symbolic devices can be used to mobilize and channel the energies of organization members" (Smircich, 1983, p. 346).

Although there does not appear to be any empirical examinations of the impact of culture on organization effectiveness, there are a number of widely cited case studies. For example, some corporations have especially

distinctive cultures which they actively cultivate and manage, and that contribute significantly to their success. "IBM's top management created a culture characterized by such shared beliefs as: (1) all employees should be respected and treated with dignity, (2) the company should aim to accomplish every task in a superior way, and (3) the customer should be given the best service possible. IBM management has said on many occasions that this culture is largely responsible for its enormous success in the past 30 years" (Baker, 1980, p. 8). Further examples abound, such as the successes of IT&T, 3M, and the Digital Equipment Corporation. More empirical research is needed to establish the determinants and consequences of "good" and "bad" cultures. While case studies have indicated that a good culture has a positive impact on organizational effectiveness, further empirical research is obviously warranted (the research of Janz is most promising).

Measurement of Culture. Originally, organizational culture was assessed through the collection of stories, special languages used, myths, etc. This is an extension of the anthropological approach of residing in a culture for a period of time and taking observations which are intended to ultimately reflect the culture. "This understanding must therefore be learned slowly, carefully,

and strategically, through intimate contact, by outsiders who try to take the point of view of insiders" (Wilkins & Ouchi, 1983, p. 469). This is a slow process, with no support as to its psychometric properties.

This author could find but one validated culture measure in the literature, and was subsequently adopted for the present study. Janz (1984) developed a measure of organizational culture based on the eight prescriptions offered by Peters and Waterman (1982). Three dimensions of culture were found to answer the question: "How do we motivate our people to do what needs to be done?" The three factors were: (1) rules and regulations; (2) power; and (3) shared values. Aside from the fact that the three factors of the CCS were derived via factor analytic techniques, there is also some consistency with the models of other researchers (e.g., Harrison, 1972), and those important culture factors identified from case studies (i.e., the frequent reference to common values/philosophies/beliefs which exemplify successful corporations).

Relationships Between Culture and Other Variables. Aside from the case studies of successful corporations such as Apple, IBM, etc, there is practically no empirical data to support the relationship between culture and individual,

job-related, or organizational variables. The evidence
available suggests that cultures which encourage individual
initiative and are consistent and clearly understood,
fosters innovation, collaboration, and teamwork (Kanter,
1982). Further research is warranted to examine the
relationship between culture and individual (e.g., job
satisfaction, burnout), job-related (e.g., individual
performance), and organizational characteristics (e.g.,
overall organizational effectiveness, absenteeism,
turnover).

Managing and Changing Culture. Given such important
proposed climate outcomes as increased organizational
commitment, innovative behaviors and decision-making, and
ultimately increased organizational effectiveness, the
modification of culture is an attractive area of
investigation.

Effective management of culture has been described as
involving an awareness of the current culture, its relation
to the organization's needs, ongoing readings of culture,
and when necessary, the use of a variety of strategies to
close the gaps between what is needed and what currently
exists (Baker, 1980; Janz, personal communication). This
latter approach of "closing gaps" between current culture
and desired culture has been the focus of culture change

strategy of Janz (personal communication). The
modification of culture involves six steps: (1) identify,
in terms of norms and values, the kind of culture that is
needed or appropriate; (2) measure the existing culture on
these same dimensions; (3) identify any gaps between the
current culture and what is needed or desired, and rank
these gaps in order of importance; (4) decide how to close
the gaps, via both direct and indirect strategies; (5)
implement the choices, through role modelling, positive
reinforcement, communication, and problem-solving; and (6)
periodically repeat the whole process. A young
organization will likely be easiest to modify, while a
large, older organization with set behavior patterns will
offer more of a challenge. From this author's experiences
in working with Janz, the critical factors in whether or
not an organization will regard culture as important, and
hence attempt improvement, are: (1) top management's
pervasive ideology about human behavior; (2) a willingness
to try new things without feeling threatened; and (3) a
belief that an organization's human resources are their
most powerful commodity.

Summary. It is difficult to offer any firm
conclusions regarding the study of organizational culture.
On the one hand, the lack of empirical evidence supporting

the relationship between culture and virtually any variable certainly warrants some degree of tentativeness. On the other, case studies and the accumulating evidence of Janz offer much promise as to culture being a potentially powerful management tool. As opposed to most I/O topics, culture was essentially born within the business world, not that of the academic (although culture and climate share much in common). This suggests that culture may fill a void which management has felt needed attention for some time. Also, culture modification systems are rapidly being applied to organizations across North America. The development of at least one validated measure of culture is promising, as well as its application to modifying culture and relating culture to other important organizational behaviors.

Regardless of the potential usefulness of organizational culture, there remains several areas which require further attention: (1) a consistent application of validated culture measures; (2) a determination of what influences culture; (3) how culture in turn affects other important individual behavior and organizational phenomena; and (4) how culture can be effectively modified to ultimately enhance employee well-being and orgnizational effectiveness. Relative to item (2), the present study will examine how the experience of downsizing influences

employee's perceptions of culture. Culture is anticipated to be a particularly sensitive index of the affects of downsizing, because it focuses heavily on how personnel perceive themselves as being treated through the values and ideologies of management. As mentioned in the discussion on downsizing, the conduct of layoffs should be a strong behavioral indicator of the extent to which management values their personnel.

Psychological Burnout

The concept of psychological burnout was first discussed in the human service context by Herbert Freudenberger (1974, 1975); although, Golembiewski (1982) noted that various aspects of the burnout phenomenon—then referred to as "flame out"—were common subjects at OD conferences in the late 1960's. The term "burnout" appears to have been originally used in the 1960's as a colloquialism of the effects of chronic drug abuse, and later to characterize the psychological state of certain volunteers who worked with addicts at alternative health care agencies (e.g., free clinics).

Today, despite its relatively brief history, the burnout literature is rapidly becoming extensive both in numbers of publications and in applications to different occupations and work settings (Silverstein, 1982). Entire

books have been devoted to the subject, in addition to well over 400 published articles (Kilpatrick, personal communication). Burnout is now recognized as an important occupational hazard, with potential consequences of "...major personal, organizational, and social costs--and these costs are probably increasing" (Paine, 1982, p. 11).

The discussions which follow will address six issues which have been raised in the burnout literature: (1) the concept of burnout; (2) a model of burnout intended to explain the dynamics of this phenomenon; (3) burnout measurement; (4) the determinants and consequences of burnout; and (5) important correlates of burnout.

What is Burnout? The concept of burnout will be examined in relation to three issues: types of research, construct validity, and development of specific definitions. A useful starting point will be to present the research methodology of burnout, as it had substantial impact on the present state of our understanding of the concept.

The majority of burnout research up to 1981 was of a descriptive nature, mostly conducted using samples of "helping professionals" (e.g., health and social service workers), and with little examination of the underlying dimensions of burnout (Pearlman & Hartman, 1982). Although

the situation has changed somewhat (i.e., the focus is now on more empirical research), this trend has resulted in a multitude of proposed causes, symptoms, and definitions of burnout. This diversity has contributed to confusion about the construct validity of burnout, and in particular, its distinction from other, related constructs (Finklin, 1983). Two important distinctions are between burnout and depression, and burnout and stress.

Some researchers have argued that a distinction has not been clearly established between the concept of burnout and that of depression. Depression has been proposed to be a symptom of burnout (Freudenberger, 1974), or the final state of burnout (Weiskopf, 1980). However, descriptions of burnout symptoms, such as sleeplessness, fatigue, and withdrawal from other people, appear very similar to symptoms of depression. These similarities have instigated some question as to whether the term "burnout" is simply another name for an old idea. To support this contention, high correlations (e.g., r=.57) have been found between measures of burnout and depression (Meier, 1984).

One alternative explanation for this apparent substantial relationship between burnout and depression is that they may be represented by different patterns and sequences that occur during development, and have different etiologies (Meier, 1984). The present author could find no

further arguments--empirical or theoretical--for or against
this issue of burnout/depression redundancy; therefore, the
issue appears to have been left unresolved.

Another concern with the construct validity of burnout
has been its relationship to stress. Burnout is more often
the result not of stress per se, but of unmediated
stress--of being stressed and having no "out", no buffers,
no support system (Farber, 1983). Stress can have both
positive and negative effects; and occurs when there is a
substantial imbalance (perceived or real) between
environmental demands and the response capability of the
individual. As the environmental demands increase or the
response capability of the individual decreases, the
likelihood of stress becoming a negative experience--and
ultimately effecting a burned-out state--becomes more
probable. "In short, burnout can be regarded as the final
step in a progression of unsuccessful attempts to cope with
a variety of negative stress conditions" (Farber, 1983,
p. 15). This position, of burnout being a function of
stress which an individual cannot effectively cope with,
appears to have been accepted in the burnout literature
(Meier, 1984; Pearlman & Hartman, 1982), and was adopted
for the present study.

By far the most confusing aspect of the burnout
literature is a preponderance of different definitions.

There does not appear to be a single definition that is accepted as standard (e.g., Maslach, 1982; Maslach & Jackson, 1981; Meier, 1983; Pearlman & Hartman, 1982). These many definitions are likely a function of the descriptive approaches used to document burnout in the past; the orientation of the particular researcher (e.g., Freudenberger is a psychoanalyst; Maslach is a social psychologist); the burnout population and work environment under scrutiny (i.e., helping professionals versus other occupations); and when used, the type of burnout measure. To date, the three underlying dimensions offered by Maslach (1982) appear to be the most popular in the literature. Burnout is represented by three components: (1) psychological and emotional exhaustion; (2) depersonalization, or a negative shift in terms of how individuals respond to others; and (3) a negative response to individual self and personal accomplishments. This definition of burnout was adopted for the present research.

A Model of Burnout. Researchers have offered a variety of paradigms to explore the process of burnout. These models of burnout can be loosely placed into three categories in terms of what is the focus of attention (there is a substantial degree of overlap, hence the use of "loosely"). These categories have been termed the: (1)

clinical; (2) training; and (3) environmental approachs.
The clinical approach views burnout from the individual's
perspective, focussing on the personal needs and
frustrations of the worker (e.g., Freudenberg, 1974, 1975).
The training approach views burnout as resulting from an
individual's inadequate skills to cope with the everyday
pressures and experiences of work (e.g., Shinn, 1982). The
environmental approach recognizes a variety of influences
such as job, organizational, and societal characteristics
in relation to individual characteristics as they relate to
burnout (e.g., Pearlman & Hartman, 1982).

Maslach (1976) has developed a model of burnout based
primarily on the clinical approach. This model is
presented here because it was adopted for the present
research. Three central factors have been proposed to
explain the burnout syndrome: emotional exhaustion,
depersonalization, and personal accomplishment. Again
within the context of "people-work", it is proposed that as
"workers emotional resources are depleted, workers feel
they are no longer able to give of themselves at a
psychological level. Another aspect is the development of
negative, cynical attitudes and feelings about ones'
clients. Such negative reactions may be linked to the
experience of emotional exhaustion,...This callous or even
dehumanized perception of others can lead staff to view

their clients as somehow deserving of their troubles

[depersonalization]...A third aspect of the burnout

syndrome is the tendency to evaluate oneself negatively,

particularly with regard to one's work with clients.

Workers feel unhappy about themselves and dissatisfied with

their accomplishments on the job [a negative view of

personal accomplishment]" (p. 99). Maslach has examined

not only helpers' reactions to their work but also a

variety of situational factors that contribute to these

reactions (hence, the model is also of the environmental

type).

Golembiewski (1982) has extended Maslach and Jackson's

(1981) model of burnout to depict the process as involving

eight phases or stages. This modification is noteworthy

for two reasons: (1) the phase model was employed in the

present study; and (2) it has been empirically assessed,

contrary to most models of burnout. He has also extended

the model to settings other than the people helping context

(using Maslach's measure, the MBI). Burnout was depicted

as being comprised of the same three dimensions as those

offered by Maslach: (1) depersonalization; (2) personal

accomplishment; and (3) emotional exhaustion. By

dichotomizing around the mean for each dimension--an

individual can be either high or low on each--eight phases

of burnout have been distinguished. Golembiewski and

Munzenrider (1984) has since been using norms developed
from a large population for the high versus low
distinctions. Depersonalization is assumed to represent
the early signs of burnout, followed by low personal
accomplishment and ending with emotional exhaustion which
characterizes advanced cases of burnout. The phase model
is depicted in Table 5.

Table 5: Golembiewski's Eight Phase Model of Burnout

Burnout Dimensions	Phases							
	I	II	III	IV	V	VI	VII	VIII
Depersonalization	Lo	Hi	Lo	Hi	Lo	Hi	Lo	Hi
Personal Accomplishment (a reversed scale)	Lo	Lo	Hi	Hi	Lo	Lo	Hi	Hi
Emotional exhaustion	Lo	Lo	Lo	Lo	Hi	Hi	Hi	Hi

Empirical support is accumulating for the eight-phase
model (and a modified four-phase version) of burnout.
Golembiewski and Munzenrider (1983) examined the
relationship between their burnout phases and various
facets of work via the JDS and the JDI. Overall, 18 of the
20 variables examined were siginificantly different (p<.05)
across the eight phases. Furthermore, the greater the
conceptual distance was between any two phases, the more

likely were the paired-comparisons of differences on the target variables to achieve statistical significance (these differences were in the expected direction in every case). Paired comparisons of all variable combinations (20 target variables by 28 comparisons, hence 560 cases) revealed that 80 (14.3%) achieved significance at the .05 level; a relatively low percentage. The authors found that the Depersonalization dimension accounted for very little variance (4%) of burnout, and so eliminated it from further analysis. With the modified burnout phases, using only personal accomplishment and emotional exhaustion (Hi or Lo on each, therefore four phases), they found 53 of the possible 108 paired-comparisons significant at the .05 level and in the predicted direction (50% of the cases as opposed to the earlier 14%). This modification of Maslach's model has at least two important implications regarding burnout as a concept: (1) it reinforces the notion of burnout being a process, involving stages; and (2) it substantiates Maslach's earlier identification of the three underlying components of burnout (although depersonalization appears to be a somewhat unpredictable component).

Aside from the accumulating evidence of Maslach and Jackson's modifications by Golembiewski, there appears to be no empirical evidence which gives clear support for any

given model of burnout. There is evidence accumulating to support the roles of individual, organizational, and environmental variables in burnout development (Pearlman & Hartman, 1982). This shift from simple to complex models, e.g., the integration of the three broad categories of variables, is a significant change in burnout research. It is also problematic, in that such complex models are more difficult to empirically assess. Either way, burnout appears to be an ongoing process, that is multidimensional, and appears to involve a developmental sequence of phases or stages.

Measurement of Burnout. The measurement of burnout began with informal observations of Freudenberger (1974, 1975) and Maslach (1976), whereby data were initially collected unsystematically through observations of a variety of workers. Eventually, systematic descriptions were used via interviews and questionnaires, and there now appears to be a trend toward the adoption of better validated measurement instruments. There are at least five burnout measures available, each offering different dimensions and varying degrees of appropriateness to particular work settings.

The measure employed in the present research was developed by Maslach and Jackson (1981), and is called

Maslach's Burnout Inventory (MBI). The MBI is based on Maslach's model; hence, three dimensions/outcomes of burnout are assessed: (1) emotional exhaustion; (2) depersonalization; and (3) personal accomplishment (a fourth dimension, personal involvement, was originally proposed but factor analysis results did not support its inclusion in the measure). In addition, an overall burnout score is produced (more specifics of the scale can be found in the method section). A review of the burnout literature makes it fairly clear that the MBI is the most commonly used measure in burnout research. Although orginally developed for the "people-helping" work settings, Golembiewski and his associates have shown that it is sufficiently valid to be appropriate to other work settings. Relative to the amount of support for the various burnout measures, the MBI is clearly the leader in terms of validation.

Overall, the measurement of burnout is becoming more systematic and consistent across settings. Instruments have also been better validated (e.g., the MBI), and as will be shown shortly, have fairly strong relationships with other variables, such as job satisfaction, physiological indices, and the like.

Determinants of Burnout. There are different theories or notions about what produces burnout and what results from it. Since most of these theories have not undergone rigorous empirical tests, it is impossible to say what are the "true" causes and effects of burnout (Maslach, 1982). Most discussions of burnout emphasize contact with people and the factors that make contact particularly difficult or emotionally stressful (not surprising given that the bulk of the burnout literature to date dealt with the helping professions). In addition to considering interpersonal relationships, causal analyses have focused on job stressors and other organizational characteristics.

Determinants of burnout can be grouped into three categories: (1) personal characteristics, e.g., personality and coping skills, (2) organizational characteristics, e.g., workload, and (3) environmental characteristics, e.g., societal and economic. Organizational characteristics which have been linked with burnout include: repetitive work activities, inconsistent rules and policies, minimal receptivity for sharing of worker grievances, lack of support groups (Pfiffering & Eckel, 1982), and minimal feedback of employee performance (e.g., Jackson & Schuler, 1983).

Environmental characteristics which have been proposed to affect burnout include familial, economic factors,

85

effects of increasing number of professions, and societal stress (Cherniss, 1982). It should be noted that in most instances, burnout determinants have been proposed either as theory, or based on individual experiences. There is very little data which can substantiate a causal relationship between these variables and burnout.

Burnout Consequences. Much like the examination of burnout determinants, there are many proposed consequences of burnout. A useful approach was adopted by Carrol and White (1982), who offered the following classification system of burnout indicators: physical, behavioral, and organizational.

Typical behavioral signs of burnout within the work environment include: important organizational decisions are more frequently decided by an increasingly isolated, elitist group which, less and less, seeks meaningful input from lower-level staff; communications with the system are poor; the development of withdrawal behaviors, e.g., leave work early, take long breaks, and stay away from the workplace as much as possible; increased interpersonal conflicts; management spending more and more time away from the organization and otherwise reducing the amount of time spent in direct contact with line staff; higher staff turnover and a decrease in average length of stay on the

job; and fewer staff leaving the organization amicably due to an increase in firings and/or forced resignations (Carroll & White, 1982; Jackson & Schuler, 1983).

An important concern when dealing with burnout is the extent to which physical symptoms arise as a result of the experience. Several researchers have cited numerous physical symptoms based on case studies and personal experiences (e.g., Freudenberger, 1974). More empirical examinations (e.g., Golembiewski, Munzenrider, and Stevensonn, 1984) have since confirmed that burnout has indeed numerous physical symptoms.

Researchers have offered a variety of individual, physical, and organizational consequences of burnout. The difficulty with this area is again the lack of empirical support. Because individual observations are relative to type of occupation, individual, and organizational factors, we do not know how generalizable these observations are. Further research is necessary before any causal inferences can be made with some degree of confidence.

Correlates of Burnout. This section has been kept separate from burnout determinants and consequences because the relationships to be discussed are based on empirical data. Much like the study of job satisfaction and organizational climate, burnout levels have been examined

in relation to a variety of individual, job, organizational, and environmental factors. Unlike satisfaction and climate, the correlates of burnout have been under investigation for a relatively brief period. Given the limited amount of research, most of the relationships to be discussed must be considered tentative until further data have been accumulated.

Burnout has been related to at least five individual characteristics; of possible relevance to the present research are sex and life changes. Relative to sex differences in burnout, there is little data and what is available is conflicting (e.g., Justice, Gold, and Klein, 1981; Maslach & Jackson, 1981; Pines, 1983). Changes that occur in one's life both on and off the job have been suggested to make individuals more susceptible to burnout (Farber, 1983). Naturally, life changes can be viewed by an individual as anything from positive to negative. Justice, Gold, and Klein (1981) reported that negative life events seem to hasten the burnout process, or make its impact more severe, while positive events (e.g., promotion, pay raises, positive changes in the work environment) may mediate the influence of these factors and reduce both the likelihood and severity of burnout. Problems with these apparent relationships between burnout and personal characteristics are the (1) inconsistency of the

relationship, and (2) the often low magnitude of the correlations (Golembiewski, personal communication).

Burnout has been consistently found to be inversely related to overall job satisfaction, as well as satisfaction with different job facets. As well, the amount of a given job characteristic (e.g., amount of autonomy on the job) has also been related to burnout. Specifically, jobs high on feedback, task significance, and personal accomplishment have been shown to be negatively related to burnout (Maslach & Jackson, 1981). Job tension has also been shown to be positively related to burnout (Brookings, Bolton, Brown, & McEnvoy, 1985; Golembiewski, Munzenrider, & Carter, 1983)). In addition, the organizational climate dimension of support has been found to have a significant negative relationship with burnout. Generally speaking, there appear to be positive and negative work features (Pines, 1982). Autonomy, work significance, and support are all positive, whereas overlaod, red tape, and paperwork are all negative.

Interestingly, with all the proposed consequences and correlates of burnout, there is a distinct lack of data on the relationship between burnout and important organizational characteristics such as absenteeism, turnover, performance, and structure. What data is available is presented below.

Several researchers have suggested that burnout may lead to turnover among human service workers (Freudenberger, 1975; Maslach, 1976, 1978; Pearlman & Hartman, 1982; Pines, Aronson, & Kafry, 1981), and a few studies have reported empirical relationships between various measures of burnout and intentions to leave one's job (Maslach & Jackson, 1981; Pines, 1982).

Work environments appear to be an important element in burnout. Given that organizations are not necessarily the same in terms of types of personnel, jobs, and organizational structure, burnout researchers should attempt to monitor these factors in relation to burnout data. Even very similar organizations may have significantly different levels of burnout (Pines, 1982).

Summary. Much like organizational culture, the concept of psychological burnout has rapidly become a popular topic. Although the bulk of the burnout research has been devoted to the people-helping professions, the concept has recently been extended to other occupations. Burnout was viewed here as being a function primarily of work-related stress, comprising three dimensions: emotional exhaustion, depersonalization, and a negative regard for self and personal accomplishments.

Several issues remain in the investigation of burnout. First, relative to the burnout construct, there is some question as to the discriminant validity between burnout and depression. Second, the methodology of burnout research, although improved over the past, can be further refined using interviews, validated measures, and more informative experimental designs. Third, further research should try to identify important burnout determinants and consequences. And finally, factors which have been related to burnout include personal characteristics (e.g., age, sex), organizational characteristics (e.g., structure), and work-related factors such as job characteristics and satisfaction. Although in some instances the relationships have been moderate and stable (e.g., with job satisfaction and a number of facets), there are many instances where the relationships remain tenuous at best (e.g., demographics).

Overall, there appears to remain much to be accomplished in the area of burnout research. The incidence of burnout cases, particularly in the helping professions, certainly justifies further research. The trends toward more comprehensive models, empirical studies, and more focus on prevention and treatment also seems most promising. Further empirical research should enlighten us as to the usefulness of burnout as a concept.

It is extremely difficult to try to predict how downsizing will influence burnout levels. A simplistic prediction would be that burnout would increase due to the experience of seeing one's fellow workers layed off. The problem with such a prediction stems from the dimensions of burnout, i.e., depersonalization, emotional exhaustion, and personal accomplishment. These dimensions remain highly related to "helping professions", and while Golembiewski has found them to relate to other occupational types, how they will be influenced in the present study's circumstances was difficult to envision.

The four areas under investigation have thus been addressed. The various components of job satisfaction, organizational climate and culture, and psychological burnout, will now be examined in terms of how the process of downsizing possibly affects each area.

METHOD

Subjects

Data were collected from four separate groups of individuals employed by different organizations. Due to numerous difficulties in obtaining the participation of groups of workers, the period of data collection was extended over a period of 19 months. Each sample group will be discussed in turn.

Clerical Layoff Group. This sample consisted of 78 government clerical workers belonging to the same provincial union. This group experienced layoffs three months prior to the distribution of the questionnaire packages. The layoffs were conducted via job abolishment, whereby particular jobs were eliminated from the organization, and hence the individuals who held those positions. Those who found their position abolished were given the option of bidding for some available positions in open competitions (i.e., these positions were available to both the layed off employees as well as the public), or they could have pursued employment elsewhere. A total of 80 permanent and 40 temporary full-time positions were eliminated during this process of job abolishment.

Participation of the workers was achieved through their union representative. This representative informed all interested workers that the research was examining organizational behavior. All completed questionnaires were returned to the union representative, who in turn forwarded them to the researcher. Approximately four weeks transpired between questionnaire package distribution and their collection, resulting in a 78% return rate.

Clerical Control Group. A group of 56 government clerical workers, members of the same union as those of the layoff group, were recruited to serve as a comparison group to the clerical layoff group. All members had not experienced layoffs in the previous two years, and no layoffs were anticipated. Subjects were obtained through presentations to two shop steward meetings, at which time the questionnaire packages were given to all interested people. Roughly eight weeks later, no further completed questionnaires had been returned, resulting in a response rate of 28%.

Labor Layoff Group. A group of 46 factory laborers, employed by a private organization, provided data during ongoing layoffs. The questionnaire package was administered at a point in time where approximately 40% of this work-group (n=48) had been eliminated. The union

local president--who happened to be a member of this work group--distributed and collected the questionnaires. The data collection took approximately three weeks, with a corresponding response rate of 64%.

Labor Control Group. The questionnaire packages were distributed to a group of factory workers employed by an organization in the private business sector. An initial response rate of 36% (18 out of 50) prompted a second administration to a different group of employees. The second return rate was 17.5% (7 out of 40), resulting in a sample size of 25 from a total of 72 employees. This group had not experienced layoffs in over 3 years and anticipated none in the future.

Measurement Instruments

The questionnaire package contained six separate measures: a demographic questionnaire, two measures of job satisfaction, one measure of psychological burnout, one measure of organizational climate, and one measure of organizational culture. A description of each measure follows.

Demographic Questionnaire. The demographic questionnaire tapped 14 different types of information about each participant. The purpose of these items was to

tap as many potential variables that may have influenced responses to the other five measures, and to provide descriptive information of the respondents. A copy of the Demographic Questionnaire can be found in Appendix B.

Job Diagnostic Survey. As outlined in the discussion of job satisfaction, the Job Diagnostic Survey (Hackman & Oldham, 1975) is a facet measure of job satisfaction, in that separate indices are determined for various aspects of a given job. The JDS was particularly suited for the present research since the job characteristics data were to provide a means of assessing the comparability of the four subject groups.

The JDS is composed of seven separate sections which provide a total of 83 items of varied format. A maximum of 25 minutes is required to complete the entire survey. The 20 subscales of the JDS represent the six components of Hackman and Oldham's (1975, 1976, 1980) Job Characteristics Model. These components are: (1) job characteristics, (2) experienced psychological states, (3) the motivating potential score, (4) individual growth need strength, (5) context satisfactions, and (6) affective outcomes.

The operational definitions of the five core job characteristics are as follows.

Skill Variety: The degree to which a job requires a variety of different activities in carrying out the work, involving the use of a number of different skills and talents of the person (Hackman & Oldham, 1975).

Task Identity: The degree to which a job requires completion of a "whole" and identifiable piece of work, that is, doing a job from beginning to end with a visible outcome.

Task Significance: The degree to which the job has a substantial impact on the lives of other people, whether those people are in the immediate organization or in the world at large.

Autonomy: The degree to which the job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out.

Feedback from Job Itself: The degree to which carrying out the work activities required by the job provides the individual with direct and clear information about the effectiveness of his or her performance.

Feedback from Agents: The degree to which the employee receives clear information about his or her performance from supervisors or from co-workers.

Dealing with Others: The degree to which the job requires employees to work closely with other people in carrying out

the work activities (including dealings with other organization members and with external organizational "clients").

The Motivating Potential Score (MPS) reflects the overall potential of a job to foster internal work motivation. The formula to determine the MPS of a job is as follows:

$$\text{Motivating potential score (MPS)} = \frac{SV + TI + TS}{3} \times \text{Autotnomy} \times \text{Job feedback}$$

The reader should note that skill variety (SV), task identity (TI), and task significance (TS) have been weighted so as not to unduly affect the MPS. The absolute lowest MPS is one, while the highest value is 343. Hackman and Oldham stress the point that a high MPS does not cause employees to be internally motivated, but merely "sets the stage" for high internal work motivation.

The core job characteristics are believed to foster three "critical psychological states" which are experienced by an employee: (1) experienced meaningfulness of work, (2) experienced responsibility for work outcomes, and (3) knlowledge of results. The operational definitions of these psychological states are as follows.

Experienced Meaningfulness of Work: The degree to which the employee experiences the job as one which is generally meaningful, valuable, and worthwhile.

Experienced Responsibility for Work Outcomes: The degree to which the employee feels personally accountable and responsible for the results of the work s/he does.

Knowledge of Results: The degree to which the employee knows and understands, on a continuous basis, how effectively he or she is performing the job.

The extent to which a worker experiences these three states is said to influence the internal work motivation and overall satisfaction of the employee. The JDS in its entirety can be found in Hackman and Oldham's book entitled Work Redesign (1980).

Job Satisfaction Blank. The Job Satisfaction Blank (Brayfield & Rothe, 1951) is a global measure of job satisfaction. This instrument is composed of 18 items, of Likert format, which are summed to give an overall index of satisfaction with work. Five response options are provided throughout the measure: strongly agree, agree, undecided, disagree, and strongly disagree. A copy of the JSB can be found in Brayfield and Rothe (1951).

Maslach's Burnout Inventory. This measure of burnout is a modified version of Maslach's Burnout Inventory

(Maslach & Jackson, 1981) developed by Golembiewski, Munzenrider & Carter (1983). The measure is composed of 25 items, all of Likert format offering 7 response options (from "very much like me" to "very much unlike me"). The items generate five kinds of scores: three subscales, a total score, and a phase model. The subscale definitions are as follows.

Depersonalization: High scores on which indicate that a respondent tends to distance self from others--reifies human contacts and responds to them as categories or things (Golembiewski et al., 1983).

Personal Accomplishment: Low scores on which imply that individuals are doing well on jobs they consider worthwhile.

Emotional Exaustion: High scores on which imply that individuals are strained beyond their comfortable coping limits--that they are nearing, or beyond, the 'end of the rope', emotionally and psychologically speaking.

The total burnout score is a simple summation of all MBI items, with all personal accomplishment items reversed. The phase model proposes that increases in depersonalization characterizes the earliest and least potent stage of burnout. When depersonalization increases sufficiently, personal accomplishment will be negatively affected. Sufficient increases in depersonalization,

compounded with subsequent decreases in personal

accomplishment, can trigger emotional exaustion. When

respondents are distinguished as high versus low on each of

the three subscales (using the cutting scores of 18 for

depersonalization, 26 for personal accomplishment, and 22

for emotional exhaustion), an eight-phase model of burnout

is generated (refer to Figure Six).

Corporate Culture Survey. The Corporate Culture

Survey (CCS) is a measure of organizational culture. This

instrument was developed by Janz (1983), and derived from

the work of Peters & Watterman (1982). The CCS is composed

of 24 statements about personnel and management behaviors,

whereby the respondent may select from five response

options (completely different, more different than similar,

about 50%, more similar than different, or almost

identical). Roughly half of the items refer to one's

immediate supervisor, while the other half refer to

"executive" behaviors. In this way, the CCS taps both

subunit and organizational culture. The CCS generates

three subscales which provides the answer to "How do

managers ensure that people act in ways consistent with the

goals that managers define for the organization?" The

actual items which comprise the CCS can be obtained from

Dr. Janz, Faculty of Management, The University of Calgary.
The subscales were defined as follows.

Rules and Regulations: Motivation to get things done are
drawn largely from the consequences of rule and regulation
violation.

Power: A mostly coercive approach to performance, breeding
narrow self-interest and win-lose conflict, with little
reward.

Shared Values: The creation of a common cause among
members of an organization, leading to co-operative
relationships.

Organizational Climate Questionnaire. As the name
suggests, the Organizational Climate Questionnaire (OCQ) is
a measure of organizational climate. Developed in 1951 by
Litwin & Stringer, the OCQ has been one of the most widely
used climate measures in organizational climate research.
The OCQ is composed of 50 descriptive statements about an
organizations's work environment, or pervading atmosphere.
Each item is of the standard likert format, providing four
response options: definitely agree, inclined to agree,
inclined to disagree, and definitely disagree. The nine
scales generated by this measure are listed below, with
their corresponding definitions.

Structure: The feeling that employees have about the constraints in the group, how many rules, regulations, procedures there are; is there an emphasis on 'red tape' and going through channels, or is there a loose and informal atmosphere (Litwin & Stringer, 1951).

Responsibility: The feeling of being your own boss; not having to double-check all your decisions; when you have a job to do, knowing that it is your job.

Reward: The feeling of being rewarded for a job well done; emphasizing positive rewards rather than punishments; the perceived fairness of the pay and promotion policies.

Risk: The sense of riskiness and challenge in the job and in the organization; is there an emphasis on taking calculated risks, or is playing it safe the best way to operate.

Warmth: The feeling of general good fellowship that prevails in the work group atmosphere; the emphasis on being well-liked; the prevalence of friendly and informal social groups.

Support: The perceived helpfulness of the managers and other employees in the group; emphasis on mutual support from above and below.

Standards: The perceived importance of implicit and explicit goals and performance standards; the emphasis on

doing a good job; the challenge represented in personal and group goals.

Conflict: The feeling that managers and other workers want to hear different opinions; the emphasis placed on getting problems out in the open, rather than smoothing them over or ignoring them.

Identity: The feeling that you belong to a company and you are a valuable member of a working team; the importance placed on this kind of spirit.

As outlined in the discussion of organizational climate, these scales were developed to tap different types of motivation which are aroused by different work environments.

Procedure

Aquisition of Subjects. Although data collection specifics for each sample group have already been discussed, all participants in the present study were obtained through the following general approach.

A description of the research was mailed to several national presidents of various unions across Canada. This letter also described the types of work conditions from which data were needed (i.e., previous layoffs within the past six months, ongoing layoffs, and possible future

layoffs). The need for control groups, i.e., work groups whose jobs were secure, was also stressed.

Subsequent correspondence via mail and phone resulted in some opportunities to present the research to local union presidents. Although the majority of such correspondences were futile, continued efforts brought the researcher in touch with those individuals (either local union presidents or union representatives) who ultimately distributed the questionnaire packages.

Questionnaire Package Format. The questionnaire package consisted of: (1) the five measurement instruments, (2) the demographic quesionnaire, (3) a set of instructions which detailed how to complete and return the package, and (4) a consent form. The instructions included directions for the maintainance of anonymity, the need for honest responses, the order in which each questionnaire should be completed (the measures were counterbalanced), and how to return the questionnaire package.

RESULTS

Demographic Information

The general demographic characteristics of each group of
workers are given in Table 6.   Both clerical groups worked
the day shift, i.e., from 08:00 to 16:30.   Relative to the
demographics collected for each clerical group, Chi-square
tests indicated no differences in sex, marital status,
level of education, number of workers with supervisory
responsibilities, recent changes in job responsibilities,
additional sources of income, comparisons of workers' wages
with individual's in similar jobs, wage changes within the
previous six months, or desire for job change.

The two labor groups differed importantly in that the
labor layoff group was unionized whereas the labor control
group was not.   Relative to frequency comparisons between
the two groups, chi-square tests indicated no differences
in marital status, level of education, supervisory role,
recent shift change, and additional income.   There was a
significantly higher percentage of females in the labor
control group (p<.01).

Table 6: Frequencies of Demographics for Clerical and Labor Groups

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control
Sample size	78	58	38	25
Sex:				
male	9 (12)	4 (7)	37 (97)	16 (64)
female	69 (88)	54 (93)	1 (3)	9 (36)
Marital status:				
married	37 (47)	26 (45)	23 (61)	22 (88)
widow(er)	3 (4)	1 (2)	0 (0)	0 (0)
divorced	9 (12)	7 (12)	3 (8)	1 (4)
separated	1 (1)	0 (0)	0 (0)	0 (0)
single	28 (36)	22 (38)	12 (32)	2 (8)
not given	0 (0)	2 (3)	0 (0)	0 (0)
Level of education:				
< 11 years	3 (4)	11 (19)	18 (47)	12 (48)
high school	39 (50)	24 (41)	8 (21)	6 (24)
vocational	24 (31)	16 (28)	7 (18)	6 (24)
some university	4 (5)	6 (10)	4 (11)	1 (4)
undergraduate degree	4 (5)	0 (0)	1 (3)	0 (0)
graduate degree	2 (3)	0 (0)	0 (0)	0 (0)
other	2 (3)	1 (2)	0 (0)	0 (0)

Table 6 (continued)

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control
Supervisory role:				
yes	20 (26)	12 (21)	6 (16)	8 (32)
no	58 (74)	46 (79)	32 (84)	17 (68)
Recent shift change:				
no change	70 (90)	55 (95)	34 (89)	20 (80)
some change	8 (10)	3 (5)	4 (11)	5 (20)
Additional income:				
yes	22 (28)	12 (21)	3 (8)	3 (12)
no	56 (72)	46 (79)	35 (92)	22 (88)
Wage change:				
yes	28 (36)	11 (19)	25 (66)	9 (36)
no	50 (64)	47 (81)	13 (34)	16 (64)
Previous layoff target:				
same position	39 (50)	0 (0)	15 (39)	0 (0)
lower position	15 (19)	0 (0)	18 (47)	0 (0)
miscellaneous	24 (31)	0 (0)	5 (13)	0 (0)

Table 7 indicates the differences in the ordinal-type data for the four groups (the values within the brackets indicate the corresponding standard deviation). Two-way ANOVA's were conducted for age, length of employment, length of union membership, work hours per week, and hourly wage. Nonsignificant differences were found for age and length of employment between the clerical groups, labor groups, or between the clerical and labor groups. Significant differences indicated that the number of work hours per week were significantly greater for the labor groups as compared to the clerical groups ($p < .001$), and that the hourly wage was significantly greater for the labor groups ($p < .001$), and significantly greater for the labor layoff versus of labor control group ($p < .001$). It should be noted that the distributions of the clerical layoff group were more negatively skewed than those of the clerical control group for length of employment (Mode=36 and Median=54 versus Mode=42 and Median=42, respectively) and for length of union membership (Mode=48 and Median=54 versus Mode=48 and Median=42, respectively). The distribution of length of employment was again more negatively skewed for the labor layoff group as compared to the labor control (Mode=36 & Median=72 versus Mode=36 & Median=42, respectively). A one-way ANOVA along the three unionized groups (the two clericals and labor layoff group)

indicated a nonsignificant F for length of union

membership.

Table 7

Comparison of Demographics for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Age	32.80 (11.35)	31.85 (10.35)	35.00 (10.42)	38.40 (11.20)	5.56	0.08	1.74
Length of Employment (in months)	73.42 (50.62)	57.14 (50.62)	93.82 (66.85)	63.52 (64.61)	2.98	6.61	0.65
Length with Union (in months)	77.01 (51.93)	60.07 (57.04)	102.71 (65.72)	-----	1.57		
Work Hours per Week	37.49 (2.38)	37.14 (1.68)	40.24 (2.26)	39.84 (1.52)	74.40**	1.49	0.01
Hourly Wage	9.39 (1.62)	9.07 (1.25)	12.51 (2.29)	10.37 (1.62)	79.52**	12.67**	10.91**

*p<.01, **p<.001

Comparisons of means were also conducted for (1) how each group felt their wages compared to an individual holding a similar job, (2) how often they thought of seeking another job, and (3) their felt job security (see Table 8). There were significant main layoff effects for job change desire ($p<.001$) and felt job security ($p<.001$). The clerical groups did not differ significantly on any of these three areas. The labor layoff group thought of finding a new job significantly more often than the labor control group (Tukey HSD, $p<.05$), and felt significantly less secure with their jobs (Tukey HSD, $p<.05$).

Table 8

Comparison of Work-Related Demographics for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Wage Comparison	2.63 (0.76)	2.62 (0.83)	2.76 (1.08)	2.76 (0.88)	0.82	0.07	0.00
Job Change Desire	2.89 (1.04)	2.67 (0.96)	3.16 (1.00)	1.80 (1.00)	1.56	15.46**	13.43**
Felt Job Security	3.62 (0.93)	3.88 (0.96)	2.95 (0.93)	4.36 (0.76)	2.08	22.22**	16.25**

$*p<.01$, $**p<.001$

Job Satisfaction

The JDS provided a measure of seven job characteristics (see Table 9). While there were no significant differences across all seven scores between the two clerical groups, and between the two labor groups, a comparison of clerical versus labor indicated differences in: autonomy ($p<.01$), feedback from job itself ($p<.001$), and feedback from agents ($p<.01$).

There were no differences within the clerical and labor groups along the three critical psychological states. However, clerical versus labor did differ on all three: experienced meaningfulness of work ($p<.001$), experienced resonsibility ($p<.01$), and knowledge of results ($p<.001$). A significant interaction was found for experienced meaningfulness of work ($p<.01$). A test of simple main effects indicated that the labor layoff group was significantly lower on experienced meaningfulness than the labor control group (Tukey HSD, $p<.05$).

Table 9

Comparisons of JDS Subscale Means for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Skill Variety	4.11 (1.72)	3.66 (1.60)	4.34 (1.50)	4.40 (1.39)	3.27	1.61	0.31
Task Identity	4.51 (1.50)	4.58 (1.68)	4.96 (1.34)	4.52 (1.55)	1.05	0.17	1.13
Task Significance	5.47 (1.32)	5.48 (1.20)	4.63 (1.68)	5.51 (0.99)	5.83	2.07	4.49
Autonomy	4.37 (1.60)	4.47 (1.44)	4.97 (1.34)	5.13 (1.23)	7.98*	0.31	0.02
Feedback from Job Itself	4.22 (1.37)	4.57 (1.44)	5.36 (1.24)	4.85 (1.25)	14.85**	0.19	4.18
Feedback from Agents	3.10 (1.56)	3.47 (1.56)	3.81 (1.65)	4.23 (1.64)	9.05*	2.78	0.01
Dealing with Others	5.01 (1.33)	5.17 (0.98)	4.63 (1.21)	4.65 (1.39)	5.50	0.44	0.13
Experienced Meaning.	4.22 (1.37)	4.56 (1.00)	4.86 (0.90)	5.34 (0.80)	16.72**	5.73	0.14
Experienced Resp.	5.02 (1.03)	4.99 (0.90)	5.08 (0.92)	5.83 (0.72)	6.99*	2.59	6.86*
Knowledge of Results	4.66 (1.14)	4.70 (1.21)	5.13 (0.98)	5.51 (0.90)	12.84**	0.90	0.97

$*p < .01$, $**p < .001$

Table 10 provides the findings for affective outcomes, context satisfactions, individual growth need strengths, and the motivating potential score, for the four groups. Of the three affective outcomes, there were no within group differences, while the labor groups did differ significantly with the clerical groups on general satisfaction (p<.001), and growth satisfaction (p<.001).

Relative to the four context satisfactions, there were no significant differences in satisfaction with co-workers and supervision either within the clerical or labor groups, or between them. Both the clerical and labor layoff groups were significantly lower than their control groups on satisfaction with job security (Tukey HSD, p<.05). The labor groups differed with the clerical groups in satisfaction with pay, where the labor groups were significantly more satisfied (p<.01). There were no significant differences in pay satisfaction between the layoff versus control groups.

There were significant differences on all three individual growth need strength scores between the clerical versus labor groups: would like growth need (p<.001), job choice (p<.01), and combined growth need strength (p<.001).

Overall satisfaction was measured with the JSB. No significant differences were found either within the clerical and labor groups, or between them (see Table 11).

Table 10

Comparison of JDS Subscale Scores for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
General Satisfaction	3.80 (1.30)	3.95 (1.06)	4.23 (1.08)	5.14 (1.00)	23.75**	3.91	2.46
Growth Satisfaction	3.81 (1.58)	4.03 (1.39)	4.82 (0.98)	5.28 (0.89)	29.10**	2.32	0.32
Internal Work Motivation	5.09 (1.09)	4.90 (0.98)	5.30 (0.75)	5.51 (0.85)	6.47	0.20	1.81
Context Satisfactions:							
Job Security	2.82 (1.71)	3.99 (1.33)	2.67 (1.59)	5.22 (1.35)	3.05	52.24**	8.31*
Pay	3.80 (1.63)	3.63 (1.39)	4.18 (1.94)	4.68 (1.72)	6.85*	0.02	1.72
Co-Workers	5.14 (1.14)	5.06 (1.16)	5.18 (0.88)	5.59 (0.92)	2.19	0.21	2.07
Supervision	4.03 (1.70)	4.48 (1.50)	4.26 (1.37)	5.11 (1.47)	2.74	6.46	0.69
Individual Growth Need Strength:							
Would Like	6.59 (0.94)	6.35 (0.93)	5.50 (1.30)	5.71 (1.14)	32.65**	0.48	1.96
Job Choice	3.17 (0.53)	3.13 (0.44)	2.91 (0.46)	2.93 (0.50)	9.84*	0.15	0.18
Combined	0.60 (0.08)	0.59 (0.07)	0.52 (0.09)	0.53 (0.09)	33.34**	0.49	1.53
MPS	97.24 (65.12)	106.17 (76.52)	131.12 (62.81)	125.18 (60.47)	7.27*	0.19	2.34

*$p < .01$, **$p < .001$

Table 11

Comparison of JSB Scores for the Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Total Score	57.21 (12.52)	57.29 (11.50)	59.55 (8.86)	64.36 (7.58)	6.38	0.96	1.89

*p<.01, **p<.001

Psychological Burnout

Of the four MBI subscale scores, and the overall burnout index, no significant differences were found either between the clerical and labor groups, or between layoff and control (see Table 12). The assignment of group members to each of the eight phases of the MBI burnout model are shown in Table 13. As outlined earlier, a combination of low and high scores on each of the personal accomplishment, emotional exhaustion, and depersonalization scales determined the phase assignment. The cutting scores for assignment were : 22 for emotional exhaustion, 26 for personal accomplishment (after reversal), and 18 for depersonalization (where less-than-or-equal-to each score yielded a "low" assignment while greater-than yielded "high"). Chi-square tests indicated no significant differences between the MBI Phases of the clerical groups or between the labor groups. A modified 4-phase model was also assessed with the same outcome of nonsignificance.

Table 12

Comparison of MBI Subscale Means for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Emotional Exhaustion	25.87 (11.40)	25.91 (9.32)	24.08 (8.93)	19.48 (9.78)	5.58	0.93	2.15
Personal Accomplishment	26.99 (6.46)	28.88 (6.12)	28.63 (6.37)	25.60 (7.23)	0.13	0.13	6.02
Personal Involvement	8.60 (2.79)	8.25 (2.48)	7.16 (2.53)	8.60 (2.83)	3.06	0.31	4.69
Deper-sonalization	18.01 (7.07)	20.47 (7.87)	19.66 (6.94)	18.60 (9.46)	0.04	1.51	2.21
Total Score	70.87 (19.63)	75.26 (18.69)	72.37 (15.31)	63.68 (20.88)	1.77	0.01	5.02

$*p<.01$, $**p<.001$

Table 13: Means on Each of the MBI Burnout Phases

	1	2	3	4	5	6	7	8
Clerical Layoff:								
	18	2	9	2	12	2	6	27
	(23.1)	(2.6)	(11.5)	(2.6)	(15.4)	(2.6)	(7.7)	(34.6)
Clerical Control:								
	11	4	5	5.	1	5	10	17
	(19.0)	(6.9)	(8.6)	(8.6)	(1.7)	(8.6)	(17.2)	(29.3)
Labor Layoff:								
	5	1	6	5	3	2	4	12
	(13.2)	(2.6)	(15.8)	(13.2)	(7.9)	(5.3)	(10.5)	(31.6)
Labor Control:								
	6	2	4	2	1	5	2	3
	(24.0)	(8.0)	(16.0)	(8.0)	(4.0)	(20.0)	(8.0)	(12.0)

Organizational Culture

The four scores created by the CCS resulted in several significant differences both within and across the clerical and labor groups (see Table 14). The clerical groups significantly differed from the labor groups on rules and regulations (p<.001), although there were no significant differences between the layoff versus control groups. The use of power did not differ between the clerical versus labor groups, but significant differences were found when layoff was compared to control (p<.001). Shared values

significantly differed between clerical versus labor groups

(p<.001), and between control versus layoff groups

(p<.001). The composite score called the excellence index

indicated a significant difference between clerical versus

labor (p<.01), and between layoff versus control (p<.001).

Table 14

Comparison of CCS Subscale Means for Clerical and Control Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Control	Group F	Layoff F	Interaction F
Rules/ Regulations	25.85 (4.85)	26.86 (3.66)	19.40 (5.27)	22.24 (6.13)	60.69**	5.27	1.50
Power	22.36 (5.29)	20.55 (6.26)	23.74 (4.89)	19.04 (7.18)	0.05	10.63**	2.60
Shared Values	19.94 (6.09)	22.40 (5.13)	22.13 (6.09)	26.88 (8.55)	10.95**	12.70**	1.42
Excellence Index	−11.0 (9.52)	−7.11 (9.82)	−8.0 (7.34)	0.43 (14.21)	10.11*	14.00**	2.19

$*p < .01$, $**p < .001$

Organizational Climate

The nine scales of the OCQ also indicated several significant differences between the clerical versus labor, and between control versus layoff groups (Table 15). No differences were found along the scales of responsibility, standards, and conflict. The layoff groups differed significantly from the control groups on structure ($p<.01$). Specific comparisons indicated that the clerical layoff group did not differ from the clerical control group, while the labor layoff group was significantly higher on structure than the labor control group (Tukey HSD, $p<.05$).

Amount of reward was also significantly different between clerical versus labor groups ($p<.01$), and significantly different between layoff versus control ($p<.01$). Amount of risk only differed significantly between the clerical versus labor groups; no differences were found between layoff versus control. Significant differences were found between clerical versus labor ($p<.01$) and between layoff versus control ($p<.001$) on the warmth scale.

The amount of support was also found to differ significantly between the layoff versus control groups, but not between clerical and labor groups. Simple main effect comparisons indicated that the labor layoff group was

significantly less on support when compared to the labor control group (Tukey HSD, p<.05). The identity scale also indicated significant differences between clerical versus labor (p<.001) and between layoff versus control (p<.001). Tests of simple main effects also indicated that the labor layoff group was significantly lower on identity than the labor control group (Tukey HSD, p<.05).

Table 15

Comparison of OCQ Subscale Means for Clerical and Labor Samples

	Clerical Layoff	Clerical Control	Labor Layoff	Labor Layoff	Group F	Layoff F	Interaction F
Structure	21.05 (2.44)	21.33 (2.34)	19.43 (2.17)	17.56 (2.40)	4.27	9.04*	10.60**
Respon- sibility	16.64 (2.49)	16.21 (2.63)	16.58 (1.91)	17.56 (1.92)	2.01	0.00	3.69
Reward	11.44 (3.15)	12.41 (2.99)	12.29 (2.35)	14.28 (3.54)	7.56*	8.88*	1.17
Risk	11.54 (2.10)	11.60 (1.79)	12.82 (2.10)	11.80 (2.58)	6.96*	0.82	2.79
Warmth	10.86 (3.04)	11.88 (2.83)	11.61 (2.25)	14.16 (2.87)	10.12*	13.63**	3.07
Support	10.54 (2.71)	11.64 (2.57)	10.00 (2.18)	13.52 (3.37)	1.19	23.34**	8.53*
Standards	16.17 (2.17)	15.93 (2.03)	15.42 (2.02)	16.40 (1.96)	0.64	0.23	3.56
Conflict	8.99 (1.40)	9.22 (1.51)	8.87 (1.32)	9.36 (1.47)	0.05	2.38	0.33
Identity	7.99 (2.26)	8.57 (2.10)	8.34 (1.79)	11.04 (1.95)	14.47**	17.01**	10.60**

*$p<.01$, **$p<.001$

DISCUSSION

Two groups of employees, clerical workers and laborers, were examined to identify how the experience of downsizing affects individuals still employed within an organization. Greenhalgh and Rosenblatt (1984) proposed that personnel have three basic sources of data upon which perceptions of job insecurity are based. The clerical layoff group had at least four sources: (1) official organizational announcements that layoffs were to occur, (2) unintended organizational clues, e.g., budget cuts, (3) rumors running rampant, and finally (4) the elimination of 80 permanent and 40 temporary workers. The members of the clerical layoff group had survived their organizational downsizing, and were assured by management of no further layoffs. The labor layoff group members also received these same four sources of information as did the clericals. At the point of data collection, 48 workers had been eliminated from a work group of 120. The remaining 72 workers were still being faced with further layoffs; hence, although they survived the downsizing, the layoff threat remained.

The first question of course is the degree of job security expressed by the different groups of employees. All participants were asked the following question: "What

do you think are the chances that you will be in the same job 6 months from now?" The data indicated that the two clerical groups did not differ, indicating that the members felt that they had a "good chance" (reflected by their average resonse of approximately three) of keeping their jobs. This would appear consistent with the fact that although the clerical layoff group had experienced layoffs, they were also assured of future employment. The labor groups did, however, differ in their perceptions of job security. The labor layoff group stated that they, on the average, had a 50/50% chance (reflected by their average of less than three) of maintaining their jobs, whereas the control group indicated that they had a "good chance". This also appears consistent with the fact that further layoffs were pending for the labor layoff group members. Ultimately, 22 workers remained once the downsizing was complete.

Before discussing the findings of this research, important differences in the characteristics of each sample should be addressed. The clerical groups were quite similar in several ways. They did not differ in personal characteristics such as sex, age, level of education, marital status, etc. There were, however, differences in length of employment and length of union membership. One likely reason for these differences is the manner in which

the downsizing was conducted. Although particular positions were targeted for elimination, when more than one clerical worker held the same position, seniority was used to determine which individual would be eliminated. As a consequence, the clerical layoff group was comprised of individuals with greater length of employment and union membership than those of the clerical control group.

The labor groups were more problematic because they differed on some important characteristics. Most importantly, the labor layoff group members were unionized whereas the labor control group members were not. This difference is a potential confound in the study which could not be remedied. However, there are two reasons to argue that such a comparison of workers may not entirely negate the usefulness of the data obtained from these groups. First, there is no empirical data in the literature to argue that unionized versus nonunionized personnel differ in terms of job satisfaction, burnout, organizational climate, and organizational cluture. And second, as will be shown shortly, the pattern of job characteristics between the two labor groups did not differ significantly. In either case, some caution is recommended in interpreting the findings between these two groups.

Another difference between the characteristics of the labor groups were in terms of sex distribution. The labor

layoff group had a substantially greater number of males when compared to the labor control group. As well, the labor groups taken together had substantially more males as compared to the clerical groups. The issue, of course, is whether differences in groups could have been a function of sex differences. A review of the literature indicates that sex differences have not been established in job satisfaction, burnout, organizational climate, and organizational culture.

A third difference was found in level of pay for the labor layoff versus control groups. The labor layoff group received a significantly greater hourly wage than did the labor control workers. This is likely a function of the former group being unionized. As with the issue of sex differences, this difference was not considered to impact the dependent variables for two reasons. First, there were no differences between the labor groups when asked how their wages compared to individuals with similar jobs, and there were no significant differences on the JDS scale of satisfaction with pay. And second, the available evidence in the literature on the different dependent variables examined in this study has not established a relationship between pay and organizational climate, organizational culture, or burnout.

The final demographic information that was of interest was the subjects' desire for changing their jobs. All participants were asked "In the past six months, how often have you thought of seeking another job?" Some authors have argued that workers within an organization under stress, in this instance having to downsize, are more likely to desire--and perhaps seek--employment elsewhere. The data of the present study supported this contention. There was a significant main effect by layoff group for increased desire for job change. A further argument is that the clerical groups did not differ significantly, while the labor groups did. Perhaps because the layoffs were finished for the clerical layoff group, the downsizing stressor was removed. Conversely, the labor layoff group was still under stress, i.e., facing more layoffs, and hence had a greater desire for a change of employer.

Job Satisfaction

The comparability of the four groups is at least to some extent dependent upon how similar the characteristics of the workers' jobs were. The JDS assessed seven job characteristics of each sample group. Not surprsingly, the clerical groups did not differ on any characteristic--given that they were all members of the same union and different branches of the same organization. The two labor groups

also did not differ significantly on the amount they perceived having on each of the job characteristics. It is thus argued that at the job level, the two clerical groups and the two labor groups could be compared with regards to job satisfaction with some degree of confidence that any differences found were not a function of holding different jobs. Comparisons between labor and clerical positions, however, must be interpreted with some degree of caution. Group main effects were significant for autonomy, feedback from the job, and feedback from co-workers or supervisors. Interestingly, the remaining four job characteristics did not differ between the clericals and laborers. Hence, according to Hackman and Oldham's definition of the dimensions that characterize a particular job, there was some overlap between the two job categories.

According to the Job Characteristics Model, certain job characteristics influence three different psychological states. A combination of skill variety, task identity, and task significance will influence how an individual experiences his/her job as being personally meaningful. Although these three job characteristics did not differ significantly between the clerical versus labor groups, nor between layoff versus control, the experienced meaningfulness of work did differ between the clericals versus laborers. The autonomy job characteristic was

proposed to influence the extent to which an individual feels responsible for his/her work. Consistent with the differences in autonomy across clericals versus laborers, the experienced responsibility also differed significantly between the different job types. The final job characteristic of feedback from one's job was said to influence the degree to which an employee knows or understands how effectively s/he is performing. Again, consistent with the significant differences between the job characteristic of feedback from the job, knowledge of results also differed between the clerical and labor groups.

The three critical psychological states of experienced meaningfulness and responsibility, and knowledge of results, was argued by Hackman and Oldham to influence internal work motivation, as well as growth and general satisfaction. While internal work motivation did not differ between the clerical versus labor groups, both general satisfaction and growth satisfaction differed significantly. Again, these findings appear consistent with the differences in job characteristics between being a clerical worker versus a laborer. Note however, that in all instances, no differences were found to be a function of whether one experienced a downsizing or not. In all

cases, the layoff groups did not differ from the nonlayoff groups.

These trends suggest that the characteristics of one's job, and in turn, the outcomes of a job's characteristics upon an individual, does not appear to be influenced by the downsizing process. This is intuitively appealing, because there does not appear to be any logical reason for a downsizing to affect the relationship that individual's have with their jobs (unless of course, job characteristics are somehow altered). Relative to this particular area, recent job changes were explored for all of the participants. All participants were asked the following question: "In the past six months, has your job changed, and if so, in what manner?". Tests of frequency differences indicated that no group differed from another in recent job changes. Therefore, any differences found could not have been a function of job changes.

Four context satisfactions were also examined for each group: satisfaction with job security, pay, co-workers, and supervision. While the clerical and labor groups did not differ in satisfaction with job security, both comparisons of layoff versus nonlayoff were significantly different. Specifically, both layoff groups were less satisfied with job security than were their comparison groups. Naturally, given the previous and possible further

layoffs for the labor layoff group, it is not surprising that they were less satisfied with their job security. The decreased satisfaction with job security for the clerical layoff group is interesting, given that there was no difference between their stated future job security when compared with the control clerical group (recall that they were asked what their chances were of being on the same job six months in the future). Apparently, although the clerical layoff group were confident of future employment, the downsizing process nevertheless influenced how satisfied they were with their job security.

A second context satisfaction was with pay. Although there were no differences as a function of experiencing layoffs, the clerical groups were less satisfied than the labor groups. The remaining context satisfactions were with co-workers and with supervision. In both instances, no significant differences were found whether between the clericals and laborers, or as a function of layoffs. One possible reason for no differences in satisfaction with supervision is that the three unionized groups had supervisors who were members of their union, and hence perhaps comrades in a sense (supervisors were also removed during the downsizing). This same argument could also have applied to satisfaction with co-workers.

As argued in the earlier presentation of job satisfaction, some researchers have suggested that facet measures of satisfaction may ignore certain sources of satisfaction with one's job not measured as an individual facet. For this reason, the overall satisfaction measure JSB was also employed. Consistent with most of the findings of facet satisfaction, no differences in overall satisfaction were found either between the clericals and laborers, or as a function of downsizing. This suggests that at least for the present study's participants, the facet satisfactions of the JDS did not in fact ignore any additional sources of satisfaction. Note also that if only an overall satisfaction measure was used, the effect of downsizing on satisfaction with job security would have been overlooked.

Overall, job satisfaction does not appear to be affected by the process of downsizing. While satisfaction with job security is clearly affected, neither overall satisfaction nor specific job satisfactions appear to be influenced. This suggests that if the important job characteristics of an individual's position is not influenced by the downsizing process—which they were not in the cases of the clerical layoff group or the labor layoff group—satisfaction derived from one's job will also not be influenced. It should be noted, however, that this

conclusion runs counter to the single piece of research which examined how decreased job security affects satisfaction. Hall and Mansfield's (1971) assessment of the effects of decreased job security found that job satisfaction in fact decreased. Unfortunately, because these researchers used their own measure of overall job satisfaction, a comparison of the present study's findings with theirs was not possible.

Burnout

Psychological burnout, as defined by the MBI, also does not appear to be influenced by the downsizing process. Neither the clerical groups versus the laborers, nor the layoff versus nonlayoff conditions, resulted in differences in any of the four burnout dimensions. Furthermore, the assignment of workers to the eight phases (or the modified four phases) did not indicate that layoffs encourage higher levels of burnout. These are quite surprising findings, in that one would be inclined to predict that individuals experiencing, or having experienced, a downsizing would have been under more stress than individuals with no experiences or threat of layoffs. One can only conclude that either individuals within the downsizing organization either do not in fact experience increased stress, or that

stress is experienced but not manifested by the phenomena referred to as burnout.

The definition of burnout adopted for the present study was that it was represented by three components: (1) a feeling of psychological exhaustion, (2) a negative shift in how individuals respond to others, and (3) a negative response to individual self and personal accomplishments. Items which illustrate emotional exaustion include "feeling drained from work", "I feel that I'm working too hard", or "I feel like I'm at the end of my rope". Such items seem to reflect a dimension which implies that an individual is beyond his/her coping limit of the demands placed upon them from work. Items which illustrate depersonalization include "I've become more callous toward co-workers", "I don't really care what happens to some co-workers", "working with people all day is really a strain for me". These items appear to reflect a dimension whereby an individual tends to distance himself from co-workers and other people. Personal accomplishment items include such statements as "I can understand how my co-workers feel about things", "I feel very energetic", or "I can easily create a relaxed atmoshpere with co-workers". These items seem to focus on a job with high people contact, and reflect an individual's relationship with co-workers and their job.

This lack of differences in burnout can perhaps be explained for two reasons. Firstly, a number of the MBI items which focus on high people contact seem inappropriate for both the clerical groups and the labor groups, where their jobs deal more with paper work or the construction of mechanical devices. And secondly, the findings of job satisfaction appear relevant. It was shown that job characteristics appear to not be influenced by downsizing, nor do satisfactions gained from different job sources, co-workers, or supervision (although one should be wary of this finding in light of the unionized supervisors). Since the three burnout components appear to be highly related to either job demands or co-worker relationships, and since neither of these areas appear to be affected by a downsizing, it is not surprising that burnout as defined here was also not influenced. The MBI may have been inappropriate because (1) it was not job related, and (2) tapped areas which did not seem to be influenced by a downsizing.

The work of Golembiewski is related to this issue. He and his colleagues have often related context satisfaction (although not job characteristics) with the eight phase burnout model. Their findings have been somewhat consistent whereby as one progresses from phase I through to phase VIII, various context satisfactions decrease.

Relative to the findings of the present study, no differences were found on the different context satisfactions. Therefore, in light of Golembiewski's findings, there was no reason to expect burnout to increase in the layoff groups.

Organizational Culture

Organizational culture was previously defined as representing the set of values which predominate an organization as to how all members should behave. Culture was measured with the CCS, which taps three dimensions of motivators used by management to get personnel to do the things that need to be done. The first dimension, rules and regulations, differed significantly between the clerical and labor groups, but was not influenced by whether workers had experienced a downsizing. The definition of the rules/regulations dimension reflects the enforcement of specific behaviors as being "acceptable" and outlined punishment for "unacceptable" ones. Given the nature of clerical work, as opposed to laborers within a factory, it isn't surprising that clericals have more rules and regulations. The job is highly structured, with very specific job descriptions as to what clerical workers are to do and what not to do. The absence of a significant effect for layoff may be due to no changes in management's

use of established rules and regulations during the downsizing process. Downsizing researchers have suggested that during times of decline, management often adhere to established procedures. Although management may adhere to such established procedures, the data suggests that personnel do not perceive managment as increasing their reliance on rules and regulations.

The second CCS dimension relfects the use of power to get personnel to accomplish work that needs to be done. Janz has argued that such a form of motivation is counterproductive for at least two reasons: (1) it cannot make people want to do things, hence personnel will only do what is expected of them and not be motivated to ever contribute "beyond the call of duty" when needed, and (2) the use of power over personnel can make them want to get even. The findings of the present study indicate that while there were no differences between the clerical versus labor groups, there were significant differences between the layoff versus control groups. Specifically, both layoff groups perceived a greater use of power when compared to their control groups.

The third CCS dimension is shared values, which reflects the establishment, and common understanding amongst all members, of what needs to be accomplished for the organization to be successful. It has been argued that

such a managerial philosophy, and hence perceived organizational characteristic, fosters greater effectiveness since personnel want to do the needed behaviors as opposed to either adhering to stated norms or being forced through the use of power. Levels of shared values differed both between the clerical and labor groups, and between layoff versus control. The feeling of shared values appears to be adversely influenced by the downsizing process. The excellence index, which is a composite score of the three CCS dimensions, also reflected the findings of power and shared values. Again, both the clerical versus labor groups, and layoff versus control groups, differed significantly.

The consistent findings of increased power coupled with decreased shared values is consistent with what researchers have argued would happen when personnel are not involved in the decision process and implementation of a downsizing program. In both instances of the layoff groups, personnel were eliminated by management with no input from those personnel who were influenced directly (i.e., layed off) or indirectly (i.e., the survivors). This issue will be returned to after a discussion of the findings of organizational climate.

Organizational Climate

Nine dimensions of organizational climate were assessed by the OCQ. Nonsignificant effects for both clerical versus labor, and layoff versus nonlayoff, were found for the dimensions of responsibility (a feeling of being responsible for one's job and performance), standards (the perceived importance of explicit goals and performance standards), and conflict (the emphasis on problem resolution versus ignoring or smoothing over conflicts). In addition, the dimension of risk (e.g., sense of riskiness and challenge in the workplace) differed as a function of clerical versus labor, but not in terms of layoff versus control. Note that these four areas are somewhat similar in that they refer to job demands and/or characteristics. Much like the findings of job satisfaction, perceptions related to an individual's job do not appear to be affected by a downsizing.

Upon examining the results of the significant OCQ dimensions, it became apparent that conclusions as to the effects of downsizing could best be addressed in terms of the overall trend of dimension differences. No differences were found between the clerical versus labor groups on the dimension of structure, while differences were indicated between the layoff versus no layoff conditions. These findings are difficult to interpret due to the components of this dimension. The items which comprise structure

included some referring to rules and regulations, some to job structure, and some to overall organizational structure. Given these multiple components, combined with the significant interaction whereby the clerical layoff was lower on structure as compared to the clerical control while the labor layoff group was higher than the labor control, these findings were deemed uninterpretable.

There appears to be a similar pattern of significant differences along the OCQ dimensions with those found from the CCS. It should first be noted that the clerical groups differed significantly from the labor groups on reward, risk, warmth, and identity dimensions. Little can be said about these differences because they likely reflect differences in the organizations in terms of management behaviors and policies due to differences in organizational purpose and structure.

Relative to the layoff versus nonlayoff conditions, significant main effects were found for reward, warmth, support, and identity. An interesting trend appears when one considers the definitions of these dimensions. Reward refers to a concentration on rewards for good performance and little emphasis on punishment. Warmth refers to the prevalence of friendly and informal social groups. Support refers to the perceived helpfulness of managers and co-workers. And finally, identity refers to a spirit of

belonging within the organization. Overall, these
dimensions seem to reflect different aspects of the
relationship between personnel and management. Two of the
dimensions, support and identity, seem to parallel the
culture dimensions of power and shared values,
respectively. In fact, correlations indicated that support
and power correlated -.65, while identity and shared values
correlated .51. Specific comparisons also indicated that
the labor layoff group felt that they had substantially
less support from management and identified less with their
organization than did the labor control group.

These trends amongst the culture and climate
dimensions suggest that downsizing influences the
relationship between personnel and management, and between
personnel and the organizatiron as a whole. Such findings
are consistent with previous arguments that downsizing
programs which have not involved employees in the process
will likely result in a decrease in identification with the
organization, and reduced support of management's decisions
(Greenhalgh, 1982; Hall and Mansfield, 1971; Levine, 1978).
They are also consistent with Luce's (1983) contention that
cultures which foster shared values resulted in less
devastating downsizing programs. And finally, these
findings are consistent with Hall and Mansfield's (1971)
findings that personnel faced with what essentially was

decreased job security, responded with perceptions that management were less supportive, and that personnel identified less with the organization.

Limitations of the Present Study

Confidence in these conclusions must be tempered to some extent because this study has definite limitations. Likely the most severe problem with the present study is in terms of its design. The design used is generally referred to as posttest-only with nonequivalent groups (Cook & Campbell, 1979). It is one of the weakest quasi-experimental designs available. Two important threats to any conclusions drawn from the present study are internal validity and external validity. Internal validity is concerned with correctly concluding that an independent variable is, in fact, responsible for variation in the dependent variable(s). External validity is concerned with the generalizability of the research findings to and across populations of subjects and settings. The most imortant threat to internal validity was selection, whereby differences in the dependent variable means may reflect prior differences among the experimental groups.

The selection threat is of great concern because either or both of the layoff groups could have differed from their respective controls before any downsizing had

been implemented. However, there are several reasons why selection may in fact not have been the sole reason for significant differences. First, the general nonsignificant differences in job characteristics between the two types of workers, i.e., clericals and laborers, combined with the finding that no job changes had occurred at least six months prior to data collection, suggests that the workers within the two groups did in fact have comparable jobs. Second, the pattern of differences in felt job security and satisfaction with job security are quite consistent with the actual experiences of each layoff group. The clerical layoff group had experienced layoffs that were officially over. The data for this group indicated that while they were fairly secure with their jobs, they remained dissatisfied with their job security. The labor layoff group, which had experienced layoffs and faced even more, expressed low felt job security and satisfaction with job security.

Third, at least for the two clerical groups, one could argue that their climate and cultures should also be similar barring any additional pressures (e.g., downsizing) since they were employed by the same organization--hence having the same organizational structure and management policies. The comparability of the labor groups remain somewhat more tenuous than those of the clericals. The

jobs were quite similar, but the orgnaizational structures differed in number of levels in the hierarchy and size. Although it was determined that neither organization had active culture programs at the time of data collection, it must be accepted that their climate and/or culture could have differed. Fourth, the use of two different groups adds some strength to the design.

One final argument against the threat of selection problems relates to the patterns of differences across the four sample groups. The two layoff groups, at the time of data collection, could be viewed as having differential degrees of the independent variable, i.e., downsizing. Although managers who have undergone a downsizing have stated that the effects lasted for a long period of time (note, however, that no measurements were actually taken), one would expect the effects of an ongoing layoff to be more pervasive than one conducted three months earlier. Of the differences in comparisons (not including job characteristics) of layoff versus control, 67% of the comparisons indicated a negative impact on the dependent variables for the clerical layoff group. For the labor layoff group, 85% of the comparisons indicated a negative impact on the dependent variables. Furthermore, of the 33 comparisons, 82% (n=27) of them indicated that the labor layoff group experienced greater negative impact than the

clerical layoff group (18%, n=6). In other words, the layoff groups were consistently lower on the dependent variables, and when the layoffs were still underway, consistently worse effects were found. These findings further support the possiblity that the group differences were not a function of selection, but in fact the experience of downsizing.

Implications for Future Research

There remains much to be accomplished in order to develop a more clear and empirically supported understanding of how downsizing affects individuals who survive the process. The greatest challenge for any researcher will be to maintain a highly defensible experimental design. Clearly, a much stronger design, as compared to the present study, would be to collect data prior to a downsizing combined with perhaps two data collections after the process to assess changes over time. This was the original goal of the present researcher, but proved to be a futile pursuit. There appear to be at least two avenues available to research in downsizing: either use unionized workers, or obtain the support of management. This researcher's experiences indicated that most management, faced with a downsizing, will promptly refuse to permit a researcher to collect data from their

employees. There appeared to be several reasons for this consistent response: (1) management's concern for how participants of such research would respond to the conduct of a study (i.e., they likely already have one or more sources of information suggesting that their job security is about to change); (2) management's fear of being assessed in terms of how they will manage, or have handled, a downsizing; and (3) management's tendency toward conservatism, protectionism, and rule adherence when faced with downsizing decisions.

Unions responded quite inconsistently to requests for research on layoffs. Some refused because they simply did not want "their people involved" (e.g., because times were rough enough without having some outsider meddle into their affairs), while others were all too eager. This eagerness appeared to have two components; (1) a genuine concern for how their members were being affected, and (2) an opportunity to collect ammunition against management. In either case, the conduct of downsizing research is almost a futile exercise, and a powerful source of frustration. It is most certainly a worthy and important area for any applied researcher, but all should be forewarned as to the inherent obstacles. To illustrate, this researcher certainly did not originally pursue a posttest only nonequivalent experimental design. But after 19 months of

trying to persuade individuals to participate, what remained were the data presented in this thesis.

An important concern is the external validity of downsizing research. While unions were somewhat more amenable to participation, there are inherent problems with unionized subject groups. First, generalizability of the findings to all members of a particular organization is difficult to defend. And second, generalizability to other organizational settings will be equally precarious. Therefore, in addition to design improvements, researchers need to involve different populations of workers.

Downsizing researchers should also devote considerable thought to the particular constructs they should examine, and how they should be measured. Two important questions are: (1) how job-related is the measure, and (2) what level of analysis will be addressed. Whereas the level of analysis was fairly straight forward for the present study, it was found that the MBI measure of burnout may have been an inappropriate measure of the effects of downsizing stress. stress.

Although the findings of the present study have suggested that downsizing affects not an individual's relationship with his/her job, but with management and the organization overall, replication is a must. The design weaknesses, combined with the union-nonunion confound, and

possibly (and arguably) the impact of substantial sex
differences, all permit some doubt to be raised with
regards to the findings. With these considerations in
mind, it still appears that organizational culture and
certain climate dimensions may be particularly vulnerable
to a downsizing. Further research will either confirm or
disprove such conclusions.

Another important area of investigation is not simply
the effects of downsizing, but differential effects as a
function of (1) the percentage of personnel removed from
the organization, and (2) how the downsizing was conducted.
A downsizing which involved all organization members in the
decision-making and implementation may have a different
impact than one planned behind closed doors and conducted
via memos and notices of dismissal.

Implications for Management

There are several implications for managers faced with
a possible need to downsize. There appear to be two
categories of decision making. First, an economic
determination of the most effective short- and long-term
downsizing strategies. Second, the extent to which their
personnel will be involved in the entire process. This
author would argue that the first set of decisions should
not be made independently of the second. While management

no doubt has the power to implement whatever strategy they choose, input from subordinates should be encouraged for at least two reasons: (1) subordinates may surprise management and suggest alternative strategies, e.g., shared wage cuts; and (2) the final decisions may be better supported and committed to by those who were involved. This latter statement is one of the fundamental arguments of culture, and relates to the present study.

It was stated earlier that both downsizings of the clerical and labor groups did not in any way involve them in the process. While the present researcher is not in a position to suggest that if personnel had been involved the affects would have been different, the findings do suggest that a downsizing in which no subordinates are involved adversely influences their relationship with management and the organization. Based on these findings, management faced with a downsizing are encouraged to try to maintain a strong relationship with their personnel. More specifically, the maintenance of a high shared values culture, or high management support and employee identification with the organization, may buffer the adverse consequences of downsizing. Management must realize that once a downsizing is complete, those survivors now are the organization. How they have been affected may

very well influence the future success of that

organization.

The above characteristics are what culture authors

have argued as representative of "good" cultures, and more

effective organizations. Relative to the culture area, two

more specific suggestions can be offered to management.

First, research is accumulating to suggest that good

cultures foster innovation, commitment, and support of

organizational members (and perhaps increased job

performance). Such personnel characteristics would be a

major resource when an organization is faced with a

possible downsizing. It therefore appears worthy of

consideration to develop a good culture in general, and

particularly when the organization is stressed by external

pressures. And second, if an organization is either in the

process or has completed a downsizing, the present study's

findings suggest that culture and certain climate

dimensions be assessed. Particular areas that are

identified as problematic can then be addressed and

eventually resolved. The culture modification program of

Janz, for instance, may prove to be a particularly potent

tool for management.

How this study's findings relate to union members

should not be ignored. One apparent consequence of the

union/management dichotomy is that each group takes

responsibility for themselves, and hence takes care of themselves. Although the traditional rivalry of union versus management is not likely to change in the near future--regretfully so--perhaps union members can approach management with these findings and suggest ways to improve their interactions prior to and during a downsizing.

Downsizing appears to be a phenomenon that is going to remain within our society for some time. There are a multitude of possible pressures which can force an organization to reduce their workforce: the changing industrial structure, economic downturns, unstable oil prices, technological changes, the list can go on and on. Naisbitt (1984) stated that an organization's most powerful commodity is its personnel. If the findings of the present research are in fact true, and can be generalized to other types of organizations and beyond unionized employees, management would be well advised to foster a working environment characterized by employee support, shared values, and commitment to the organization's objectives. The findings of the present study suggest that these areas are particularly important when an organization is faced with the unfortunate need to downsize.

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APPENDIX A

Consent Form and Cover Letter

PLEASE READ THIS FIRST

Introduction to this research

Enclosed are four questionnaires which you have consented
to complete. The information which you provide will serve as
part of my research in the area of organizational behavior.
during periods of economic decline. The first three questionnaires
examine: (a) how you feel about your job, (b) what pressures
you experience while on the job, and (c) how you feel and think
about your work situation. In all, they probably cover the
three most important aspects of one's job.

I propose to gather data from yourself and your fellow
workers for the next few months. Once I have analyzed the
results, I will provide you with a report which will explain the
findings and the conclusions drawn.

General Instructions

Consent form. A one page consent form is included with an
envelope attached to it. This form is to show that you have
volunteered to participate in the research. Once you have
signed the form, please enclose the form in the attached
envelope and seal it. This will be the only form which you
are to put your name on. To maintain your anonymity, the letter
should be kept separate from the actual questionnaires.
Further instructions will be given shortly.

Consent Form for Participation in the Organization Research Project

I, _____, am aware that the study in which I agree to participate concerns the feelings and perceptions of employees about their jobs and the organization of which they are a part. The study being conducted by Michael S. Ross, under the supervision of Dr. J. E. Boyd and Dr. T. Janz, examines the effects of organizational retrenchment upon those employees who remain within an organization. I understand that I may withdraw at any time. I have been informed that the information I provide will remain confidential and that my identity will be concealed throughout the research. The information will be used in two ways: (1) for research purposes in the area of organizational behavior, and (2) to provide feedback to participating employees. After completion of the study, I have been informed that I am to receive a report of the general findings, thus providing me with research information to which I have made a contribution. Knowing the conditions of the study, I consent to participate in this research project.

_____
Signature

_____
Date

<u>To complete the questionnaires.</u> The three questionnaires
(labelled A, B, and C), are to completed in the order
provided to you. At the top of the first page of each questionnaire,
I have hand-written a number, either 1, 2, or 3. These numbers
correspond to the order in which the questionnaires should be
completed by you. It is most important that you follow this
sequence (your questionnaires may not be in alphabetical order).

These three questionnaires ask many questions, so feel
free to take a break after completing each one. However, the
best way is to try to complete the entire package in one
sitting. The total time required is about one hour. This
time should not be too excessive, if you take one or two
breaks as suggested.

Once you have finished the three questionnaires, there
is a "Demographic Questionnaire" which asks questions about
yourself and your job. That will be the last questionnaire to
complete.

You may receive this questionnaire package again at a
later date (2-3 months). Therefore, it will be important
to be able to match your first set of responses with the
second one. In order to maintain your anonymity, the following
procedure will be used.

At the bottom of the last page of the "Demographic
Questionnaire" is a box. In that box, please write down
either a name or a number that you will <u>undoubtedly remember</u>
when asked to complete the questionnaire package at a later
date. For example, you could use your mother's maiden name or
the name of your pet. Whichever approach you select, please be sure
not to forget the name or number (it may be 2-3 months until you
are asked to remember it). In this way, your <u>anonymity is maintained</u>
while the information you provide can still be matched. <u>Do not use
your own name.</u>

How to return the questionnaires
===

Once the questionnaires have all been completed, please do
the following.

1/ Return the 4 questionnaires to the brown envelope and
seal it. If I receive an envelope either not sealed, or re-opened,
: I will immediately destroy it.

2/ Keep the envelope with the questionnaires, and the envelope
with the consent form, separate. Both are to be sealed and
kept separate. In this way, no name can be associated with
the responses on a questionnaire.

3/ There are two ways to return the two envelopes: (1) you may
return the envelopes to the individual who gave the questionnaire
package to you, or (2) mail them to me at the address given on
page 4. (Whatever you feel more comfortable doing).

Once I have received the completed questionnaires, I
will code them into numbers and destroy the originals. The
results of the research will be in summary data only. In this
way, there is no way for an individual, or group of individuals,
to be identified.

Please Read the Following Carefully

1/ This research has been endorsed by both the national director
of your union, and by your union president. All those participating
in the study will receive a report as to the findings of the study
as they apply to your union, as well as the overall findings of
the study.

2/ Please do not consult or discuss the questions with anyone
while you are completing the questionnaires (naturally you are free
to discuss them afterwards). Complete them on your own. There are
no right or wrong answers; answer in the way that you feel is appropriate.

3/ Respond to each question as honestly as you can. I am trying
to find out how people such as yourself feel about their work. It's
essential that you answer each question in a manner which you truly
feel.

Please answer honestly; the way you normally feel. That's
extremely important.

Thank you very much for your co-operation. With your help,
this study will be a tremendous success. If you have any questions
or concerns, please feel free to contact me.

Sincerely,

Michael S. Ross, B.Sc.
The University of Calgary
Department of Psychology
2500 University Dr. NW
Calgary, Alberta
T2N 1N4

APPENDIX B

Demographic Questionnaire

Demographic Questionnaire

Finally, you are asked to respond to the following items regarding your position just now in your job. You·should remember that all of your responses are anonymous, and that anything you say will remain completely confidential.

Where options are given, please circle one of the letters which corresponds to the answer which best describes you.

1/   How old are you? _____ years

2/   Sex: (a) male   (b) female

3/   What is your current marital status?

    (a)   married

    (b)   widowed

    (c)   divorced

    (d)   separated

    (e)   never married

4/   What is the highest level of education that you have completed?

    (a)   less than 8 years of formal education.

    (b)   8 - 11th grade.

    (c)   high school diploma

    (d)   professional or vocational certificate or diploma.

    (e)   some university education.

    (f)   university undergraduate degree

    (g)   post-graduate degree

    (h)   other (please specify): _____

    _____

    _____

5/   What is your present job? _____

    _____

A/ What are your 3 most frequent job activities?

    (a) _____

    (b) _____

    (c) _____

B/ How long have you worked for your present employer? _____

C/ For how many years have you been a member of your union? _____

D/ Do you supervise other employees? (a) yes

                                   (b) no

    If yes, how many other people do you supervise? _____

6/ What hours (or shift) do you normally work? _____

7/ How many hours do you normally work each week? _____

8/ In the past 6 months, has there been a change in the hours that you normally work?

                (a) yes

                (b) no

A/ If there has been a change, please state what change has occurred.

_____

_____

_____

9/ What is your hourly wage? _____

10/ How do you feel your wage compares to that received by someone in another job requiring similar abilities?

    (a) much less   (c) about same   (e) much more

    (b) less   (d) more

A/   What kind of job did you compare your wage to?   _____

_____

_____

11/   Do you have any additional income other than your job?

           (a)   yes

           (b)   no

12/   In the last 6 months, has your hourly wage changed?   (a)   yes

                    (b)   no

A/   If your wage changed, how did it change?   (a)   increased

                    (b)   decreased

B/   How much did your wage change?   (a)   very little

                (b)   little

                (c)   somewhat

                (d)   a lot

13/   In the past 6 months, how often have you thought of seeking another job?

           (a)   never

           (b)   rarely

           (c)   sometimes

           .(d)   frequently

If so, for what reason?   _____

_____

_____

14/ What do you think are the chances that you will be in the same job 6 months from now?

(a) no chance

(b) small chance

(c) 50/50 chance

(d) good chance

(e) almost certain

15/ In the past 6 months, has your organization laid off employees? If so, list the 3 types of workers that were laid off the most. If possible, list the job with the largest number of layoffs first, and the rest in order.

(a) _____

(b) _____

(c) _____

16/ In the past 6 months, has your job changed?

(a) Yes

(b) No

If yes, please state what change has occurred.

_____

_____

_____

THE END

N.B. DONT'T FORGET TO PUT EITHER A NUMBER OR A NAME IN THE BOX BELOW. (pet's name, mother's maiden name, anything you will remember)

APPENDIX C

Correlations Between All Measures

Table C-1: Correlations Between Demographics versus JDS

	Wage	Wage Comp.	Job Change Desire	Job Security
Skill Variety	30**	-07	-13	05
Task Identity	20*	17	-10	-01
Autonomy	25**	20*	-37***	07
Experienced Work Meaningfulness	18*	02	-37***	17
Experienced Work Responsibility	17	12	-18*	01
Knowledge of Results	15	18*	-14	10
General Satis.	28**	15	-52***	22*
Growth Satis.	23*	17	-34***	15
Job Security	20*	09	-24**	19
Pay	29**	31***	-26**	13
Co-workers	15	12	-20*	04
Supervision	24**	23**	-35***	11
Would-like Growth Need Strength	-09	-19	27**	-11
Job-choice Growth Need Strength	-08	00	15	-23**
Combined Growth Need Strength	-11	-13	27**	-20*
Motivating Potential Score	23*	07	-21*	02

*p<.05, two-tailed. **p<.01, two-tailed.
***p<.001, two-tailed.

Table C-2:   Correlations Between Demographics versus JSB]%

	Wage	Wage comparison	Job seeking	Job security
JSB	24**	18*	−45***	22*

*p<.05, two-tailed. **p<.01, two-tailed.
***p<.001, two-tailed.

Table C-3:   Correlations Between Demographics versus MBI

	Age	Wage	Job change desire
EE	−07	−23*	47***
PA	−20*	−14	31***
PI	11	−07	06
D	−24**	−07	24**
T	−19*	−19*	36**

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed.

Table C-4:   Correlations Between Demographics versus CCS

	RR	P	SV	E
Wage rate	−26**	−18*	16	24*
Wage comparison	−12	−21*	04	16
Job change desire	01	35***	−36***	−42***
Length of employment	−17	−08	17*	17*
Length with union	−16	−09	20*	19*

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed.

Table C-5: Correlations Between Demographics versus OCQ

	Age	Wage	Wage Comparison	Job Change Desire	Length with Union
S	-18*	10	13	-11	-11
RS	02	19*	01	-31***	17*
RW	-03	15	15	-43***	13
RK	-02	14	-02	-21*	08
W	-10	25**	22**	-38***	06
SP	-01	19**	19**	-34***	07
ST	07	-12	01	21*	01
C	-08	-04	07	-09	-10
I	-04	23*	16	-41***	18*

*p<.05, two-tailed. **p<.01, two-tailed.
***p<.001, two-tailed. (S = Structure, RS =
Responsibility, RW = Reward, RK = Risk, W = Warmth,
SP = Support, ST = Standards, C = Conflict,
I = Identity)

Table C-6: Correlations Between JSB versus JDS

Job Characteristics:

	SV	TI	TS	A	FJ	FA	DO
JSB	53***	22**	28***	61***	45***	39***	21**

Psychological States:

	EMW	ERW	KR
JSB	61***	48***	37***

Affective Outcomes:

	Gen. Sat.	IWM	Growth Sat.
JSB	74***	48***	72***

Context Satisfactions:

	Job Security	Pay	Co-workers	Supervision
JSB	28***	43***	49***	57***

Motivating Potential Score

JSB	60***

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed. (SV = Skill Variety, TI = Task Identity, TS = Task Significance, A = Autonomy, FJ = Feedback from Job, FA = Feedback from Agents, DO = Dealing with Others, EMW = Experienced Meaningfulness of Work, ERW = Experienced Responsibility of Work, KR = Knowledge of Results)

Table C-7:   Correlations Between JSB versus MBI

	EE	PA	PI	D	T
JSB	-65***	-48***	-17	-48***	-70***

*p<.05, two-tailed.   **p<.01, two-tailed.   ***p<.001, two-tailed.
(EE = Emotional Exhaustion, PA = Personal Accomplishment, PI = Personal Involvement, D= Depersonalization, T = Total Score)

Table C-8:   Correlations Between JSB versus CCQ

	RR	P	SV	E
JSB	02	-46***	52***	57***

***p<.001, two-tailed.
(RR = Rules/Regulations, P = Power, SV = Shared Values, E = Excellence Index)

Table C-9:   Correlations Between JSB versus OCQ

	S	RS	RW	RK	W	SP	ST	C	I
JSB	39***	35***	44***	23**	42***	45***	-13	12	48***

**p<.01, two-tailed.   ***p<.001, two-tailed.

Table C-10-A: Correlations Between JDS Job Characteristics
and Psychological States versus MBI

	SV	TI	TS	A	FJ	FA	DO	EMW	ERW	KR
EE	28***	24**	14	50***	26**	29***	09	46***	27***	38***
PA	40***	07	27**	32***	35***	23**	13	40***	28***	29***
D	24**	19*	19*	42***	14	22*	17	36***	26**	13
T	38***	22**	21*	54***	31***	32***	18*	52***	34***	35**

*p<.05, two-tailed. ***p<.01, two-tailed. ***p<.001, two-tailed. (Note: All values in this matrix are negative.)

Table C-10-B: Correlations Between JDS Affective Outcomes,
Context Satisfactions and MPS versus MBI

	Gen Sat.	Gro Sat.	IWM	Job Sec.	Pay	Co-Work.	Sup.	MPS
EE	67***	47***	22*	29***	34***	31***	45***	42***
PA	33***	44***	36***	13	20*	29***	34***	43***
D	42***	34***	28***	02	07	34***	26**	35***
T	64***	54***	34***	23**	30***	39***	46***	51***

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed. (Note: All of the values in this matrix are negative.)

Table C-11-A: Correlations Between JDS Job Characteristics and Critical Psychological States versus CCQ

	SV	TI	TS	A	FJ	FA	DO	EMW	ERW	KR
RR	12	04	17	10	16	07	11	01	05	02
P	24**	24**	12	48***	35***	40***	13	46***	33***	44***
SV	42***	14	27**	47***	37***	53***	18*	45***	30***	30***
E	37***	21*	21*	55***	40***	54***	17*	54***	37***	43***

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed. (Note: All of the correlations with P, i.e., Power, are negative.)

Table C-11-B: Correlations Between JDS Affective Outcomes, Context Satisfactions, and MPS versus the CCS

	Gen Sat.	Gro Sat.	IWM	Job Sec.	Pay	Co-Work.	Sup.	MPS
RR	05	00	08	04	-13	02	05	13
P	50***	44***	28***	32***	23**	36***	53***	48***
SV	48***	55***	25***	35***	21*	33***	53***	50***
E	59***	59***	31***	39***	28***	40***	62***	56***

*p<.05, two-tailed. **p<.01, two-tailed. ***p<.001, two-tailed. (Note: All of the correlations with P, i.e., Power, are negative.)

Table C-12: Correlations Between MBI versus CCS

	EE	PA	PI	D	T
RR	11	-13	13	-23**	-04
P	57***	27**	06	29***	49***
SV	-43***	-42***	-05	-18*	-25**
E	-61***	-39***	-08	-23**	-45**

**p<.01, two-tailed. ***p<.001, two-tailed.

Table C-13: Correlations Between MBI versus OCQ

	EE	PA	PI	D	T
S	-34**	-13	-10	-23*	-33**
RS	-27*	-29**	08	-21	-18
RW	-44**	-28**	-04	-27**	-36**
RK	-18	-12	-15	00	-14
W	-38**	-15	08	-28**	-37**
SP	-41**	-26*	-01	-18	-32**
ST	27*	11	03	10	20
C	-20	-09	00	-13	-19
I	-43**	-20	07	-23*	-37**

p<.05, two-tailed. *p<.01, two-tailed. **p<.001, two-tailed.

Table C-14:   Correlations Between CCQ versus OCQ

	RR	P	SV	E
S	12	-30**	25*	31**
RS	04	-32**	31**	37**
RW	-01	-63**	57**	71**
RK	-13	-19	24*	28**
W	-08	-53**	43**	58**
SP	-13	-65**	55**	72**
ST	20	27**	-18	-30**
C	-06	-26*	12	23*
I	-17	-60**	51**	68**

p<.05, two-tailed.   *p<.01, two-tailed.   **p<.001, two-tailed.