2003

# The Role of Stress Resiliency and Perceived Procedural Fairness in The Coping Processes of Layoff Survivors

Sue E. Schonberg
*Seton Hall Univerisity*

# THE ROLE OF STRESS RESILIENCY AND PERCEIVED PROCEDURAL FAIRNESS IN THE COPING PROCESSES OF LAYOFF SURVIVORS

BY

SUE E. SCHONBERG

Dissertation Committee

Sandra S. Lee, Ph.D., Mentor
Olivia Lewis-Chang, Ph.D.
Joan H. Coll, Ph.D.

Submitted in partial fulfillment of the
requirements of the degree of Doctor of Philosophy
Seton Hall University
2003

# ABSTRACT

## THE ROLE OF STRESS RESILIENCY AND PERCEIVED PROCEDURAL FAIRNESS IN THE COPING PROCESSES OF LAYOFF SURVIVORS

The population of layoff survivors (i.e., those employees spared in a layoff) has been a relatively overlooked group of people. How these individuals fare in the aftermath of a layoff as well as what variables seem to enhance healthier coping is of paramount importance to industry leaders. What is known is that poor coping on the part of layoff survivors can impact a company's productivity as well as disability rates. Previous studies on layoff survivors have examined Perceived Procedural Fairness (layoff survivors' perceptions about how a recent layoff was handled) and Job Stress. However, no studies to date have simultaneously examined the variables of Perceived Procedural Fairness and Stress Resiliency with regard to Job Stress and Job Burnout. The goal of this current study was to test the following hypotheses: (a) The higher the level of Perceived Procedural Fairness, the lower the level of Job Burnout; (b) The higher the level of Perceived Procedural Fairness, the lower the level of Job Stress; (c) The higher the level of Stress Resiliency, the lower the level of Job Burnout; (d) The higher the level of Stress Resiliency, the lower the level of Job Stress; and (e) Stress Resiliency will moderate the effect of Perceived Procedural Fairness on Job Burnout. One hundred and twenty-one participants from seven different companies representing six different work sectors were used in this study. Participants completed four surveys: (a) Stress Resiliency was measured by the Stress Resiliency Profile (Thomas & Tymon, 1994); (b) Perceived Procedural Fairness was measured by an unpublished scale written by Jim

Westaby (2000) and based upon the work of Brockner and colleagues (Brockner, DeWitt, Grover & Reed, 1990; Daly, 1995; Davy, Kinicki, & Scheck, 1991); (c) Job Burnout was measured by the Maslach Burnout Inventory – General Survey Version (Maslach & Jackson, 1986); and (d) Job Stress was measured by the Job Stress Survey (Spielberger & Vagg, 1991). Two separated hierarchical multiple regression analyses were conducted. Only hypothesis 3 was fully supported and hypotheses 2 and 4 were only partially supported. Additional multiple regressions were conducted to determine relationships between Stress Resiliency, Somatic Complaints and Job Burnout and Job Stress. Only Somatic Complaints were found to be significantly correlated with overall Job Stress.

# TABLE OF CONTENTS

iv

## LIST OF TABLES

CHAPTER I

Introduction

The phenomenon of corporate downsizing in the United States is widely recognized. Over the past two decades, companies of all sizes have reduced their employee headcounts in an effort toward achieving increased profitability through cost containment. From the early 1980s until the early 1990s, there were over 3.5 million jobs eliminated in Fortune 500 companies (Lee, 1992). In addition, according to a survey conducted in the latter half of the 1980s by the American Management Association, firms employing more than 5000 people were found to have downsized two thirds of their employee population (Greenberg, 1988). Lastly, the *New York Times* noted that within the past twenty years, more than 43 million jobs have been eliminated and that the rate of job loss peaked at a record number of 3.4 positions a year in 1992 (*New York Times*, 3/3/96). Unfortunately, this trend is likely to continue.

There are a variety of economic factors which currently exist and increase the likelihood for further downsizings. Among these are: (a) An increase in mergers and acquisitions, which result in personnel excess; (b) An increase in technological advances resulting in lowered need for manpower; (c) An increase in international competition; and (d) Slowed economic growth (Appelbaum, Simpson, & Shapiro, 1987). Others would contend that downsizing has become so pervasive that it has evolved from being an

isolated phenomenon designed to rescue a dying company to a more universally accepted way of managing in companies (Ropp, 1987).

What is not as readily realized however, is the extent and magnitude of the devastating effects this has on the employees who remain after the downsizing. This population of "survivors" is often overlooked in the aftermath of a downsizing. Bunker (1997) asserts that emphasis is often placed by organizational leaders on the mechanics of an organizational change, with far less attention paid to the human factors side of the equation. They are often presumed to be "the lucky ones" who were spared in the layoff, and similarly grateful to remain employed. Oftentimes, this is far from the truth.

Survivors are a unique group who collectively present with a distinct constellation of symptoms (Noer, 1993). According to Noer, layoff survivors are likely to experience a combination of anger, fear, guilt, and depression. In addition, he contends that they are also likely to exhibit lowered levels of risk taking, which in turn is likely to hurt future productivity (Noer, 1997). Survivors are also prone to feeling betrayed and discarded by their company (Farley, 1991), as well as experiencing lower morale (Brockner, 1988). Survivors are often required to do more work with fewer resources, and are likely to experience stress engendered by future job uncertainty (Dunlap, 1994; Lee, 1992). Job security has also been demonstrated to have an adverse effect on work effort (Brockner, 1992). It is also known that the role of perceived procedural fairness (how surviving employees perceive the actual downsizing was handled) is significant in terms of the resulting effect on morale, anger and feelings about their jobs and the organization (Brockner, 1992; Moskal, 1992).

In summation, we have learned a fair amount about certain deleterious effects downsizing has had on its survivors, as well as the significant effects that perceived procedural fairness and job insecurity can have. However, it is critical to gain a better understanding of this population for several reasons. First, one needs to learn about the type and degree of ill effects there can be on the survivors themselves. To merely acknowledge that this group is "stressed out" averts the opportunity to uncover the multi-layered psychological intricacies that this population experiences. One needs to better understand how this group is responding to downsizings, in order to tailor psychological interventions accordingly. Secondly, one needs to better understand the impact of an organization's behavior surrounding the actual downsizing as well as aftermath on the coping ability of survivors. It is hoped that organizational interventions and/or recommendations can be subsequently provided to allay some of the layoff disruption.

## Background of the Problem

### Effects on the Organization

Downsizing has been shown to have a negative impact with regards to safety concerns in the organization itself. Flannery, Hanson, Penk, and Pastva (1997) conducted a case study in a mental health institution that underwent a recent downsizing. They found a four-fold increase in the frequency of assaults on staff, as the hospital census decreased. Another organizational outcome to downsizings has been an increase in disability rates among the layoff survivors. In 1996, both Cigna Group Insurance Managed Disability and the American Management Association surveyed approximately

300 large and mid-sized AMA-member companies during a downsizing period (Koco, 1996). They found a 70% increase in disability claims during that time period, and the average duration of both short- and long-term disability claims ran an average 25% longer at companies that eliminated jobs than those that did not.

*Effects on Survivors – Non-Managers*

There are many measurable organizational outcomes following a downsizing. Russell (1995) concluded following an analysis of mill and mine operations that among these outcomes were job expansion and an increase in job responsibility. Similarly, Tombaugh and White (1990) noted in a study conducted with layoff survivors of a chemical company, that employees reported increases in role overload, role conflict, and role ambiguity. Managers at this same study in contrast, reported the downsizing as affording employees an increase in responsibility and decision making. This discrepancy between what managers reported and what employees perceived is noteworthy, as it is likely to be a pervasive phenomenon. Noer (1993) would contend that this perception of managers is a clear example of the state of denial that many remain in, and could be viewed as a type of rationalization on their part. Parker, Chmiel, and Wall (1997) too noted how layoff survivors are often presented with job expansion coupled with greater responsibility. As a likely outgrowth of these repercussions, some of the experiences frequently reported by the survivors themselves will now be highlighted.

In David Noer's 1993 seminal book, *Healing the Wounds*, he coined the term "layoff survivor sickness." By this he meant the collection of attitudes, feelings, and perceptions experienced by those individuals still remaining in a work environment

following a downsizing or layoff. Included among these reactions were feelings of job insecurity, unfairness, depression, stress, fatigue, reduced risk taking and motivation, distrust and betrayal, as well as at times (perhaps surprisingly) optimism and continuing commitment to their jobs. He likened the response of many layoff survivors to that of individuals who had encountered a traumatic event, such as a natural disaster or large-scale calamity. Somewhat analogous to the survivor guilt experienced by an individual surviving a plane crash would be the experience of an employee surviving a downsizing, having witnessed numerous colleagues being terminated. In order to better understand this phenomenon, Noer conducted research consisting of a combination of structured interviews with employees and human resource personnel who had been spared in their company's recent downsizing.

Schweiger, Ivanvevich, and Power (1987) identified five additional major concerns among survivors in a firm acquired through a merger and acquisition. These were: loss of identity, lack of information and anxiety, an obsessive concern about their own continued survival, lost talent, and family repercussions. There has been further evidence provided supporting the linkage between increased stress and organizational restructuring accomplished through downsizing (Tombaugh & White, 1990). Other researchers have noted that downsizing survivors tend to have decreased job satisfaction, lowered organizational commitment, greater strain, and are more likely to leave work and have higher rates of absenteeism (Brockner, Grover, Reed, DeWitt, & O'Malley, 1987; Davy, Kinicki, & Scheck, 1991; Wong & McNally, 1994). Lastly, Brockner, Grover, Reed, and DeWitt (1992) examined the relationship between survivors' level of job insecurity and work effort. They found that individuals experiencing moderate levels of

job insecurity as measured by high levels of job threat (as well as high levels of individual and organizational control over subsequent layoffs occurring) as well as individuals experiencing low levels of job threat coupled with a low sense of control were more likely to exhibit a greater increase in job effort. Conversely, they found that individuals who experienced low job insecurity (low job threat coupled with a higher sense of control) or high job insecurity (high threat coupled with a lower sense of control) did not exert as high a work effort as the previously cited research.

In addition, there is general agreement that employees who survive a downsizing are more likely to experience job stress. Worry and perceived threat to future employment are among some of these related emotions (Brockner, 1988, Brockner, et al., 1992). While Karasek (1979) did not directly investigate the concept of job stress and layoff survivors, he did research the interactions between job demands, decision latitude, and job strain. He found that the combination of low decision latitude coupled with high job demands led to both higher mental strain and lower job satisfaction. Shaw and Barret-Power (1997) provide a stress-based view of downsizing, outlining areas for further research. This in turn, appears to be also correlated with a higher likelihood of dissatisfaction and intent to leave the organization.

*Effects on Survivors - Managers*

Other researchers have focussed more exclusively on the managers who survive a downsizing. Kets de Vries and Balazs (1997) examined the reactions of managers who were responsible for implementing the downsizing process. From data obtained from the implementation of the layoff, they identified five different coping styles observed:

(a) compulsive/ritualistic, (b) abrasive, (c) dissociative, (d) alexithymic/anhedonic, and (e) depressive.

The compulsive/ritualistic style is typified by the person's need for control, which tends to be fulfilled by a rigid attention to rules, procedures, and schedules. In addition, their affective presentation appears aloof and restrained. Their approach to authority is conducted with total deference, whether it is given or demanded. The major defensive pattern with this group was that of isolation. Kets de Vries and Balazs define this as a splitting of affect from cognition, which manifests itself in such patterns as rationalization, compartmentalization, and intellectualization. These individuals were likely to execute a downsizing with precision to detail, barring any tolerance for any type of deviation. This rigidity in procedural conduct seemed to convince themselves and others of the adequacy of such procedures.

The abrasive style is typified by individuals exhibiting impatience, a degree of arrogance, and a lack of interpersonal skills. There is a tendency to openly display contempt for subordinates, which not surprisingly, minimizes their self-confidence and desire to exhibit any type of work initiative. This coping style is further typified by signs of "reactive narcissism," often appearing as emotional coldness, grandiosity, vindictiveness, and a sense of entitlement. This narcissism accounts for a blurring of boundaries, where others are likely to be viewed as extensions of themselves to be used for their own benefit. Splitting (delineating objects into either all "good" or all "bad" is a common defensive mechanism for this group. As such, it is not uncommon for this group to view individuals being laid off as the "bad" people, ultimately responsible for the downsizing in the first place.

The dissociative style is typified by an individual who removes from conscious awareness designated thoughts, images, feelings, sensations, and desires. Such managers described themselves as being detached from the downsizing process, even while in the midst of firing high numbers of employees. This style is best described by an individual who has lost the capacity to experience emotions, who ultimately feels like an automaton or outside observer.

The alexithymic style is somewhat similar to the dissociative style, insofar as these individuals seem to have a lessened ability to feel as well. They tend to have great difficulty in experiencing and recognizing emotions. They tend to experience a type of disconnect between their bodies and their minds, and as such often ignore or dismiss distress signals emanating from either source. In order to avert feeling emotions, these individuals tended to resort into "doing," which often took on robotic qualities.

The anhedonic style is typified by a loss of interest in all activities, which previously provided pleasure. These individuals frequently reported boredom, and became more inclined to avoid normal work activities. This was manifest in higher reported instances of procrastination and difficulty concentrating, culminating in higher degrees of ineffectiveness.

Lastly, the depressive style, as the name would imply, was typified by a flattening affect, and difficulty in responding to the appropriate mood of the occasion. Unique to this style of coping, was a tendency toward self-accusation, resulting in a pervasive feeling of guilt. Oftentimes, these individuals blamed themselves for the harm caused to the employees who they were charged with firing.

Bunker (1997) who heads the Center for Creative Leadership, described findings derived from intensive workshops conducted for senior level managers charged with the task of initiating and overseeing layoffs. This was done in conjunction with senior leaders working in the Canadian federal government. The aim of the 5-day process-oriented course is for leaders to discover their own transitional vulnerability and better understand the impact of both owning and not owning such vulnerability. A culmination of interpretive data from 25 editions of this experiential course led Bunker to make several observations pertaining to management's handling of the downsizing process and concurrent expectations for other employees, as well as their own reactions as survivors themselves.

With respect to management's handling of the downsizings, they appeared somewhat oblivious to the fact that employees were feeling stuck and angry, yet were somehow expected to "charge forward" with the new work order at hand. In terms of the managers' own experiences as survivors, he noted their experiencing a profound sense of violation, a need to grieve, a lack of leadership skills around people issue, as well as a gap in the "ability to learn."

In addition, he noted their tendency to wait for the problems to go away or to blame others for causing them and/or not fixing them. He also noted a tendency for managers to wear protective masks – that is, feeling compelled to act upbeat when in fact they were feeling quite frustrated and powerless on the inside. This seemed to shield them from the conflict inherent in both having to adhere to painful expectations of their leadership role coupled with the reality of their own ongoing survivor pain. Unfortunately, masking creates its own difficulties. Employees are apt to perceive an

image lacking in candor and authenticity, which can lead to further frustration at not having their feelings validated. He felt that by far, the greatest problem exhibited by senior leaders was the inability to recognize and respond empathically to the emotional recovery needs of the survivors around them.

*Factors Moderating the Impact of Downsizing -- Procedural Fairness*

To date, researchers focusing on downsizing have identified the phenomenon of procedural fairness as a significant factor as it relates to survivors of layoffs. Procedural fairness refers to how an individual perceives the fairness of a decision to be. Individuals are likely to be influenced by the fairness of the procedures used to derive one's outcomes, independent of either the favorability or fairness of the outcomes received. That is, despite a negatively impending event such as job loss, employees can perceive this event either negatively or positively. How news of an impending downsizing is communicated to employees appears to be one important factor. Equally important appears to be the extent to which employees are allowed involvement in the unfolding downsizing process (how they may be involved in designing or implementing related decisions).

Some previous research has been done on procedural fairness and downsizing. Brockner, Davy, and Carter (1985) examined the relationship between positive inequity, self-esteem and productivity. They derived the concept of positive inequity from previous literature on equity theory (Adams, 1965). According to equity theory, workers are very concerned with being treated fairly. As such, they believe their work input should equal that of comparable others. Any deviation from perceived equity (whether it

is positive – that is, you would perceive yourself to be overly compensated relative to others, or whether it is negative – that is, you would perceive yourself to be under compensated relative to others) would be likely to elicit behavior or belief changes designed to restore a sense of fairness.

In their experiment with a staged layoff, it was found that individuals with higher self-esteem in positive inequity situations were less productive than individuals with lower self-esteem in positive inequity situations. It was deduced from these findings that in order for the survivors to ameliorate their own feelings of guilt at being a survivor, they felt the need to compensate through extra work effort. It could also be speculated that individuals with lower self-esteem felt unworthy of being a survivor, and therefore needed to correct this perceived inequity. In addition, their study revealed an overall tendency for layoff survivors to experience increased feelings of remorse and to develop more negative attitudes toward their co-workers.

Armstrong-Stassen (1998) examined the influence of gender and organizational level on how survivors appraise, cope with, and emotionally react to downsizing. Survey questionnaires were administered to layoff survivors at a telecommunications company in order to discern what differences may exist along gender lines regarding perceived injustice. She considered two closely related concepts as falling under this category: (a) procedural justice (which includes the rules used for implementation of a layoff, as well as what explanations are given to employees for the layoff) and (b) distributive justice (which includes judgements made regarding the selection of employees to be laid off). She found female technicians perceived both greater procedural and distributive justice than did their male counterparts, female clerical employees, or male supervisors.

In addition, the perception of procedural fairness (overall perceived fairness of the procedures used to select the employees to be laid off) has been depicted as a moderating variable in many of the aforementioned negative consequences experienced by all survivors. Brockner & colleagues (Brockner et al., 1992) examined the influence of prior commitment to an institution with perceived procedural fairness. Organizational commitment can be understood as varying degrees of loyalty felt for one's company or work organization. Most definitions have included an employee's belief in the organizations' values or goals, a willingness to exert extra effort on the organization's behalf, and the employees' intention to remain with the organization (Mowday, Porter, & Steer, 1982). In the 1992 study, Brockner et al.'s concept of organizational commitment encompasses a deeper level of trust. It measures an individual's congruency between their attitudes and supportive behavior (to the company), which is due to belief in the company's cause or a desire to support those workers enacting such a cause. The results of their field study showed that surviving employees, who were previously highly committed to their organization and who felt simultaneously unjustly treated by the organization, exhibited the more negative reactions, following the downsizing. These measured negative reactions included their current level of organizational commitment, level of work effort, and turnover intention.

This work gained further support in recent research conducted by Wiesenfeld, Brockner, and Martin (1999). Negative emotions were reported as more frequently experienced by participants who witnessed a portrayal of an unfair organizational downsizing. The negative emotions experienced tended to be in the domain of self-consciousness. Insofar as survivors perceived procedural injustice, Brockner (1990)

demonstrated that survivors would become more withdrawn from their jobs. Mishra and Spreitzer (1998) posited that perceived trust and justice influenced survivor's appraisal and responding to a downsizing, insofar as the downsizing could be evaluated as a threat or not. Davy and colleagues (1991) examined procedural fairness and its connection with global process control. They determined that global process control was a direct antecedent of procedural fairness. Furthermore, they determined that perceptions of procedural fairness and job security had direct effects on job satisfaction. In addition, these researchers found that job security mediated between these variables and organizational commitment.

*Factors Moderating the Impact of Downsizing – Communication*

Related to procedural fairness is the notion of communication during the downsizing process. According to Bunker (1997), openness in communication, coupled with related involvement and participation are key factors that can help mitigate negative impact on survivors. This view is supported by several other researchers involved with organizational change (Brockner, DeWitt, Grover, & Reed, 1990; Richey, 1992). The perception of job insecurity as experienced by layoff survivors has been cited as a relevant factor by several researchers. Greenhalgh and Rosenblatt (1984) found that a layoff survivor's level of job insecurity depends upon both perceived threat of job loss and perceived control. As such, increasing the use of effective communication among layoff survivors has been linked with reducing uncertainty regarding job security (Hunksayer & Coombs, 1998). In addition, Brockner and colleagues (1987) demonstrated that there is a significant decrease in organizational commitment among

layoff survivors following downsizings. As such, increasing the use of effective communication has been shown to increase organizational commitment in this population as well (Grosman, 1989). Lastly, Schweiger & DeNisi (1991) suggest that effective communication prior to a corporate merger can reduce the negative impact of such a change, specifically by minimizing survivors' feelings of uncertainty and enhancing feelings of trust within their company.

## Statement of the Problem

The present study seeks to build upon our existing knowledge of the important roles which both Perceived Procedural Fairness and Stress Resiliency, as well as and subsequent Job Stress and Job Burnout play in bettering our understanding of survivor syndrome. What this study aims to achieve is partialling out the effects of a major organizational/internal factor such as Perceived Procedural Fairness along with a major individual factor such as Stress Resiliency on the degree of healthy coping of downsizing survivors. Research on hardiness is directly related to stress resiliency (Maddi, Kahn, & Maddi, 1998). These authors contend that hardiness encompasses perceptions of control, commitment, and challenge, which help mitigate stressful circumstances encountered. Hardy individuals are better able to turn stressful and potentially debilitating events into developmentally positive experiences. In this way, one will be able to distinguish the relative weight of the role which an external variable (such as Perceived Procedural Fairness) plays in successful coping as well as the relative weight of an internal variable (such as Stress Resiliency).

While the phenomenon of job burnout is of critical importance, the existing

literature on the topic has not yet infiltrated the research conducted with layoff survivors.

A common factor among individuals experiencing high degrees of Job Burnout appears

to be the perception of controllability (Glass, McKnight, and Valdimarsdotti, 1993;

McKnight & Glass, 1995). Another significant factor appears to be the extent to which

employees experience differences in actual vs. perceived work demands (Miller, Reesor,

McCarrey, & Leikin, 1995). Lee and Ashforth (1996) conducted a meta-analysis on

Maslach's three dimensions of Burnout (Emotional Exhaustion, Depersonalization, and

Diminished Personal Accomplishment) and their relationship to turnover intentions,

organizational commitment, and control coping. In this way, managers may gain further

insight into needed changes in how layoffs are conducted. In addition, employee

assistance professionals and/or human resource personnel may see the eventual merit in

embarking on company-wide implementations of Stress Resiliency trainings, to offset the

lowered Stress Resiliency found in certain employees.

## Hypotheses

In order to fully investigate the role which Perceived Procedural Fairness and

Stress Resiliency play in the coping processes of layoff survivors, a sample of male and

female surviving employees in nine Fortune 100 and 500 companies across the United

States will be assessed for this purpose. Surviving employees participating in this study

will be given four measures to complete: (a) A measure of Perceived Procedural Fairness,

(b) A measure of Stress Resiliency, (c) A measure of Job Stress, and (d) A measure of

Job Burnout. Analyses of the respective weighting of Perceived Procedural Fairness and

Stress Resiliency will be obtained, as well as a determination of any moderating effects Stress Resiliency has on Perceived Procedural Fairness.

The purpose of the present study is to begin to fill the gap in the literature regarding what factors contribute most heavily to the coping processes of layoff survivors. Of particular interest in this research are the predictor variables of Perceived Procedural Fairness and Stress Resiliency. Three research questions were developed from this: (a) How strong a role does Perceived Procedural Fairness play with regard to the coping processes of layoff survivors? (b) How strong a role does Stress Resiliency play with regard to the coping processes of layoff survivors? (c) Does Stress Resiliency have a moderating effect on Perceived Procedural Fairness?

The hypotheses of the present study are the following: It is predicted that the predictor variables of Perceived Procedural Fairness and Stress Resiliency will be positively correlated with the criterion variables of Job Stress and Job Burnout. Specifically, (a) It is predicted that the higher the Perceived Procedural Fairness score, the lower the degree of Job Burnout; (b) It is predicted that the higher the Perceived Procedural Fairness score, the lower the degree of Job Stress; (c) It is predicted that the higher the level of Stress Resiliency, the lower the degree of Job Burnout; (d) It is predicted that the higher the level of Stress Resiliency, the lower the degree of Job Stress; and (e) It is predicted that Stress Resiliency will moderate the effect of Perceived Procedural Fairness on both Job Burnout and Job Stress.

Significance of the Study

There are many significant deleterious effects of downsizing. One cannot afford to overlook these effects, as they involve both the survivors as well as the organizations they work in.

*Effects on the Survivors*

Burke and Greenglass (1999) found that full-time nurses who had survived a recent downsizing reported greater emotional exhaustion, poorer physical health and had a higher absenteeism rate. As per disability rates, both Cigna Group Insurance Managed Disability and the American Management Association (1996) reported a significant increase in disability claims among layoff survivors. In addition, after a recent hospital downsizing, Flannery and colleauges (1997) reported higher frequency rates of assaults on staff. Appelbaum (1991) reported as commonplace among layoff survivors decreases in productivity and company loyalty as well as a tendency toward an increase in staff turnover.

*Effects on the Organization*

Armstrong-Strasser (1994) reported that employees who had a higher degree of perceived job threat, while not engaging in a form of control coping, were more likely to experience lower reported job performance. Similarly, Brockner et al. (1992) noted that employees who experienced a high degree of job insecurity (as indicated by feeling a higher degree of job threat, coupled with lower levels of control) were more likely to exhibit lower levels of work effort.

Clearly, neither the effects on the survivors themselves or the effects on the organization can be singly dismissed or overlooked as there is tremendous overlap between the two. It is thus essential to determine the relative weight that the variables of perceived procedural fairness and stress resiliency play in the eventual coping ability of survivors, in order to tailor both individual and organizational interventions accordingly.

## Definition of Terms

The data for this research has been gathered utilizing four testing instruments designed to measure four distinct factors: (a) A Perceived Procedural Fairness subscale was designed by Jim Westaby (2000), based upon previous research of Brockner, DeWitt, Grover, and Reed (1990); Daly (1995) and Davy, Kinicki, and Scheck (1991); (b) Stress Resiliency, as measured by the Stress Resiliency Profile (Thomas & Tymon, 1995); (c) Job Burnout, as measured by the Maslach Burnout Scale (Maslach & Jackson, 1996); and (d) Job Stress, as measured by the Job Stress Survey (Spielberger & Vagg, 1991).

*Perceived Procedural Fairness*

Perceived Procedural Fairness refers to the overall perception of surviving employees as to how they felt the actual downsizing was conducted. Among some of the areas of concern involve: (a) Was adequate advance notice given regarding the forthcoming layoff? (b) Was the layoff justified? And (c) Did management offer adequate reasons for the layoff? (Brockner, 1992; Moskal, 1992). Perceived Procedural Fairness

will be measured by the subscale developed by Jim Westaby (2000). The subscale contains twenty-six questions, and response choices range from 1 – 5, and will alternately denote relative levels of both positive and negative perceptions of procedural fairness. A higher score on this scale reflects a more positive perception of Procedural Fairness, whereas a lower score reflects a more negative perception of Procedural Fairness.

*Stress Resiliency*

Stress Resiliency is closely related to hardiness, and measures an individual's ability to cope when faced with stressful, adverse situations (Kobasa, 1979). Thomas and Tymon (1995) have operationalized three aspects of Stress Resiliency: (a) Deficiency Focusing, (b) Necessitating, and (c) Low Skill Recognition. Stress Resiliency will be measured by the Stress Resiliency Scale developed by Thomas and Tymon (1995). The scale consists of 18 items and response choices range from 1 – 7. The three aforementioned aspects of Stress Resiliency will be measured, and participants will be subsequently categorized as being either most stress resilient, moderately resilient, or most predisposed to stress.

*Deficiency Focusing*

This refers to an individual's tendency to focus on the negatives of a situation, and to minimize the positives. This is similar to Beck's cognitive-behavioral (1976) cognitive distortion of "Black and White thinking." This subtype of Stress Resiliency is measured by Thomas and Tymon's (1995) Stress Resiliency Scale.

*Necessitating*

This refers to an individual's tendency to resort to imperatives such as "should" or "must" statements. This is similar to Beck's cognitive-behavioral (1995) cognitive distortion of "Must and Should statements." A person resorting to Necessitating is likely to feel that tasks are inflexible demands and that they have little control in their decision making. This subtype of Stress Resiliency is measured by Thomas and Tymon's (1995) Stress Resiliency Scale.

*Low Skill Recognition*

This refers to a tendency to minimize one's own competencies and attribute successes to external forces. Implicit in this belief is that an individual does not recognize the role of their own abilities in producing their own successes. This subtype of Stress Resiliency is measured by Thomas and Tymon's (1995) Stress Resiliency Scale.

*Job Burnout*

The authors of the Maslach Burnout scale General Survey version (Maslach, Jackson, & Leiter, 1996) have operationally defined three subcales related to Job Burnout: (a) Exhaustion, (b) Cynicism, and (c) Professional Efficacy. Job Burnout will be measured by the Maslach Burnout Scale (Maslach, Jackson, & Leiter, 1996), General Survey version. The scale consists of sixteen test items and response items ranging from 0 – 6, which corresponds to relative levels of experienced frequency.

Participants will be measured on the three aforementioned subscales of Burnout, and will be categorized in each category as experiencing either high, moderate, or low

levels of Exhaustion, Cynicism, and Professional Efficacy respectively. Based on this analysis, participants will then be categorized as experiencing either high, average, or low degrees of Burnout.

*Exhaustion*

This represents the degree to which an individual feels fatigued by their work. This subtype of Job Burnout is measured by the Maslach Burnout Scale - General survey version (Maslach, Jackson, & Leiter, 1996).

*Cynicism*

This represents the degree to which an individual remains indifferent or distant in their attitude toward their work. This represents an attitude specifically toward the work itself, and not to personal relationships at work. This subtype of Job Burnout is measured by the Maslach Burnout Scale – General survey version (Maslach, Jackson, & Leiter, 1996).

*Professional Efficacy*

This represents the degree to which an individual focuses on their own professional expectations of themselves. Specifically, it measures an individual's expectation of their own continued effectiveness at work. This subtype of Job Burnout is measured by the Maslach Burnout Scale – General survey version (Maslach, Jackson, & Leiter, 1996).

*Job Stress*

The authors of the Job Stress Survey (Spielberger & Vagg, 1991) wanted to identify sources of generic occupational stress. They contend that job stress is a combination of perceived severity of particular job stressors as well as the frequency of their occurrence. They cite job stress pressure and lack of organizational support as two critical stressors. Job Stress will be measured by the Job Stress Survey (Spielberger & Vagg, 1991). The measure consists of sixty test items and measures two types of job stress as well as experienced frequency of these stressors. The two types of Job Stress (Job Pressure and Lack of Organizational Support) are rated on a 1 – 9 scale, where lower numbers represent lower amounts of experienced stress and higher numbers represent higher amounts of experienced stress. Participants also rate the frequency of these two types of job stressors on a 0 – 9 scale, which corresponds to number of days on which the event occurred during the past 6 months. The Job Stress Survey yields three scales of Job Stress (Job Stress Index, Severity, and Frequency) and six subscales of Job Stress (Job Stress Pressure Index, Severity, and Frequency) and (Lack of Organizational Support Index, Severity, and Frequency). According to a participant's job status (managerial or non-managerial), their scores will be compared with published normative data corresponding to their job category.

*Job Stress Pressure*

This directly relates to pressures experienced in an individual's work day, including: working overtime, meeting deadlines, doing excessive paperwork, etc. This subtype of stress is measured by the Job Stress Survey (Spielberger & Vagg, 1991).

*Lack of Organizational Support*

This directly relates to perceived problems regarding support within the organization. This includes difficulty getting along with supervisors or poorly motivated coworkers, as well as a lack of opportunity for advancement. This subtype of stress is measured by the Job Stress Survey (Spielberger & Vagg, 1991).

## Limitations of the Study

There are some potential threats to internal validity in this study. The dependent measures of Job Stress and Job Burnout will only be measured at one point in time. It is plausible that employees reporting high levels of both Job Stress and Job Burnout experienced these prior to the layoff, and have little to no relationship to the layoff at all. It could be that such employees are experiencing Burnout due to an ongoing unhealthy relationship with their supervisor, or to the nature of the job itself. By not establishing a baseline of Job Stress for a particular job, it could well be the case that a particular job carries with in an intrinsically higher level of Stress. In addition, there are several threats to external validity in this study. In addition, because the subject pool will be exclusively comprised of corporate employees, one may need to consider the generalizability of this population to the general working population which includes many human services industries.

## Summary

There have been a number of damaging effects of downsizing both on the survivors themselves and the organization which has retained them. Noer (1993) first

developed the term "layoff survivor sickness" which aptly captures the compilation of

deleterious emotional effects on downsizing survivors and draws parallels to individual's

who have experienced other traumas such as natural disasters and related tragedies. It is

now also clear that survivors experience disruption in their work effort and production

(Appelbaum, 1991; Brockner, et al., 1992). In addition, survivors experience an increase

in absenteeism and a decline in physical health (Burke & Greenglass, 1999).

These effects cannot be overlooked, as the likelihood for future downsizings

looms (Appelbaum et al., 1987). As an outcome of this study, it is hoped that two critical

variables, Perceived Procedural Fairness and Stress Resiliency can be better understood

in terms of their relative impact on the healthy coping of layoff survivors. From this

enhanced understanding, human resource personnel and organizational psychologists

can tailor both individual and organizational interventions accordingly.

CHAPTER II

Review of the Literature

Effect on Survivors

The toll taken in the aftermath of a layoff has both individual and organizational effects on its survivors. This section will outline the range of these effects in the following order: (a) Emotional effects, (b) Effects on health, (c) New Expectations, (d) Effect on performance, (e) Effect on job security, (f) Effect on turnover intention, (g) Effect on company loyalty, and (h) Effects on managers.

*Emotional Effects*

To date, there have been few studies conducted empirically studying the emotional effects of downsizing on survivors. More recently, the relationship between downsizing and the manifestation of anger, hostility, and psychosomatic reactions in hospital-based nurses was investigated by Greenglass and Burke (2000). A correlational study was conducted with the delivery of a mail-in survey to 1363 nurses, the majority of whom were women (94%). There were five types of measures assessed in this study:

1.    Downsizing Measures included the Restructuring Initiatives Index (which measures a variety of restructuring activities such as closing of units and beds and workload; the Impact of Restructuring Index, which measures the negative effects on

health care; and the Hospital Facilites Upkeep Index, which measures the degree of deterioration in hospital services and facilities, such as cleanliness.

2.      Hospital Support Measures included the administration's Vision of the Hospital in the future; the administration's efforts to encourage nurses to participate in hospital restructuring decisions and the extent to which the administration disseminated information and boosted the morale of hospital staff.

3.      Job Measures included workload, the use of generics (the extent to which generic workers replaced nurses) and Job deterioration (the extent of deterioration in nurses jobs, including the perceived liklihood of being laid off.

4.      Measures of Anger, Hostility, Depression, Anxiety, and Psychosomatic manifestations.

5.      Measures of Coping styles included both Control Coping and Escape Coping.

There were several salient findings in this study, all of which were significant at a minimum $p < .05$. Finding 1 was the following: Psychosomatic symptoms increased with more work and restructuring initiatives. Specifically, there were positive correlations between excessive workload, anxiety, frustration, job dissatisfaction, and psychosomatic symptomotology. Higher levels of depression, anxiety and psychosomatic symptomotology were associated with perceptions that restructuring initiatives had lowered health care quality, had negatively affected working conditions and staff morale, and made it difficult to provide services.

Finding 2 was the following: Nurses were less likely to experience psychosomatic reactions when they had a clearer sense of the hospital's future. The authors explain

this by the belief that having added information increases an individual's sense of control, or predictability. Jackson (1983) supports this contention by adding that perceived control is associated with decreased stress and improved health. The role which enhanced communication plays during a downsizing will be addressed in greater detail in the forthcoming subsection titled *Perceived Procedural Fairness*. The role which perceived individual control contributes to one's relative levels of Stress Resiliency will be addressed in the forthcoming subsection titled *Stress Resiliency*.

Finding 3 was the following: Anger and hostility were associated with more restructuring initiatives. Specifically, the greater the replacement of generic workers for nurses and an increase in workload and job deterioration resulted in higher levels of anger and hostility.

Finding 4 was the following: Hostility increased with greater workload, restructuring initiatives and its impact, the substitution of generic workers for nurses, a lessening of hospital upkeep and job deterioration.

The final finding was the following: In terms of coping styles, anger was higher with escape coping and lower with self-efficacy coping. It should be noted that the majority of the pool of participants was female, and therefore generalizability to the general population should be done cautiously.

As previously indicated, most of what is currently known about survivors' emotional reactions to downsizing has been observational in nature. According to *Industry Week* staff writer Brian Moskal (1992), survivors often feel an initial sense of relief for having been spared in the layoff, and then quickly feel a sense of sadness for the loss of their co-workers and friends. He based these impressions on observations of

survivors from Computer, a company that experienced rapid growth in the 1980s, and later underwent a series of downsizings.

The experience of profound sadness by survivors is a universally agreed phenomenon. According to Jeanie Duck, an East Coast Business Consultant (Moskal, 1992), it is imperative that survivors have the opportunity to grieve over what has transpired since their downsizing. She believes that employees need to openly discuss the cutbacks with both colleagues and managers alike. She contends that managers need to make themselves available to such discussions, lest they appear aloof and exempt from the pain. She further adds that unprocessed grief can have several deleterious consequences. Such survivors might be apt to sabotage new strategic initiatives, if they are still clinging to the image of their company in the past. Similarly, displaced anger toward the company could manifest itself in the badmouthing of new projects.

Another common emotion experienced by survivors is a sense of guilt. Michael Perlman, a principal member of a West Coast external employee assistance program, bases his impressions from clinical observations of employees seen in his EAP (Moskall, 1992). He contends that survivors experience a type of guilt similar to that which is experienced by individuals who survive a plane crash, or similar disaster. He adds that oftentimes, there are accompanying fears and anxieties of "being the next one to go."

There has been a wide range of notable emotional effects observed among layoff survivors. Among these were increases in psychosomatic symptoms and hostility when both workload increased and when restructuring initiatives occurred as well as when

participants had a more obscured view of their organization's long-term goals. In addition, several researchers noted that feelings of grief and guilt tend to emerge among the survivors of a downsizing. One can speculate as to the significant ramifications these emotional effects can have both in the short and long-term, as well as both individually and systemically.

## Effects on Health

The significance in highlighting the physical ill effects experienced by downsizing survivors should be apparent. Employees experiencing either repeated bouts of a physical illness or that of a chronic condition are more likely to incur higher rates of absenteeism on the job (Burke & Greenglass, 2000).

The connection between an employee's perception of negative impact on the organization due to restructuring initiatives and increased levels of somatization were previously detailed in the subsection *Emotional Effects* (Greenglass & Burke, 2000). To recap, the more nurses perceived that restructuring had negatively affected working conditions, staff morale and health care quality, the higher was their level of somatization.

Burke and Greenglass (2000) sought to determine whether or not significant differences with regard to physical health, medication use, and the experience of psychosomatic symptoms existed between full and part-time nursing staff who had survived a downsizing. These researchers utilized mailed surveys to hospital-based union member nurses in Ontario. A total of 1362 participants were included in the study.

Physical health was measured by a six-item scale, asking participants to indicate if they had been diagnosed with a variety of physical conditions within the past three years. Among some of the conditions listed were: migraine headaches, ulcers, and high blood pressure. Medication use was measured by a five-item scale indicating how often they took various medications. Among those listed were: tranquilizers, sleeping pills, and pain medication. Psychosomatic symptoms were measured by a thirty-item scale, asking participants how often they experienced particular symptoms within the past three months.

Among those listed were: dizziness, faintness, poor appetite, and lower back pain. Their study indicated that full-time nurses experienced significantly poorer physical health and greater medication use than part-time nurses. However, there was no apparent significant difference in experience of psychosomatic symptoms between the two groups. The authors speculated that the two former significant differences were more likely influenced by the fact that the full-time nurses were of greater age, had spent more hours on the job, and had greater work-family conflict.

Zeitlin (1995) reported on the effects of organizational downsizing and stress-related illness in the U.S. maritime shipping industry. This industry has experienced a loss of 75% of its jobs in a working lifetime. What it has endured from an organizational change perspective over the past twenty years has foreshadowed many of the problems in the industrial U.S. today. Those having particular relevance to the current study at hand are: (a) The coping with rapid economic and/or technological change which could easily result in the need for less manpower, and (b) A declining industrial job base.

In the mid 1970s, the National Maritime Research Center established the Merchant Marine Accident Data Base. This consists of the career long illness/injury reports of 22,763 seaman, representing 222,875 incidents. Of the 82,100 illness reports contained within this data base, a total of 11,903 reports (14.5% of all reported illnesses) were considered to be stress-related. The eight diseases chosen were the following: (a) cardiovascular disease, (b) hypertension, (c) heart attack, (d) psychoneurosis, (e) suicide, (f) peptic ulcer, (g) arthritis, and (h) asthma.

From his analysis of the data base, he determined that seaman who were higher in rank (i.e., licensed deck and engine personnel) versus seaman lower in rank (i.e., unlicensed engine personnel) experienced a significantly higher ($p < .05$) stress-related disease rate. Zeitlin (1995) speculates that the higher stress levels experienced among the licensed personnel are due to several factors. Among these are: (a) declining job opportunities due to downsizing, (b) accommodating to ongoing technological and situational changes, and (c) the difficulties of handling supervisory responsibility in times of diminishing management authority.

The physical ill effects experienced by layoff survivors has understandably gained attention in recent years. Increases in psychosomatic symptomology as well as that of stress-related diseases were noted in this population. The fiscal consequences for the upsurge in medical problems for this group are apparent.

*New Expectations from Survivors*

According to David Noer from the Center for Creative Leadership (Chaudron, 1994), layoff survivors are likely to experience a host of altered expectations regarding

their organizations. Survivors are likely to expect that any training received after the layoff will include transferable skills and not be solely focused on their current work environment.

Similarly, survivors are likely to expect "job shopping" to be anticipated by their employers, given the tenuousness of their current positions. It is conceivable that clashes could occur in corporate cultures which are insensitive or in denial about such modified employee expectations. A company which insists on employees remaining beholden or dependent on a single company may encounter escalating tensions. It seems apparent that both employer and surviving employee endorse common expectations in this regard.

Layoff survivors are apt to possess new expectations of their management, given the ensuring changes in their organization. Among these are the expectation that future job training necessarily includes transferable skills, as well as the fact that survivors in tenuous job positions will likely consider more stable, alternate job possibilities outside of their current firm. This shift in employee loyalty needs to be recognized in order to offset any ensuing conflicts with management.

## Effect on Performance

According to David Noer from the Center for Creative Leadership (Chaudron, 1994), in order to ameliorate stress, layoff survivors are likely to become risk-adverse in the aftermath of a downsizing. He further contends that the avoidance of risk-taking is likely to affect productivity in today's business world.

Several studies have systematically examined how productivity is affected in the

aftermath of a downsizing. In 1991, research was conducted in the Air Defense Systems Division of General Dynamics Corporation, which had recently undergone a 29% reduction in its workforce (Richey, 1992).

Employee surveys were distributed with the intent of collecting data on the following topics: (a) the effect of the layoffs on job performance, morale, and loyalty to the company; (b) the effectiveness of the communication process; (c) the fairness with which laid off employees were treated by the company; (d) the supportiveness of family and co-workers during the layoff period; and (e) the effectiveness of various outplacement services offered to laid off employees.

A comparison was made among three employee groups: (a) employees who were going to be laid off, (b) employees who had already been laid off and were no longer working for the company, and (c) employees who were neither laid off or on layoff notification. For the purposes of this subsection, only data relevant to the layoff survivors and their performance will be discussed here. A total of 260 survey questionaires were returned from the three subject groups. A total of 90 surveys were completed by the survivor group, which represented a 60% return rate.

The findings that 29% of the survivors indicated that their job performance had either decreased or decreased significantly, yet 19% of the survivors indicated that their job performance had either increased or increased significantly. How might this latter finding be accounted for? While previous research has indicated that an initial increase in productivity following a downsizing is not unlikely (Appelbaum et al., 1987), when this does occur, it is often followed by depression and lethargy. Other researchers have

contended that in order to cling onto their jobs, survivors will put forth an increased work effort (Brockner et al., 1992).

In 1994, Armstrong-Stassen designed a study to investigate layoff survivors' reactions with regard to job performance, organizational commitment, and turnover intentions from a stress and coping perspective. Survey questionnaires were distributed to 200 technical employees in a major telecommunications company. In addition, 22 in-depth interviews were conducted. The purpose of conducting the interviews was to provide a context for interpreting the questionnaire results.

The majority of the participants were male (76%), the remainder (24%) were female. Coping resources were operationalized as encompassing the following three measures: (a) Optimism: as measured by the Life Orientation Test (Scheirer & Carver, 1985); (b) Mastery: as measured by Pearlin and Schooler's (1978) Sense of Mastery Scale; (c) Social support: as measured by the Supervisor and Co-worker Support subscales (Caplan et al., 1975). Stress appraisal was operationalized as the perceived threat to one's job and relevant items were adapted from Jick (1979). Coping strategies were measured by the Coping scale from Latack (1986). Organizational commitment was measured by the Organizational commitment scale by Cook and Wall (1980). Turnover intention was measured by items taken from Cammann et al. (1983) and are part of the Michigan Organization Assessment Questionnaire. Lastly, job performance was assessed by a single survey question asking participants to describe their current job performance.

Armstrong-Stassen (1994) distinguished two coping styles relevant to her research: control coping versus avoidance coping. Control coping consists of actions and

cognitive appraisals that are more proactive in nature, whereas avoidance coping consists of actions and cognitive appraisals that are more avoidant and escapist in nature. She predicted that control coping would be significantly positively related to organizational commitment and job performance and negatively associated with turnover intention. In addition, she predicted that escape coping would be negatively related to organizational commitment and job performance and positively associated with turnover intention.

Both these predictions were confirmed. Survivors with a high perceived threat of job loss who engaged in high control coping reported significantly higher job performance than those with high perceived threat of job loss who did not engage in control coping. Survivors with high perceived threat of job loss who resorted to escape coping reported significantly lower job performance than those with high perceived threat who did not use escape coping.

The findings in this study should however, be considered cautiously, as the pool of participants underrepresented females, as well as the fact that only one test item was used to measure job performance. Moreover, it is conceivable that employees may not be as objective regarding their own performance and that a supervisor might be a more objective judge.

Lastly, survey data collected from 909 companies who had downsized within the past five years provided the basis for research conducted by Raber, Hawkins, and Wesley (1995). Survey questionnaires were distributed to human resource managers in companies who sustained layoffs within the past five years. Questions were targeted to the survivors in their respective companies.

With regard to job performance, two important findings surfaced: (a) Eighty-four

percent of the human resource managers reported that survivors performed competently after the downsizing; (b) 75% of employees were reported as maintaining productivity, and (c) 66% of employees were reported to be able to work in teams after downsizing.

The effect on employee performance has been studied among layoff survivors. Both decreases and (seemingly paradoxical) increases in work performance have been noted. In addition, the relationship between an employee's coping style and job performance was demonstrated. The link between performance, productivity, and profitability is clear and likely to be an important concern to an organization's viability.

*Effect on Job Security*

In 1998, Armstrong-Stassen wanted to examine layoff survivors and how the variables of gender and organizational level may affect their ability to appraise, cope with, and emotionally react to downsizing. Her research population consisted of 236 employees from a telecommunications company who had recently survived a layoff. Participants included clerical employees, technicians, and managers. To note, the technicians were placed into two groups. Group 1 had only experienced this as their first downsizing, while Group 2 had endured five downsizings to date. Utilizing surveys, she wanted to look at levels of perceived job insecurity, perceived injustice, sense of powerlessness, coping strategies, and emotional reactions. Perceived job insecurity was assessed through an index developed by Jick (1979), which assesses the degree of worry about job security, the likelihood of being laid off, and expectations for the future of the organization.

There were two salient findings related to job security in this study. First, on the

overall, male and female layoff survivors did not differ in perceived job insecurity. Secondly, while no significant difference existed between clerical employees, supervisors and technicians with regard to perceived job insecurity, significant differences did exist between the two groups of technicians. There were significantly higher levels of perceived job insecurity in Group 2 (those who had endured five previous layoffs) as compared with Group 1 (who had only endured this recent layoff). This would suggest that job insecurity is more strongly affected by the number of times one has survived a layoff, as compared with factors such as gender or job position.

In 1994, Dunlap conducted a qualitative study examining the main effects of job security, desire for justice, and level of job enrichment in layoff survivors. Structured interviews were conducted with six layoff survivors from a computer software development and training company. Two middle managers and four non-managers were interviewed in this study.

There were three salient themes which emerged in regard to the survivor's job security:

1.     In order to shield themselves from a future downsizing, those interviewed reported that many employees seemed to take on additional, unfulfilling responsibilities in order to appear indispensable.

2.     At times, employees would report being given varying levels of workload. Because of this variability, these same employees were unclear about management's expectations of them, and subsequently how they might be evaluated.

3.     Employees often reported a fear of making mistakes, and subsequently reported a lowering of risk-taking and innovation. At times, this was reported to lead to

decreased levels of employee contribution.

While the number of interviews was clearly limited in this study, valuable themes emerged regarding the impact job insecurity has on job performance.

The effect on job security has been explored with regard to layoff survivors. Varying factors seemed to generate or exacerbate an employee's level of job security. In particular, the greater the number of layoffs which one has lived through appears to decrease the perception of job security. In addition, in response to an increased level of experienced job insecurity, employees were found to lower their level of risk taking and innovation as well as commitment to an increase in job tasks in order to appear more indispensable. Job insecurity also appeared increased by unclear expectations from management, fueling concerns about their own job evaluation. As such, one can readily speculate as to the longer-term corrosive effects of job insecurity.

*Effect on Turnover Intentions*

In 1994, Mone wanted to determine what effect individual-level factors such as self-esteem, personal goals, task self-confidence, job satisfaction, and organizational commitment had on layoff survivors' intentions to leave the downsized organization. In this study, Mone posed three specific questions:

1.　Are self-efficacy and self-esteem predictive of intent to leave a downsized organization?

2.　If it is shown that self-efficacy and self-esteem are predictive of such intentions, are the effects indirect or direct? Are the effects mediated by other factors such as job satisfaction, organizational commitment and/or personal goals?

3.      How do the relationships among aspirations, self-concepts and the intent

to leave an organization vary in downsized versus non-downsized organizations?

Survey questionaires were distributed to 145 layoff survivors at an industrial

anufacturing company which had undergone a 25% reduction in headcount four

weeks prior. The majority of respondents were male (76.6%). Eight measures were

assessed in the study: (a) Self-efficacy was measured by four job duty subscales. These

measured varying levels of attained mastery for core job duties; (b) Global self-esteem

was measured by Rosenberg's (1965) scale; (c) Role self-esteem was measured by two

items developed by Mone (1994) which tap how important an employee feels in their

organization and work team; (d) Task self-esteem was measured by five items developed

by Hollenbeck and Brief (1987) which tap mastery of one's main job task, performing

one's main job task as well as one would like, and confidence in performing well; (e)

Goal setting was measured by six items from Locke and Latham's (1990) scale; (f) Job

satisfaction was measured by Brayfield and Rothe's (1951) scale; and (g) Organizational

commitment was measured by Allen and Meyer's (1990) Affective Commitment Scale.

There were several noteworthy findings in this study: (a) Self-efficacy was

positively and significantly related to intent to leave a downsized organization; (b) Task

and role self-esteem were not significantly better predictors of intent to leave than was

general self-esteem; (c) Self-efficacy and self-esteem affect personal goals, job

satisfaction, and organizational commitment, which in turn, influences intent to leave; (d)

Higher self-efficacy leads to greater task and role self-esteem and to higher personal

goals. This in turn enhances job satisfaction and commitment which reduce the intent to

leave; (e) Higher task self-esteem increases role and general self-esteem, and higher role self-esteem enhances commitment, thus reducing an intent to leave; and (f) The direct effects of self-efficacy and role self-esteem are to increase the intent to leave a downsized organization.

As downsized companies will strive to retain their remaining surviving workforce, it will become increasingly important to become cognizant of the aforementioned individual level factors that might influence a surviving employee to leave the organization.

Mone's (1994) study demonstrated how among layoff survivors, self-efficacy and self-esteem influence the intent to leave a downsized organization. This highlights the importance of these two variables and warrants further querying into how they can be better bolstered.

## Effect on Company Loyalty

Brian Grosman (1989), a Canadian attorney, described some noteworthy observations he made while working in a downsized law firm. He noted how unrealistic corporate expectations arise when companies resort to using euphemisms to describe the current state of the organization.

In particular, he found a tendency in his firm to distort the reality of ongoing layoffs and uncertainty and espouse misleading concepts such as: *We are your corporate family* and *We endorse employee participation in decision making*. These expectations in turn, are likely to be placed upon those managers who are doing the actual firing. They are likely to feel compelled to justify the act of firing, and as such, are apt to feel

(what might appear to be paradoxical) hostility toward the employees who are to be fired.

Subsequently, these (ambivalent) managers are likely to feel their firing behavior is an act of disloyalty to their peers, associates, and employee-participants. Similarly, those being terminated as well as their surviving colleagues are apt to view the managers' behavior as a breach of the original employment contract they entered, which likely implied implicit or explicit employment longevity. He contends that this will likely culiminate in feelings of pervaisive cynicism among managers and surviving employees.

Among surviving employees and managers, disruption of company loyalty has been noted. In the aftermath of a downsizing, a chain of events can ensue, fostering feelings of disloyalty throughout the organization. One can only speculate as to the long-term effects of such systemic negativity.

*Effect on Managers*

Duke Kroft, group manager of data processing for Steelcase Inc., noted several distinct reactions displayed by managers in the aftermath of a layoff (Moskal, 1992). Initially, managers were apt to feel guilty about having to terminate certain subordinates. Soon after, they described feeling angry about having to make cutbacks in their department when they were already lean on manpower. Ultimately, many managers noted their tendency to bury themselves in their own work, which became "back burnered" during the period that the layoffs were being conducted. This resulted in their inability to walk around and be physically accessible to subordinates who might have needed their support at the time. Lastly, Kroft noted that managers needed to modify their behavior in the case of a layoff which was large-scale in scope, as opposed

to one which was performance-based, with only a handfull of employees being terminated. In the former case, managers needed to continually reassure those employees that their terminations were not performance-based.

Luthans and Sommer (1999) conducted a longitudinal, quasi-experimental field study in order to determine whether differences existed between managers and other staff members in a downsized health care organization. They wanted to determine two things: (a) Were there significant differences between managers and other front line staff in terms of perceptions of job attitudes, and (b) Were there differences between managers and other front line staff members in terms of their reactions to downsizing.

The study was conducted in a medical rehabilitation hospital in the Midwest over a 3-year period. The total number of participants was 848, this represented 95% of the managers and 60% of the full-time staff. Control groups were used and consisted of departments within the company which had not been affected by downsizing. Four scales representing four distinct types of work attitudes were administered to both groups. These fours measures were: (a) Organizational commitment (as measured by the Organizational Commitment Scale (Mowday, Steer, & Porter, 1979); (b) Job satisfaction (as measured by the Job Diagnostic Survey (Hackman & Oldman, 1980); (c) Supervisor support (as measured by the Supervisor Support Scale (Pearce, Branyiczki, & Bakasci, 1994); (d) Workplace trust (as measured by a scale tapping the perception of shared work objectives and mutual support, developed by Pearce et al. (1992).

The first hypothesis stated that both managers and non-managers would experience less positive work attitudes following a downsizing. Of the four work attitudes, all except supervisor support significantly declined for both groups. In

addition, organizational commitment and job satisfaction were significantly different for both managers and non-managers in those departments affected by downsizing.

The second hypothesis stated that managers would report higher levels of organizational trust and workgroup trust as compared with non-mangers. In addition, managers reported higher levels of supervisor support than did non-mangers.

Lastly, while job satisfaction for both managers and non-mangers declined over the downsizing period, there was no significant difference between these two groups.

There are several implications one can draw from this. The first is that both managers and non-managers are more likely to target their frustrations externally toward the organization rather than toward their immediate colleagues. This is supported by the fact that supervisor support did not decline over the course of the downsizing, while other significant work attitudes did.

The second implication concerns the fact that overall, managers reported little change in work attitudes over the 3-year duration of the downsizing period. Insofar as managers were more actively involved in the plans and progress of the unfolding layoff plans, they were likely to have a longer-term vision for benefits to this organizational overhaul.

In addition, it was noted that there were parallel declines in work attitudes between departments that were being downsized, as well as in those departments that were not. While at first glance this might seem peculiar, it could be the case that the non-affected departments were feeling empathy toward those in the affected departments. These last two implications are strongly related to perceived procedural fairness, one of the criteria variables latter discussed at length.

Finally, Armstron-Stassen (1997), investigated the effect of repeated downsizings on surviving managers in a major U.S. corporation. Questionaires were distributed to 38 remaining managers at a Fortune 100 company which had undergone a series of layoffs in previous years. Specifically, Armstrong-Stassen wanted to determine: (a) The effect of being subjected to a series of layoffs; (b) How surviving managers coped with the downsizings; (c) What were the levels of job strain and burnout among surviving managers; (d) What was the level of support and commitment surviving managers perceived from their organization; and (e) What was the level of commitment to their own organization among surviving managers.

Through the distribution of surveys, surviving managers were asked to indicate how many layoffs they had endured during their tenure at the company. Responses ranged from 1-9 times. Coping strategies consisted of four types: (a) positive thinking, (b) direct action, (c) help-seeking, and (d) avoidance/resignation. Outcome measures consisted of the following: (a) Job-related strain was measured by 4-items taken from the Job-Tension scale (Kahn et al., 1964); (b) Burnout was measured through the emotional exhaustion subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1981); (c) Perceived Organizational Support was measured by the Survey of Perceived Organizational Support scale (Eisenberger et al. 1986); (d) Organizational commitment was assessed by the Affective and Continuance Commitment scales (Meyer et al. 1993).

There were several important results in this study:

1.      Managers who were subjected to greater numbers of repeated downsizing reported higher levels of continuance commitment to the company. Continuance commitment refers to one's intention to remain in a company after weighing the costs of

leaving the company with the lack of alternatives available and associated sacrifices involved.

2.    Managers who were declared surplus (and thus needed to find a job elsewhere in the company or risk being laid off) were less likely to engage in direct action and positive thinking coping, reported significantly higher levels of both job-strain and job burnout, perceived significantly less support from their organization and reported higher continuance commitment.

3.    Managers who had been subjected to higher numbers of layoffs reported few long-term negative effects, as compared with managers who had been exposed to fewer layoffs. This finding is particularly intriguing as it may relate to the notion of stress resiliency and hardiness – one of the criteria measures in this study which will be later addressed in greater detail.

While a major limitation to this study is its small sample size, the variables investigated are of the upmost significance in survivor research. As such, replication of this study with a larger population would be warranted.

The effects on managers in a downsized organization vary greatly. Feelings of guilt and anger on the one hand appeared to be generated. Similarly, managers who were declared surplus within the organization reported experiencing higher levels of job strain and job burnout. On the other hand, it appears that other managers in some sense were buffered from the stress of the layoff and ensuing reorganization because of their active involvement in the logistics and implementation of such. The variability of such reactions should be highlighted and more systematically studied.

<center>Perceived Procedural Fairness</center>

One of the critical variables expressed by layoff survivors is procedural fairness. As a downsizing is being conducted, those employees being retained by their company (the survivors) need to have a grasp of what they can expect from their company both in the short and long term. These expectations are likely to emanate from two sources: distributive fairness and procedural fairness. The former refers to a survivor's perception of how the terminated employees were treated following the layoff announcement. For example, were the terminated workers given adequate severance pay or were they given any outplacement assistance in finding another job. Distributive fairness can be conceived as a subset of procedural Fairness. Procedural fairness refers to how the outcomes of the layoff decision were determined. It can be distinguished as having two aspects to it: structural and interpersonal (Folger & Bies, 1989). The former deals with how the decisions are made; the latter deals with the considerateness and social sensitivity of the people in positions of responsibility. How an organization communicated the news of the impending layoff, for example, is a critical consideration. Were clear explanations offered to employees? Was the news communicated in a timely manner? Were the explanations offered to employees fair and reasonable? It is conceivable that employees experiencing these variables in the negative may view the recent layoff as a more unpredictable situation. In turn, this could color their feelings of trustworthiness toward their company, even in matters unrelated to downsizing (Brockner, Wiesenfeld, Reed, Grover, & Martin, 1993).

The concept of perceived fairness (Brockner et al., 1993) is strongly related to Procedural Fairness. The former embodies a broader conceptualization of how an individual feels he/she was treated in a particular situation. Brockner and colleagues

conducted two studies examining the role perceived fairness played in relation to other salient survivor variables. The first study was a field survey of 597 layoff survivors in small, company-owned retail stores throughout the U.S. Specifically, this correlational study sought to determine the interrelatedness between the independent variables of: (a) perceived job quality relative to before the layoff, (b) perceived fairness, and (c) survivors' perceptions of their co-workers' reactions to the layoffs on the dependent variables of survivors' retrospective self-reports regarding their organizational commitment relative to before the layoff and survivors' retrospective self-reports regarding their turnover intentions relative to before the layoffs.

The independent variable of (a) perceived job quality was measured by five items taken from a related scale by Hackman and Oldman (1980); (b) perceived fairness was measured by validated related test items drafted by Brockner and colleagues (1993); and (c) perceived co-workers' reactions were measured by validated related test items drafted by Brockner and colleagues (1993). A control variable measuring survivors' prior attachment to the terminated employees was also included in the study. Two validated related test items were drafted by Brockner and collegues in 1993 to assess this.

The dependent variables of organizational commitment was measured by a related scale developed by Schwyhart and Smith (1972) and turnover intention was measured by a related validated test item drafted by Brockner and colleagues (1993).

There were several pertinent results in this study:

1.       Survivors' reported a significantly lower level of organizational commitment when they perceived job quality was diminished, perceived fairness was

relatively low, and perceptions of co-workers' reactions were more negative, and survivors' prior attachment to the layoff victims was relatively high.

2.    Survivors reported greater turnover intentions when the perceived job quality diminished and when perceptions of co-workers' reactions were more negative

3.    Perceived fairness had a more positive relationship with organizational commitment when prior attachment to layoff victims was high – that is, when perceived fairness was low rather than high, it was more closely related to the favorability of their co-workers reactions.

4.    A perceived change in job quality yielded a stronger change in organizational commitment when perceptions of co-workers' reactions were relatively favorable and when perceived fairness was relatively high.

5.    A perceived change in job quality yielded a stronger change in turnover intention when perceptions of co-workers' reactions were relatively favorable and when perceived fairness was relatively high.

Brockner and colleagues (1993) conducted a second study in the form of a laboratory experiment. Their aim was to determine the effect perceived job quality and perceived fairness had on participants' perceptions of the study's significance as well as their overall reaction to haven taken part in the study.

A total of 52 undergraduate students were recruited for this experiment. The independent variables of perceived job quality and perceived fairness were measured respectively by using four validated questions asking participants to evaluate the intrinsic

interest of the task and handling the staged experiment in either a fair or unfair manner. The dependent variables of one's perception of the study's significance as well as their overall reaction to haven taken part were measured respectively by a two measure index created by the authors tapping the believed significance of the study as well as future learnings to be derived by this study and a one item measure tapping participants' reactions to haven taken part in the study.

The results from this study supported the contention that perceived fairness is a significant factor in the downsizing process. Individuals reacted significantly $(p < .01)$ more favorably when the staged layoff they witnessed was handled fairly as opposed to unfairly. This was particularly the case when individuals were subjected to an uninteresting verus interesting job task. Specifically participants tended to attribute significantly greater impact to the purpose of the study in the interesting versus boring task condition when subjected to a fair versus unfair condition. Participants also rated their reactions to the study significantly more positively in the fair/interesting task condition versus fair/boring task condition.

This study demonstrates that perceived fairness acts as a moderating variable in the downsizing process. That is, it is not only the perceived fairness of the downsizing process but also survivors' perceptions of the changes in working conditions that will determine their overall reactions.

Closely related to the concept of Perceived Procedural Fairness is interactional justice theory. In the context of a layoff, this posits that there is an interaction between reasons offered for the layoff as well as actions taken by the organization to compensate those who were terminated (Brockner et al., 1987). This in turn, is likely to have an

effect on worker's attitudes and behaviors at work. If for example, workers feel that little has been done to compensate those who were terminated, or that the reasons for termination were unfair, they are apt to question the organizations' commitment to them.

Mellor (1992) examined whether or not an organization could influence union survivors' reactions to a layoff by offering an explanation for the layoff decision. He wanted to determine whether survivors' judgements about the legitimacy of an explanation for a layoff decision could influence their own reactions as well.

He posited the following hypothesis: There is likely to be a significant interaction between layoff severity (percentage of laid off employees) and workers' belief in the truthfulness of the layoff decision and postlayoff union commitment. Specifically, he expected survivors who had a higher belief in the truthfullness of the layoff decision would be less committed to the organization than those who had more moderate levels of belief under conditions of more severe layoffs.

He conducted a correlational study using surveys at 15 manufacturing union sites which had undergone layoffs between 1980 and 1987. The number of participants totaled 335, and the majority were male (95%). At the time of the layoffs in each site, a written communication was made to all employees citing the reason for the impending layoff. In each case, it was stressed that the union's refusal to make wage and benefit concessions in the past was the reason for the layoff.

The predictor variable of layoff severity was assessed for each site utilizing the criterium of 2% to 5% in reduction of workforce as being low severity and 25% to 70% as being high severity. The predictor variable of workers' belief in the truthfulness of the layoff decision (belief in the account), was measured by a single survey item asking

survey respondents to rate the extent that the account was true at the time it was issued. Job seniority was used as a control. The criterion variable of union commitment was measured by the Union Commitment Scale (Friedman & Harvey, 1986; Gordon et al. 1980). In addition to yielding an overall measure of union commitment, there are four component measures to this measure: (a) loyalty to the union, (b) responsibility to the union, (c) willingness to work for the union, and (d) belief in unionism.

The results supported the original hypothesis: the interaction between layoff severity and belief in the account was related to a willingness to work for the union, but not to union loyalty, union responsibility, or belief in unionism. Specifically, as layoff severity increased, survivors with higher levels of belief in the account were less willing to work for the union after the layoffs ($p = < .01$). Similarly, as layoff severity increased, survivors with lower levels of belief in the account were more willing to work for the union after the layoffs ($p = .01$).

Thus, how survivors' assess the legitimacy of an explanation for a layoff decision can have a significant impact on how they in turn redress injustice. An awareness of this is vital, as companies and their unions ought to negotiate an explanation for a layoff which properly designates the responsible agent.

The variable of Procedural Fairness was later examined with the focus on managers and the interplay of self-esteem. Wiesenfeld, Brockner, and Thibault (2000) conducted two consecutive studies. Study 1 hypothesized that the relationship between Procedural Fairness and lower self-esteem would be more pronounced among managers than non-managers. Study 2 hypothesized that the relationship between Procedural Fairness and managers' behaviors was mediated by their self-esteem. In addition,

subordinates of managers who exhibited less effective (managerial) behaviors in turn, had more negative perceptions of their immediate work environments. In essence, both studies wanted to determine how managers' reactions to how layoffs are handled relate to their effectiveness during times of organizational change.

Specifically, Study 1 predicted that managers would be more likely to experience lower self-esteem in the face of layoffs that were perceived as being more procedurally unfair. Additionally, Study 1 predicted that the tendency for managers to exhibit lower self-esteem in association with greater Procedural Unfairness would be attributable to their higher levels of organizational commitment.

Participants included 129 part-time business school students who had survived a layoff within their organization within the past year. Forty-eight of these were managers and 81 were non-managers. The two independent variables were: (a) Procedural Fairness (as measured by three items drafted by the current authors) and (b) organizational commitment (as measured by eighteen items from a related scale developed by Brockner, Wiesenfeld, Reed, Grover, and Martin (1993) and four additional related items drawn from O'Reilly and Chatman's (1986) Organizational Commitment scale. The dependent variable of self-esteem was assessed by using six items from Heatherton and Polivy's (1991) State Self-Esteem scale.

The results were the following: (a) Lower Procedural Fairness was associated with lower self-esteem among managers, but not among nonmanagers and (b) Managers reported significantly greater organizational commitment than did nonmanagers. Along with this finding, among respondents who were more committed to their organization, there was a more pronounced tendency for procedural unfairness to be associated with

lower self-esteem. Collectively, these two results suggest the following: It is not managerial status per se, but the level of organizational commitment associated with one's managerial status that is interacting with Procedural Unfairness to predict layoff survivors' self-esteem.

Study 2 predicted that the lower self-esteem that managers experience in relation to more procedurally unfair layoffs renders them less likely to enact behaviors needed from effective managers during times of major organizational change. Managers feeling particularly threatened are likely to be overly rigid and risk adverse, for example (Staw, Sandelands, & Dutton, 1981). As a result, they may be less likely to elicit innovative ideas or enact effective strategic decisions for example. Study 2 also predicted that behaviors exhibited by managers with lower self-esteem will in turn elicit more negative reactions from their subordinates.

Participants included 62 managers and 179 nonmanagers in a large public utility company who had survived a major downsizing two months prior. The three precictor variables were the following: (a) Procedural fairness (as measured by related items drafted by Brockner, Wiesenfeld, and Martin (1995); (b) Managers' self-esteem (as measured by items taken from a related scale created by Pierce, Gardner, Cummings, and Dunham (1989); and (c) Managerial behaviors (as measured by items taken from the Managerial Practices scale by Burke (1990). The two criterion variables were the following: (a) Subordinates' perceptions of managerial behaviors, as measured by rephrased items from the Managerial Practices scale (Burke, 1990) and (b) Immediate work environment, as measured by a related scale developed by Burke (1990).

The results were the following: (a) The more managers perceived Procedural

Unfairness, the more likely they were to report lower levels of self esteem $(p < .001)$; (b) The lower the level of self-esteem reported by managers, the less likely they were to report exhibiting behaviors needed from managers during times of organizational change $(p < .001)$; (c) Perceptions of Procedural Fairness were associated with less effective managerial behaviors $(p < .05)$; (d) Managers' perceptions of Procedural Fairness were mediated by levels of self-esteem $(p < .01)$; and (e) Subordinates' perceptions of their immediate work environment were positively related to their perceptions of their managers' behaviors $(p < .001)$, as well as their managers' reported behaviors $(p < .01)$.

In essence, these results support the contention that self-reported managerial behaviors following a layoff are more negative when managers perceived that the downsizing was handled more unfairly. As a consequence, it is equally likely that subordinates of such managers will have negative perceptions of their work environments under these circumstances. Thus, the most significant implication from both studies is that Perceived Procedural Fairness can have not only individual effects on a manager, but systemic effects on other employees within the organization.

Until this point, researchers had focused more exclusively on the main effects of procedural justice. To expand the current focus, Brockner and Wiesenfeld (1996) reviewed the results from 45 independent samples which collectively evaluated the interactive effects of Procedural Fairness and outcome fairness on individuals' reactions to a decision. This contrasted with previous work which focused on the main effects of procedural and distributive factors.

Brockner and Wiesenfeld (1996) summarized the findings of these studies and described explanations for the interaction effects observed. The most frequently observed pattern of results was the following: (a) When outcomes are considered unfair, procedural justice is more likely to have a direct effect on individuals' reactions; (b) when procedural justice is relatively low, outcome favorability is more likely to be positively correlated with individuals' reactions; (c) The combination of low Procedural Fairness and low outcome favorability is more likely to bring about more negative reactions.

In reviewing the results from the samples evaluated, Brockner and Wiesenfeld (1996) summarized four theories and hypotheses offered to account for the interactive effects of outcomes and procedures. These are: (a) Referent Cognitions Theory, (b) Attributional Explanations, (c) Self-Interest or Instrumental Hypothesis, and (d) Group Value Theory.

Referent Cognitions Theory suggests that the paired presence of unfair procedures (as defined by the conduct of those implementing the current decisions) and unfavorable outcomes engenders greater resentment than any other combination of factors. In contrast, if an individual were offered input into a decision or if a good explanation for rendering a decision were offered to an individual (that is, they perceived the procedures to be fair), their response to the resulting outcomes are likely to be more favorable, regardless of the actual outcome.

Attributional theorists have offered a different accounting for the interaction between procedural justice and outcome favorability. According to attributional theory, the interaction between procedural justice and outcome favorability can be explained by

individuals' causal attributions. There are two distinct, yet related occurrences which people seek causality. These are outcome attributions and behavior attributions.

The former refers to causal attributions people make for the outcomes they received. Attributions are likely to depend on the relationship between a person's prior expectations for their outcomes and their actual outcomes. For example, an individual who experiences an unfair perception of upper management and later experiences a very unfavorable outcome (such as hearing an announcement of a future layoff) is likely to believe that the unfairness of management influenced the negative outcome.

Behavior attributions on the other hand, result from individuals' perceptions of the causes of their behaviors. They may see their behavior as either internally or externally motivated. Accordingly, if one sees their behavior as internally motivated, they may be less dependent on the expectation of a favorable outcome to energize their behavior. For example, if an employee makes an internal attribution for working long hours, they are more likely to feel committed to their job or organization. On the other hand, if this same employee makes an external attribution for working long hours, they are less likely to infer that they are committed to their job or organization.

The Self-interest or Instrumental hypothesis offer a third explanation to account for the interaction between procedural justice and outcome favorability. This hypothesis assumes that individuals are motivated to maximize the concrete or material outcomes they receive from their exchange relationships.

Brockner and Wiesenfeld (1996) discuss in their analysis how individuals are more apt to be concerned about the longer-term outcomes affecting them. They contend that optimism regarding an individual's longer-term outcome depends on two factors: (a)

the expected level of favorability of the future outcomes and (b) the perceived certainty of individual's outcome expectations.

They add that people use information about procedures surrounding them to make inferences about their longer-term outcomes. Fair procedures differ from unfair procedures in two critical respects: (a) Fair procedures are likely to engender a greater degree of perceived favorability and (b) The perceived predictability (and hence certainty) of future outcomes is likely to be greater. According to Brockner and Wiesenfeld (1996):

> In other words, unfair procedures may lead people to infer that decisions are made
> on an arbitrary or capricious basis, thereby making it more difficult for them to be
> certain about the favorability of their future outcomes. The likely effect of
> differences in the perceived favorability and predictability of long-term
> outcomes as a function of procedural fairness is for people to feel more optimistic
> about their longer-term outcomes in response to relatively high procedural
> fairness. Feeling optimistic about their long-term outcomes, they may assign
> lesser importance to, and therefore be less affected by, the favorability of their
> current outcomes. (p. 8)

That is, if an employee were exposed to higher levels of procedural fairness in the face of a current unfavorable outcome, this might still lead them to believe that their organization could be trusted to bring forth more favorable outcomes to them in the future. This in turn, could minimize the negativity of their current unfavorable outcome. For example, an employee who was exposed to higher levels of procedural fairness in the midst of a layoff (and was subsequently given significantly more work to do) might

not feel as resentful. On the other hand, if this same employee were exposed to lower levels of procedural fairness, they might not tolerate the increase in workload as well, fearing future distrust in their organization's actions.

Lastly, Group Value Theory contends that people value their relationships with other organizations, groups, and individuals and that these same relationships serve to help mold one's self-identity and self-esteem. Accordingly, if the actions of a group or organization are in question, as is the case when procedures used are deemed unfair, this in turn can force individual members to scrutinize their own values. Unfair procedures can signal to group members a diminished regard for their dignity, and subsequently erode the members' self-esteem.

An underlying assumption for all of the above discussed explanations regarding the interactive effects of outcomes and procedures is that individuals seek to understand their environments in order to tailor their own behavior. Regulating their own behavior is likely to be threatened when events in their environment are either unexpected, negative, or both. Furthermore, Brockner and Wiesenfeld (1996) contend that unfair procedures are unexpected in Western society. They are subsequently likely to prompt individuals to seek further information to make sense of the unexpected. An increased receptivity to outcome information is likely to follow. Thus, one can better see and appreciate the entanglement of the two variables of procedural fairness and outcome favorability.

Naumann and Bennett (2000) wanted to determine additional explanations to account for individuals' perceptions of procedural justice. They noted how previous research had focused on an individually-based eitiology for explaining the phenomenon

of procedural justice. As such, they focused their attention on the social context in which procedures arise and are conducted in. They referred to this as the procedural justice climate, which can also be conceived of as a group-level cognition in how a work group as a whole is treated.

In a correlational study involving survey distribution to 255 bank employees in the United States, Naumann and Bennett (2000) sought to determine: (a) What contextual factors contribute to the development of procedural justice climate and (b) How this procedural justice climate is related to employee attitudes and behaviors.

They posited five hypotheses: (a) The greater the cohesion of a work group, the greater the members' agreement regarding procedural justice climate; (b) The greater the demographic similarity of a work group, the greater the members' agreement regarding procedural justice climate; (c) The greater a supervisor's visibility in managing the members' of a work group, the greater the members' agreement regarding procedural justice climate; (d) Organizational commitment will be positively associated with procedural justice climate; and (e) Helping behaviors will be positively associated with procedural justice climate.

Individual procedural justice was measured by an instrument derived from the following: Nine items from Moorman's (1991) related scale, one item from Lethanthal's (1976) procedural rules and two related items constructed by Naumann and Bennett (2000). Organizational commitment was measured using nine items form the Organizational Commitment Scale (Mowday, Steers, & Porter, 1979). Work group cohesion was measured by eight items taken from Dobbins and Zaccaro's (1986) related scale. Visibility of supervisors in demonstrating procedural justice was measured by a

four item scale created by Naumann and Bennett (2000). Procedural justice climate was measured by nine items modified by Moorman's (1991) related scale.

The following hypotheses were significantly supported: (a) The greater the level of a work group's cohesion, the greater the members' agreement regarding procedural justice climate $(p < .05)$; (b) The greater a supervisor's visibility in managing the members' of a work group, the greater the members' agreement regarding procedural justice climate $(p < .05)$; (c) Procedural justice climate will be positively associated with helping behaviors $(p < .05)$.

The above findings suggest that the phenomenon of procedural justice needs to be understood as a derivation of not only individual perceptions, but also those derived from a group's perspective. A sensitivity to the latter will likely bring an enriched understanding of survivors in a post-layoff environment.

Skarlicki, Ellard, and Kellin (1998) investigated third party perceptions of a layoff with regard to procedural, derogation, and retributive aspects of justice. Specifically, they wanted to determine: (a) How observers assess the fairness of the procedures used in the layoff of another person; (b) To what extent third-party observers derogate the layoff victim and how victim derogation impacts fairness judgements; and (c) What the nature of observers' retributive justice intentions is (that is, the responses of violations to fairness rules) in the context of a layoff.

Eight hypotheses were formulated to address these issues.

1.      Providing layoff victims with voice in the layoff process is positively related to observers' perceptions of the procedural fairness of the layoff.

2.	Providing layoff victims with an adequate explanation for the layoff is positively related to observers' perceptions of the procedural fairness of the layoff.

3.	Victim derogation is positively related to observers' procedural justice of the layoff. According to Lerner's (1980) just world theory, when observers are unwilling or unable to intervene to address an injustice witnessed, cognitions can be altered to maintain the belief that people "get what they deserve or deserve what they get;"

4.	Victim derogation moderates the relationship between the justice manipulations and observers' perception of procedural fairness of the layoff.

5.	Providing the layoff victim with voice in the layoff procedures is negatively related to observers' retributive intentions. Retributive intentions can entail a motivation on the part of an observer to somehow punish an organization deemed unfair in its practices (this could take the form of avoiding business with such an organization in the future).

6.	Providing layoff victims with an adequate explanation for the layoff is negatively related to observers' retributive intentions.

7.	Observers' perceptions of fairness of the layoff are negatively related to their retributive intentions.

8.	Victim derogation is negatively related to observers' retributive intentions.

Skarlicki and colleauges (1998) research was conducted in a laboratory setting utilizing a correlational design. One hundred and twenty three participants were included in the study. The stimulus consisted of a contrived newspaper announcement announcing layoffs at a local bank. The factor of procedural fairness was manipulated by staging

conditions where the employees were both given and not given the opportunity to express their concerns regarding the layoff, as well as having conditions where the employees were both given and not given adequate explanations for the layoff. Perceptions of procedural fairness were measured by four items taken from Tyler and Lind's (1992) related scale. Victim derogation was measured through 12 items derived from Lerner and Simmon's (1966) previous research on derogation. Retributive intentions were assessed by two questions developed by Skarlicki and colleagues (1998). These included intentions to be both a future customer as well as employee of the bank cited in the newspaper article.

The following hypotheses were significantly supported:

1.      Providing layoff victims with voices in the layoff is positively related to observers' perceptions of the procedural fairness of the layoff $(p < .001)$.

2.      Providing layoff victims with an adequate explanation for the layoff is positively related to observers' perceptions of the procedural fairness of the layoff $(p < .01)$.

3.      Victim derogation is positively related to observers' procedural justice of the layoff $(p < .05)$.

4.      Victim derogation moderates the relationship between the justice manipulations and observers' perception of procedural fairness of the layoff $(p < .05)$. The following hypothesis was supported although they were not statistically significant: Observers' perceptions of fairness of the layoff are negatively related to their retributive intentions. Lastly, the following hypothesis was partially supported: Victim derogation is negatively related to observers' retributive intentions.

The variable of Perceived Procedural Fairness clearly has a profound impact on surviving employees. Organizational commitment and attribution of purposefulness of a task, for example has been shown to diminish when perceived procedural fairness was low. In addition, managers who perceived layoffs as being more procedurally unfair seemed to possess lower self-esteem and to become overly rigid and risk adverse. In sum, it seems apparent that there are far-reaching implications (both individual and systemic) for all surviving employees when Perceived Procedural Fairness is taken into account.

## Stress Resiliency

This author contends that stress resiliency is a significant cognitive factor affecting the coping processes of layoff survivors. Specifically, it is anticipated that individuals possessing higher levels of Stress Resiliency will fare better in the aftermath of a downsizing. Current theories on the eitiology of stress emphasize the role of cognitive appraisal processes. According to Holroyd and Lazarus (1982) for example, stress is more likely to occur when a person perceives that the resources they possess are insufficient to meet the demands of a given task or event.

Tymon and colleagues (Thomas & Tymon, in press; Thomas & Velthouse, 1990) contend that stress results from conclusions people draw about themselves in relation to some task. Since these conclusions are based only in part on objective facts, they believe that elements of interpretation must also be added to the mix.

Thus, Thomas and Velthouse (1990) and later Thomas and Tymon (1995) identified three dimensions of interpretive styles which people rely upon when presented

with varying tasks: (a) Deficiency Focusing, (b) Low Skill Recognition, and (c) Necessitating.

Deficiency Focusing involves a tendency to focus on what is going wrong while evaluating both the present and what could go wrong when envisioning the future. Setbacks are often attributed to oneself. Low Skill Recognition involves the tendency to not attribute successes to one's own abilities and instead attribute successes to luck, ease of task, or help from others. Necessitating involves a consistent belief in tasks being imperative. As such, a person is likely to feel compelled to completing such a task, perhaps at the expense of their own choice or need.

It is the belief of Thomas and Tymon (1992) that stress results when people conclude that extraordinary demands are being placed on them. Accordingly, Deficiency Focusing is apt to increase stress by decreasing one's belief that they have the resources necessary to deal with a particular task and are thus less capable of dealing with such a task. Also likely is an exaggeration of negative task outcomes in the future.

In addition, Low Skill Recognition is apt to increase stress by similarly reducing one's perceived resources to deal with a particular task. As such, the notion of success is experienced as something depending upon things outside oneself. This in turn, is likely to enhance one's feelings of vulnerability.

Lastly, Necessitating is apt to increase stress by adding an imperative pressure to perform a particular task. Thus, tasks are likely to be seen as inflexible demands needing to be met.

Thomas and Tymon (1995) propose a cognitive model of stress which delineates a causal path between interpretive styles and stress symptoms. They assert that:

...the interpretive styles are regarded as trait variables that provide baseline tendencies in an indiviudal's interpretations with respect to deficiency focusing, etc. The individual's (state) interpretive cognitions in a specific situation, in turn, are assumed to be jointly influenced by his/her baseline interpretive styles and by qualities of the environmental stressors being encountered. State cognitions, in turn, are assumed to shape the level of stress perceived by individuals through their primary appraisal process. As shown by the double-headed arrow in the figure, level of perceived stress is assumed to feed back upon cognition during episodes of high stress. (p. 247)

In sum, these three interpretive style variables can be seen as characteristic patterns of interpreting tasks or events in one's environment. In their own unique ways they contribute to stress by making tasks encountered appear more threatening and insurmountable.

The concept of Stress Resiliency is a relatively new one. To date, the broader concept of Resiliency has been linked to the invulnerability at times seen among family members facing a variety of socio-economic, mental illness, and substance abuse-related stressors.

According to the Behavioral, Cognitive & Social Sciences Research Branch of the National Institute of Mental Health (NIMH) (1996), the factor of Resiliency should be considered when asking how some individuals appear untouched by catastrophic events such as war or natural disasters. In order to comprehend how one might link the notion of Resiliency present in a traumatic family situation with that of a layoff survivor, the

NIMH (1996) offers the following example: Young girls who are sexually abused typically suffer from an impaired sense of control, competence, and self-esteem. However, the same abused girl who can explain, comprehend, and rationalize what happened to her can possibly offset the feelings of incompetence and might even be able to take steps to end the abuse. Similarly, it can be postulated that a layoff survivor could feel stripped of her control in the aftermath of a layoff and consequently experience lowered self-esteem. She might be able to offset such feelings if she is able to rationalize what has transpired and subsequently gain a sense of control to cope with her situation. To better understand Stress Resiliency, a discussion on hardiness, which is closely linked is warranted.

In separate electronic mail communications from the two authors of the Stress Resiliency Scale (Thomas & Tymon, 1995), their respective views on the relationship between Stress Resiliency and hardiness were articulated. According to Thomas (2001):

...Originally, we used the word resiliency to be a rough synonym of hardiness – that is, to mean the ability to handle stressors. But operationally, our resiliency measure gets at the three interpretive habits that contribute to that kind of hardiness/ resiliency. It (hardiness) measured other factors (for example, social support) that also contribute to hardiness/resiliency. So I suppose that they would have an additive effect in predicting stress symptoms after controlling for levels of stressors.

According to Tymon (2001), "I would expect resiliency to contribute to hardiness. In other words, resilience is either an antecedent or component of hardiness depending on how hardiness is defined".

According to data obtained from a correlational study (reviewed later in this paper) conducted by Rhodewalt and Agustsdottir (1984), Stress Resiliency appears to exist as a component of hardiness. Accordingly, one aspect of hardy individuals' Stress Resiliency is attributable to their tendency to interpret situations in less stressful ways.

The construct of hardiness was originally defined by Kobasa (1979). She defined this as an aspect of one's personality which buffers the effects of stress on one's health. Furthermore, this personality trait composed of a constellation of attitudes, beliefs, and behavioral tendencies. Accordingly, there are three related, yet distinct subconcepts comprising this trait: challenge, commitment, and control.

Individuals strong in challenge believe that fulfillment is to be found through what is Learned from new experiences as compared with what is already familiar and routine. Change is both viewed as normal and as a stimulus to grow rather than as a threat to security.

Individuals strong in commitment appear able to rely on themselves to turn whenever they are experiencing something important and interesting to them. This in turn, tends to result in their getting more involved in life, as compared with feeling more alienated.

Lastly, individuals strong in control tend to feel that they can exert an influence over events, rather than feel they are somehow a passive victim of externalcircumstances. Such individuals are less apt to feel helpless when facing adversity. Maddi and colleauges (1998) contend that collectively these three subconcepts constitute both the courage and resiliency needed in facing life's tasks. Rhodewalt and Agustdottir (1984) expanded the investigation of hardiness. They sought to determine the moderating

effects both hardiness and Type A behavior had on a person's perception of life events and psychological distress. Participants for this correlational study included 600 undergraduate students (289 females and 311 males). Four groups of participants were subsequently delineated: low hardy Type A's, low hardy Type B's, hardy type A's, and hardy type B's. Four separate questionnaires measured the following: (a) Type A behavior was measured by form T of the Jenkins Activity Survey (Krantz, Glass, & Synder, 1974); (b) hardiness was measured by the abridged Hardiness Scale developed by Kobasa and Maddi (personal communication, June, 1982); (c) stressful life events were measured using the College Schedule of Recent Life Events (as cited in Marx, Garrity, & Bowers, 1975); and 4) psychological distress was measured by the Langner Psychiatric Impairment Scale (Langner, 1962). The authors found that a person's perception of a life event was a better predictor of psychological distress than total life change in itself. Different perceptual dimensions of a life event are more or less important to the different personality types they studied. Specifically,

1.  For Type A's, events which are perceived as less than totally controllable are associated with greater distress regardless of their level of hardiness. Events that were labeled by low and high hardy Type A's as positive but only moderately controllable were significantly related to distress (low hardy Type A's, $p < .01$; high hardy Type A's, $p < .05$).

2.  In contrast, events that were perceived as negative correlated (albeit not significantly) with Langner Impairment scores for individuals low in hardiness regardless of their Type A-B classification.

3.      Type A's who were low in hardiness faired the most poorly. These individuals had Langner Impairment scores which were significantly higher than the other high stress participants combined $(p < .01)$. The authors postulate that because Type A individuals possess both a stressful coping style and a sensitivity to reduced control, this combined with their nonhardy tendency to evaluate events negatively may make them most vulnerable to the effects of stress.

4.      Type B individuals high in hardiness appear to be the most stress resistant. None of the correlations between Langner scores and perceptions of events was significant for hardy Type B's.

5.      Hardy individuals were more likely than non-hardy individuals to perceive events as positive and under their control. High hardy individuals as compared with their low hardy counterparts, reported a higher percentage of life events as positive $(p < .01)$.

In addition, high hardy individuals were more likely than their low hardy counterparts to perceive that they had complete control over a higher percentage of their life events $(p < .001)$.

The authors contend that as such, it appears that one characteristic of hardy individuals is a tendency to perceive life events and situations as less stressful. For events which hardy individuals perceived as less positive and less controllable, these tended to be as disruptive for them as they would be for low hardy individuals. Specifically, for hardy individuals, the correlations between events perceived as less positive (undesirable), moderately controllable, or uncontrollable and Langner Impairment scores were all significant $(p < .05)$.

Wiebe (1991) investigated the role hardiness plays as a stress moderator. Specifically, she wanted to determine whether hardiness influences the appraisal of the same stressor in individuals differing in levels of hardiness. In addition, she wanted to know whether such appraisal differences influence physiological responses. Lastly, she wanted to test the impact of participant gender on hardiness effects.

A between-groups experimental design was used, measuring hardiness (high vs. low) and gender, and manipulating hardiness component (control vs. challenge vs. commitment) and component level (high vs. low) variables. 240 undergraduate student participants were used (60 were male, 60 were female). Participants were initially grouped according to hardiness level (high vs. low) based on the hardiness scale developed by Kobasa, Maddi, and Kahn (1982) and were then assigned to one of six experimental conditions described above. All participants were exposed to the same stressor, which involved listening to a four minute taped lecture. Participants were told they needed to repeat this lecture afterwards and their performance would be videotaped and further scrutinized by two professors. In order to both determine whether participants differed in their appraisal of the same stressor and whether the appraisal manipulations were successful, participants were asked to evaluate six statements tapping their perceptions of control, challenge, and commitment. In addition, affect was assessed both before and after the experimental manipulation of the evaluative threat stressor. A ten-item checklist assessed both positive and negative emotional responses. Physiological responses were determined by both skin resistance and heart rate.

The results of the study were intriguing. While all participants experienced increased heart rate levels to the experimental stressor, high hardy men experienced

significantly lower heart rate elevations than did low hardy men $(p < .001)$. Curiously though, hardiness did not influence heart rate among women.

There was another significant correlation between manipulation of task appraisal in high hardy versus low hardy men. Men in the high hardiness appraisal condition experienced lower heart rate levels than did men in the low hardiness appraisal condition $(p < .001)$. Similarly, men in the high hardiness appraisal condition displayed less vasoconstriction than did men in the low hardiness appraisal condition $(p < .01)$.

In contrast, women in the high hardiness appraisal condition experienced higher heart rate levels than did women in the low hardiness condition $(p < .05)$. Component levels did not influence scores among females.

In terms of affect, men reported experiencing significantly less negative affect than women only in the low challenge appraisal condition $(p < .05)$. High hardy participants of both genders reported experiencing more positive affect than did low hardy participants $(p < .05)$. Similarly, high hardy participants of both genders reported experiencing less negative affect than did low hardy participants $(p < .05)$.

Lastly, with regard to frustration tolerance and hardiness, there was a significant main effect found $(p < .05)$. In addition, high hardy participants experienced a significantly increased frustration tolerance by making more attempts on unsolvable tasks than did low hardy participants $(p < .05$ and $p < .03)$.

The results appear to suggest that hardiness does moderate stress and that this occurs through an adaptive stress appraisal process. If one were to speculate as to why marked differences existed across gender lines, the answer may lie in the hardiness test

instrument itself. Insofar as the hardiness scale used (Kobasa et al., 1982), it was developed using a sample of male executives, it may not be an appropriate measure of the hardiness construct in women.

Maddi (1999) later investigated the role hardiness plays in moment-to-moment experiencing, coping, and strain reactions. In the first study, an experiential sampling technique was utilized to assess hardiness as measured by the Personal Views Survey (Maddi, 1996).

Participants consisted of twenty male managers from a midwestern utilities company. Scores for hardiness were obtained one month earlier for all participants and were subsequently separated into groups of high and low hardy individuals. For a period of one week, participants were randomly asked 10 times a day to complete the same hardiness measure in order to support the construct validity of hardiness.

As predicted, those individuals scoring high on the hardiness measure consistently experienced their moment-to-moment activities with the sense of challenge, control, and commitment (the three components of hardiness according to Maddi, 1996). The experiencing items means differentiated individuals both high and low in hardiness among the following activites: (a) Activity enjoyment $(p < .006)$, (b) Activity interest $(p < .02)$, (c) Openness of mood $(p < .01)$, (d) Activity importance $(p < .04)$; (e) Feel supportive of others $(p < .03)$, and (f) Imposed activites $(p < .001)$.

The second study wanted to determine which coping styles were more likely to be elicted by differing levels of hardiness. Specifically, Maddi (1996) sought to show that the higher the hardiness level, the more likely one would resort to transformational (hardy) coping as compared with regressive (avoidance) coping.

Participants consisted of 146 male managers from a Midwestern utilities company. Hardiness was again measured by the Personal Views Survey (Maddi, 1996). Coping was measured by the Ways of Coping Checklist (Folkman & Lazarus, 1980). In this measure, participants were asked to describe the most stressful event they had experienced within the previous six months as well as their attempts to cope with these events.

Events were segmented into the categories of work, health, family, or other. The results indicate that for persons high in hardiness, there is a greater tendency for stressful work events to elicit transformational coping (mean coping scores for participants high in hardiness was 19.25 as compared with 16.27 for participants low in hardiness; two-way interaction scores between hardiness and transformational coping were significant $p <$ .02).

In addition, there is a general tendency for persons high in hardiness to engage less in regressive coping (mean coping scores for participants high in hardiness was 4.90 as compared with 5.76 for participants low in hardiness; two-way interaction scores between hardiness and avoidance coping were not however significant $p < .63$). Lastly, there is a tendency for persons low in hardiness to engage in regressive coping in nonwork stressful events.

The third study predicted that there is an inverse relationship between hardiness and physiological strain. Hardiness was again measured by the Personal Views Survey (Maddi, 1996). Stressful life events were measured in a manner introduced by Holmes and Rahe (1967). Physiological strain was measured by two means. The Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) measures

both physical and psychological strain. The other means used to measure strain was blood pressure readings obtained from company medical records from the past six years. Participants consisted of 140 male managers from a Midwestern utilities company.

The results indicated that hardiness correlated significantly $(p < .01)$ with the anxiety, depression, somatization, interpersonal sensitivity, and total scores on the Hopkins Symptom Checklist. In addition, in 4 of the 6 years, being low in hardiness corresponded to being high in blood pressure (a minimum of $p < .01$).

Maddi and Hightower (1999) expanded on the concept of individual hardiness to one that encompases an organizational focus. The aim of developing a hardy organization is to create a culture in which potential adversity (stemming from environmental or social change) into opportunity, thereby creating success for the entire organization. The three previously stated attitudes of individual hardiness (commitment, control, and challenge) parallel the organizational values of cooperation, credibility, and creativity.

Individuals embracing the concept of commitment will be more likely to steer others into valuing cooperation expressing group interests. On an organizational level, this is likely to be manifest in employees committing to work activities, rather than distancing from them. Individuals embracing the concept of control will similarly likely influence others to take responsibility for their actions as they value credibility. Oganizationally, this might be seen in employees seeking to control adverse events, rather than feeling impotent.

Lastly, individuals embracing the concept of challenge will likely influence others to value creativity, as they have learned from past experience. On an organizational

level, this might be seen in employees reporting challenging experiences as a developmental challenge, rather than a threat to stability. The framework of a hardy organization rests on two additional components comprising individual hardiness – transformational coping and activistic social support (Maddi, 1994). Transformational coping involves attaining new perspectives about stressful life events and working toward decisive problem solving action. This mode of coping is in contrast to that of avoiding problems, catastrophizing, or denying problems. Activistic social support involves a reciprocity of assistance and encouragement from others when managing stressful events. This mode of interaction is in contrast to that involving overprotection or competition between others.

In 1999, Atella conducted a case study involving the introduction of hardiness ideology and skills to an organization that had undergone a significant downsizing. Surviving employees were reportedly angry about the layoff disruption and how it was conducted. In addition, they felt grief and sadness as well as a tremendous sense of fear and anxiety that they too would be treated as poorly in the future. Morale dropped and productivity declined. Surviving managers experienced a similar range of emotions. Prevalent was a sense of guilt in having actively participated in the termination process. In addition, they experienced profound depression which strongly impacted their ability to adequately confront employees on performance issues.

The hardiness intervention was geared to managers and supervisors. An offsite retreat was selected for the purpose. Its aim was two-fold: The experiential component allowed participants the opportunity to reflect and share their feelings of loss regarding the layoff. The remaining component was didactic in nature and contained workshops

on change management, loss and mourning issues and tenet and skills involved in the hardiness model. This culminated in visioning and strategic planning efforts aimed at moving toward making new decisions and enacting new actions.

Following the retreat, managers returned to their company and modeled ways to permit mourning among their surviving subordinates. Expression of other related feelings was encouraged. Anecdotedly, the company reported an improvement in commitment among employees and a renewed sense of vigor and morale.

The role of Stress Resiliency is anticipated to be significant as it relates to the coping processes of layoff survivors. Stress Resiliency is a relatively newly conceived phenomenon, can be better understood as a subset of hardiness. Parallels can be drawn between hardy individuals (who seem to weather life events and situations as less stressful) and Stress Resilient layoff survivors.

## Job Burnout

According to Farber (2000), the phenomenon of Burnout has been viewed more typically as a psychosocial rather than psychophysiological disorder. He notes that there has been a significant historical shift in how Burnout was first described in the 1960s and early 1970s and then again in the 1990s. The earlier decades experienced significant social upheaval and attracted many young human service individuals to working with needy and troubled clients.

In the 1960s, teachers approached their work with an unparalled vigor brimming with high expectations to make changes in their students' lives. For some, these changes were not viable, and those teachers who were unable to modify their expectations

accordingly experienced Burnout. Similarly, in the 1970s, Freudenberger (1974) noted how young professionals working with drug addicts in New York City were initially sustained in their work by the belief that they were involved in social causes larger than themselves. This belief created an invulnerability to their chronic work overload, coupled with scant rewards for their work. Here again, for those workers who were unable to modify their expectations for client change, there was the increased likelihood for experiencing Burnout.

Farber (2000) points out that many significant changes in the past 30 years have likely contributed to how Burnout is now viewed. Among these are: (a) The increase in downsizings oftentimes results in increased workloads with diminished resources for those workers remaining in their company or organization; (b) The increased reliance on electronic communications between coworkers has decreased face-to-face interactions with other colleagues; and (c) There has been a shift in individual commitment to larger social causes in favor of viewing one's work as a vehicle for personal gain.

In sum, the Burnout of the 1960s and 1970s was attributed to the pursuit of lofty, Often times socially meaningful aims which later resulted in working harder and harder to attain such goals. One could classify this type of Burnout as stemming from an internal sense of disappointment in not achieving socially meaningfull goals that had been previously set.

In contrast, the Burnout of current day could be attributed to individuals feeling that they are besieged by multiple obligations on the job, including a variety of external pressures (among those less opportunities for personal advancement or financial renumeration). One could classify this type of Burnout as stemming from an external

sense of disappointment – feeling the demands to outperform others within their organization, the pressure to meet increasing demands of others or the drive to enhance oneself fiscially.

Three models of Burnout have emerged from the afore-mentioned trends. The earlier work of Freudenberger and North (1985) describe Burnout as a feeling state resulting from an overload of stress and denial. They contend this results from excessive demands made upon the self, or from others. This ultimately depletes an individual's internal resources, coping ability and energy. According to Freudenberger and North (1985), Burnout is a twelve-step process involving overinvolvement and time urgency, achievement striving, distortion of perceptions and values, denial of personal needs, increased use of inadequate coping behaviors, withdrawal, depersonalization, and depression. The end result is likely to be both emotional and physical exhaustion.

Whereas Freudenberger and North (1985) described Burnout as a feeling state, Cherniss (1980) offered that Burnout is a response to an overload of work stress or dissatisfaction involving the withdrawal of a professional previously committed to their work. Strain is likely to manifest itself as fatigue, irritability, and tension. Detachment is likely to be the culmination of burnout, as this achieves the purpose of conserving energy. In distinguishing these two models, Cherniss places a greater emphasis on the perceived role of work and organizational factors, whereas Frueudenberger and North (1985) place a greater emphasis on personality characteristics and client contact.

Maslach (1982) derived the most widely used and accepted model of Burnout to date. His original model was intended for use with the population of human service

professionals and included three distinct dimensions: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. A later version was created (Maslach, 1996) intended for use with the general population. This version also has three distinct dimensions which parallel those in the Human Services version: Exhaustion, Cynicism, and Professional Efficacy. This version is utilized in the present study.

In 1990, Lee and Ashforth wanted to determine whether the three dimensions comprising Maslach's (1982) three-factor model were related to similar areas such as work adjustment and stress coping. A correlational study was conducted using 219 supervisors and managers from a large public welfare agency. The majority of these participants were women (70%). The following measures were used: (a) Burnout was measured by the Maslach Burnout Inventory – Human Services version (1982); (b) Psychological and physiological aspects of strain were measured by 3 and 4 item scales developed by Patchen (1970); (c) Control of an escape from stressful work situations were measured by 17 and 11 item scales developed by Latack (1986); (d) Work-related helplessness was measured by a 6-item scale developed by Ashforth (1989); and (e) Self-appraisal of performance in various aspects of work was measured by a 6-item scale developed by R. J. House (as cited in Smith, 1982).

The results were the following: (a) The dimension of Exhaustion was more strongly co-related with psychological and physiological strain than was the dimension of Depersonalization ($r$'s = .94 and .56, as compared with ($r$'s = .15 and .33); (b) Self-appraisal of performance and control over stressful events was more strongly related to Depersonalization than it was to Exhaustion ($r$'s = .72 and .59) as compared with ($r$'s = -.45 and -.39); (c) Helplessness was more closely related to Exhaustion than it was to

Depersonalization ($r$'s = .53) as compared with ($r$'s = .10) and (d) Personal

Accomplishment was more closely related to perceptions of performance and

use of control.

In 1996, Lee and Ashforth conducted a meta-analysis investigating how demand

and resource correlates and behavioral and attitudinal correlates were related to each of

Maslach's (1986) three dimensions on the Maslach Burnout Inventory – Human Services

version. These three dimensions were: Emotional Exhaustion, Personalization, and

Personal Accomplishment.

To understand how these four variables are related to Burnout, the above authors

reference the conservation of resources theory of stress espoused by Hobfoll and Freedy

(Hobfoll, 1989; Hobfoll & Freedy, 1993). Accordingly, Burnout is likely to occur when

particular valued resources are lost or are insufficient to meet particular demands at work.

These work demands include role conflict and ambiguity, heavy workload, stressful

events, and pressure. Consequently, particular behavioral and attitudinal outcomes are

likely to result. These can include turnover intentions, specific behavioral coping

responses, and a lessening of organizational commitment, job satisfaction, and job

involvement.

Sixty-one studies dated from 1982 to 1994 were used in the meta-analysis. The

results were the following: (a) Thirteen of the twenty-six demand and resource

correlates had individually corrected weighted mean correlations greater than or equal

to .30 with Emotional Exhaustion; (b) Emotional Exhaustion was positively associated

with turnover intenions ($r = .44$) and negatively associated with organizational commitment ($r = -.43$); (c) Depersonalization was negatively associated with organizational commitment ($r = -.42$) and job satisfaction ($r = -.44$) and (d) Personal Accomplishment was positively associated with control coping ($r = .52$).

The authors explain these findings in the context of viewing work demands as being perceived as a loss, because in order to meet such demands, valued resources need to be expended to meet such demands. Insofar as an individual perceives the consequences of such losses to be weighty, they will be more likely to expend more energy to protect themselves from further loss. It is this expenditure of energy and feeling that one's resources are depleted, which results in the state of Burnout.

In 1993, Glass and colleauges sought to determine the interrelationships between Burnout, depression and perceptions of control in hospital-based nurses. A correlational study was conducted using 162 nurses (predominantly female) from a Northeast general hospital. The measures used were the following: (a) Burnout was assessed using the Maslach Burnout Inventory – Human Services version (1986); (b) Depression was assessed using the Beck Depression Inventory (Beck, 1967; Beck, Rush, Shaw, & Emery, 1979); (c) Perceived job control was assessed using a 13-item questionnaire developed by McDermott (1984); and (d) Actual job control was assessed by assembling six job categories utilizing severity of patient illness and type of nursing care required as criteria.

The results were the following:

1. All correlations between the Beck Depression Inventory and the Maslach Burnout Inventory were significant ($p < .01$). This was particularly evident with the Emotional Exhaustion subscale. Over 19% of the variance in Emotional Exhaustion is

attributable to the unique contribution of the Beck Depression Inventory and another 6% is attributable to perceived job control.

2.    There appears to be strong evidence for the discriminant validity of the Maslach Burnout Inventory and the Beck Depression Inventory. None of the Beck Depression Inventory items loaded higher than .40 on a Maslach Burnout Inventory factor, and only one Maslach Burnout Inventory item loaded on a Beck Depression Inventory factor at this level.

3.    Perceived job control is directly related to the Beck Depression Inventory and to each of the Maslach Burnout Inventory subscale scores such that greater depression and burnout are associated with lower perceived control. All of the coefficients were significant at $p < .01$, with the exception of Depersonalization ($p < .05$).

These results indicate that individuals with higher Burnout perceive less control than those with lower burnout. Moreover, those with higher levels of Burnout tended to have higher levels of perceptual accuracy. In addition, according to Glass and colleauges (1993), these findings support previous research (Alloy & Abrahamson, 1988; Taylor & Brown, 1988) which contend that mildly and severely depressed individuals (in contrast to nondepressed individuals) tend to be more accurate in their estimates of personal control. Based on their findings, they contend that perceived lack of job control indirectly induces depression, insofar as it operates through differences in the degree of Burnout.

In 1995, McKnight and Glass conducted both a replication and extension of the Glass and colleauges (1993) study. They sought to verify that perceptions of job control are antecedent to Burnout, which in turn precedes depressive affect. In addition, they

wanted to replicate previous data (Glass et al., 1993) which indicated that nurses with higher Burnout scores display more accurate perceptions of job uncontrollability as compared with their less burned-out counterparts.

A correlational study was conducted two years later with 100 nurses from the previous 1993 study (Glass et al., 1993). The measures used in the study were identical to those used in the Glass et al. (1993) study.

The findings were as follows: (a) The Indicies of depressive symptomology and burnout showed significant associations on the order of .3 to .5; (b) Greater Burnout was associated with greater perceptual accuracy and less personal control $(p < .05)$; (c) Analysis of variance with low, medium and high levels of the Burnout subscale Emotional Exhaustion and with levels of perceived control reached significant levels $(p < .001)$; (d) Analysis of variance with low, medium and highlevels of the Burnout subscale Personal Accomplishment and with levels of perceived control reached significant levels $(p < .001)$; (e) Analysis of variance with low, medium and high levels of the subscale Depersonalization and with levels of perceived control reached significant levels $(p < .05)$; and (f) Analysis of variance with high and low levels of the Beck Depression Inventory and with levels of perceived control reached significant levels $(p < .05)$ only with the burnout subscales of Emotional Exhaustion and Personal Accomplishment.

Thus, these results suggest that the variance shared by depression and Burnout may be attributed to their co-development and higher levels of Burnout were associated with more accurate perceptions of job uncontrollability, irrespective of depression levels. The authors suggest that a newer phenomenon -- burnout realism, was present, as compared with depressive realism. Job Burnout is anticipated to be a significant

consequence experienced by layoff survivors in the present study. While various models have accounted for the eitiology of this phenomenon, Maslach's (1996) three dimensional model has been utilized in the present study. The toll exacted by Job Burnout on surviving employees is likely to include that which is exacted by increased feelings of depression and lessened control.

## Job Stress

Currently, there exist three prevailing theories on Job Stress (also known as work stress or occupational stress). The first and most widely accepted is the Person-Environment Fit (P-E Fit) theory derived by French, Caplan, and Harrison (French & Caplan, 1972; French, Caplan, & Harrison, 1982). Accordingly, stress and strain in a work environment is attributed to a mismatch between a worker's abilities and the demands of the work environment or job. It is the incompatibility of this fit which produces psychological strain and stress-related physical disorders. Key concepts within this theory are role ambiguity and role conflict.

The second theory on Job Stress is Karasek's (1979) Demand-Control model. This model focuses on the objective demands or pressures of the work environment and the degree of decision making control a worker possesses. It has been postulated that high job demand coupled with low worker control will lead to psychological distress and stress-related physical complaints.

Both the Person-Environment Fit theory and Demand-Control model focus primarily on the general demands of a job and the skills and abilities of the worker. Less focus is given to how individual differences in personality and coping resources interact

with specific job pressures to influence the emotional reactions of workers. Lazarus (1991) addressed the later interaction in his conceptualization of work stress. In his Transactional Process Theory, he contended that several variables interact in the equation: (a) Stressful antecedent conditions ("stressors") and (b) The individual's cognitive appraisal of the situation (whether or not it is perceived as a threat, harm or challenge to their well-being.

He further delineates two types of appraisal. Primary appraisal concerns whether or not the individual has any personal stake in the encounter and secondary appraisal concerns the individual's available coping options for dealing with threat, harm, or challenge. These entail both cognitive and behavioral efforts on the person's part to manage demands which stretch or exceed their resources.

Lazarus further delineates two types of coping: Problem-focused and emotion-focused. The former reflects efforts to change either one's own behavior or to take action on the environment. The latter reflects efforts to either modify one's perceptions of sources of distress or to find ways to avoid thoughts about sources of distress. Adverse emotional reactions are likely to result when an individual perceives a stressor as threatening and the person does not possess the necessary resources to cope with it. He contends that stress implies a process and not a static arrangement because of our shifting attempts to mollify that which is distressing or undesirable. This further implies that stress changes over time and different scenarios.

There are several existing measures of Job Stress. They include: The Work Environment Scale (Insel & Moos, 1974). This measure is based primarily on the Person-Environment theory (French & Caplan, 1972; French, Caplan, & Harrison, 1982).

This assesses the psychological states and emotional reactions of workers assigned to a specific job. Items on the WES target general reactions of workers toward their supervisors, fellow workers and different aspects of their work environment.

There are three areas of work stress measured: (a) interpersonal relationships, (b) orientation toward personal growth, and (c) organizational structure of the work setting. Limitations of the scale according to Spielberger and Vagg (1991) are that the WES does not provide information on worker's perceptions of specific work stressors as well as to the frequency of these stressors.

The Job Diagnostic Survey (JDS; Hackman & Lawler, 1971; Hackman & Oldman, 1975). The JDS is based on tenets from both the P-E Fit theory and Demand-Control model (Karasek, 1979). It assesses workers' perceptions of job characteristics as well as their satisfaction and internal motivation. There are five perceptions of job characteristics focussing on: (a) skill variety, (b) task significance, (c) task identity, (d) autonomy, and (e) feedback. Limitations of the scale, according to Spielberger and Vagg (1991), are that it focuses more on workers' feelings about their jobs and doesn't tap either the perceived severity of the work stressor or its frequency.

The Occupational Stress Inventory (OSI) was developed by Osipow and Spokane (1981). It is based on tenets from the P-E Fit theory and measures such variables as role overload and role ambiguity as well as coping skills, physical strain and social support. The three major areas assessed by the OSI are work role stress, personal strain, and personal coping resources. While it provides information regarding sources of job stress, according to Spielberger and Vagg (1991), it does not assess the perceived severity of these stressors or their frequency.

The Occupational Stress Indicator (Cooper, Sloan, & Williams, 1988) is based on tenets from the P-E Fit theory, Demand-Control model and Lazarus's Transactional Process theory (1991). This measure taps specific work-related stressors, job satisfaction, coping strategies, personality, as well as physical and mental health problems. Because of its comprehensiveness, its limitation according to Spielberger and Vagg (1991) is its lengthy administration time.

The Job Content Questionaire (Karasek, 1979) is directly based upon the Demand-Control model. This measure assesses how workers experience specific events according to five dimensions: decision latitude (how much control workers' have in making certain decisions), psychological and physical demands, exposure to physical demands in the work environment, job security and satisfaction, and social support. Limitations of the scale according to Spielberger and Vagg (1991) are two-fold: (a) the instrument does not assess the severity of work-related stressors and (b) there is little published data on the psychometric properties of the scale.

The Generic Job Stress Questionaire was developed by Hurrell and McLaney (1988) at the U.S. National Institute for Occupational Safety and Health (NIOSH). It assesses role conflict and ambiguity, work load, job satisfaction, cognitive demands, social support, and Type-A personality. A limitation of the scale according to Spielberger and Vagg (1991) is that it has a very lengthy administration time.

The Stress Diagnostic Survey was developed by Ivancevich and Matteson (1976). This is a self-report measure designed to tap perceived stress in work settings. According to Speilberger and Vagg (1991), the measure in fact does not truly tap perceived stress, but the frequency in which particular stressors are experienced. In addition, few studies

utilizing this measure can be found in recent literature.

The Work Stress Inventory was developed by Barone and collegues (Barone, 1994; Barone, Caddy, Katell, Roselione, & Hamilton, 1988). Job stress is assessed in a wide range of jobs. Both intensity and frequency of job stress occurrence is assessed.

Limitations of the scale according to Spielberger and Vagg (1991) are two-fold: (a) while the scale assesses job pressures and lack of organizational support, it does not make clear distinctions between these two concepts and (b) the scale focuses on aspects of the work environment including hazardous physical conditions, safety, and exertion.

Lastly, the Job Stress Survey was developed by Speilberger and Vagg (1991). This instrument is utilized in this paper's current study. The comprehensiveness of the measure is evidenced by its three scales and subscales. Indices for both severity and frequency of Job Pressure and Lack of Organizational Support are obtained. The authors contend that by capturing the frequency of a particularly stressful job occurrence, the likelihood of overestimating the effects of a rarely occurring stressful job event are minimized. Similarly, the effect of moderately stressful job events which occur frequently can be captured by this measure.

In 1990, Tombaugh and White (1990) wanted to determine whether layoff survivors perceived increased stress in the downsizing aftermath and whether or not the effects of that stress impacted critical work-related attitudes such as dissatisfaction and intent to leave the organization. A combination of structured interviews and questionnaires developed based upon these interviews were utilized in the study.

In the initial phase, structured interviews were conducted with 22 employees who had recently survived a layoff at their chemical plant whose workforce had been reduced

by 20 percent. In the second phase, feedback from these interviews was used to compile a survey tapping variables such as role ambiguity, role conflict, role overload and receiving feedback. Items were adopted from Abdel-Halim (1978), Rizzo, House & Lirtzman (1970) and Herold & Parsons (1985).

In addition, Satisfaction with the Organization was measured by an item adopted from Caplan et al. (1975) and Intent to Leave the Organization was measured by an item adopted from Quinn & Shepherd (1974). Participants were to rate each role stress and feedback item twice – once reflecting how this was experienced prior to the layoff and then again how it was experienced after the layoff.

The results from the interviews yielded the following information: (a) Employees reported a decentralization in decision-making leading to unclear policies and procedures; (b) Employees reported an increase in individual and group autonomy leading to an increase in poor communication; (c) Employees reported an increase in spans of control leading to a lack of performance standards; and (d) Employees reported an alteration in reporting relationships leading to both ineffective problem-solving and low employee morale.

The results from the survey data were as follows:

1.    There was a significant $(p < .001)$ increase in survivors' perceptions of role conflict, role overload and role ambiguity.

2.    There was a significant decrease in positive feedback reported $(p < .001)$;

3.    Survivors who reported the greatest job dissatisfaction also indicated the greatest increases in post-layoff levels of role conflict, role overload, and role ambiguity.

4.      Survivors who experienced job dissatisfaction also reported a decline in positive feedback.

5.      Survivors who reported greater stress expressed a greater intent to leave the organization;

6.      There was a significant difference $(p < .001)$ between survivors who were satisfied and dissatisfied with respect to role conflict and role ambiguity and a $(p < .05)$ significance with respect to positive feedback and

7.      Among those survivors expressing an intent to leave the organization, there was a significant increase in post-layoff levels of role ambiguity $(p < .05)$.

In 1997, Reissman, Orris, Lacey, and Hartman (1999) sought to determine both the prevalence of psychological distress in the workplace as well as the predominant job characteristics that were found to be most stress inducing in an environment facing an upcoming downsizing. Ninety-two white collar workers from a manufacturing company were selected for this cross-sectional study. The average company tenure for these employees was 22 years (the range was 2 – 35 years). Two questionnaires were given:

1.      The Symptom Checklist 90-Revised (Derogatis, 1994) was used to assess problems of both a psychological and psychosomatic origin.

2.      The Occupational Stress Inventory (Osipow, 1992) was used to assess three dimensions of occupational adjustment. These include: occupational stress, adverse consequences to this stress (i.e., job strain) and coping resources.

There are six subscales within the OSI that specifically tap the stress promoting aspects of a job. They are collectively known as the Occupational Role Questionaire (ORQ). These are: role ambiguity, role boundary, role overload, role insufficiency

perceived responsibility, and noxious environmental exposures. Role ambiguity refers, to the extent that the expectations, priorities, and evaluation criteria are clearly known by the employee. Role boundary refers to the extent that an employee experiences conflicting role demands and loyalties in a work environment. Role overload refers to the extent that a job exacts demands which exceed the resources that an employee has to fulfill such demands. The source of these resources can be both from the workplace and/or from the individual himself/herself. This also includes the extent that an employee is able to complete the expected overloads. Role insufficiency refers to the extent that there is a proper match between an employee's education, skills, training, and experience and the requirements of their job. Noxious environmental exposures refer to the extent that an employee is exposed to either extreme physical conditions or to high levels of environmental toxins at the workplace.

The results were the following: The prevalence of experienced stress among the participants was 40% of all those surveyed. That is, 40% of participants met the maladaptive stress criteria measured by the Symptom Checklist 90-Revised (Derogatis, 1994).

In addition, the following stress-inducing characteristics of the job were reported most frequently: (a) role insufficiency (44%), (b) role boundary (38%), and (c) role ambiguity (34%).

Lastly, a multivariate regression was done between company tenure and the six ORQ subscales and maladaptive stress. Three of these variables retained statistical significance in this selection process: (a) Role boundary $(p < .01)$, (b) Physical environment $(p < .05)$, and (c) Company tenure $(p < .05)$.

In a downsizing environment, it is critical to note that oftentimes layoff survivors will experience the three stress-inducing job characteristics cited in this study – role insufficiency, role boundary, and role ambiguity. Similarly, the results of Tombaugh and White's (1990) study indicate that positive feedback is a critical factor to consider, when evaluating such negative post-layoff consequences such a job dissatisfaction. As such, it will be prudent to heighten the awareness of managers involved in a downsizing process to the stressful implications of these variables.

In 1992, Cozens wanted to determine whether or not particular personality characteristics, role perceptions and stress levels as students could predict job stress and job attitudes as doctors. While this study did not employ a downsized population as participants, its relevance lies in the fact that it allowed for an investigation of factors which might underlie such dispositional concepts as hardiness and/or negative affectivity and their connection with job stress.

One hundred seventy participants were utilized in this longitudinal study. Participants were re-administered the identical survey instruments they completed two years prior while student doctors. A total of eight test instruments were used: (a) Perceived stress was measured by the General Health Questionaire (Goldberg, 1978); (b) Role perceptions were measured by a brief measure assessing student role satisfaction, authored by Cozens (1992); (c) Work attitudes were measured by Warr's (1987) Attitudes to Work Inventory; (d) Stressful aspects of work was assessed by the Stressful Aspects of Work Questionaire (Firth & Cozens, 1987); (e) Objective work measures such as type of hospital worked in (teaching vs. non-teaching), number of hours worked within

the past week and number of beds the subject is responsible for was collected; (f) Personality variables such as empathy was measured by the Emotion and Empathy Scales (Mehrabian & Epstein, 1972) and self-criticism and dependency were measured by two scales taken from Blatt's Depressive Experiences Questionaire (Blatt et al. 1982); and (g) Family relationships were measured by the Family Attitudes Questionaire (Thomas & Dusynski, 1974).

The findings in this study were intriguing. The main predictors of Job Stress were self-criticism and father's age and job attitudes were predicted by relationship to mother and student role satisfaction. Participants who had suffered a parental loss or separation when young were also likely to experience higher Job Stress.

In addition, Job Stress was predicted by one's relationship with their father as well as the type of hospital they worked in. Cozens (1992) interprets the latter finding in a psychoanylitic light: She suggests that students working in teaching hospitals who viewed their fathers as more intolerant, strict or unsupportive were more likely to develop self-criticallness and subsequently experience higher job stress owing to a possible negative transference to senior doctors. She offers that senior doctors in teaching hospitals may in fact exhibit more critical and unsupportive behaviors, further fueling a predisposition on such a student's part to experience a negative transference.

The significance of this study is that it warrants attention to existing dispositional factors which may significantly affect a person's ability to weather job stress encountered in latter life. Stress resiliency is a dispositional factor being investigated in this current study and its relationship to job stress will be determined.

The aim of ameliorating work stress through a group-centered therapeutic

intervention was studied by Lehmer and Bentley (1997). A weekly, cognitive-behavioral work stress-oriented psychotherapy group was offered to working individuals through Kaiser Permanente's outpatient psychiatry department. Sixty-two patients participated in the group and were studied over a 2-year period. Three general problems were presented in the group: (a) interpersonal problems with a boss or co-worker, (b) excessive work load, and (c) organizational change. The types of interventions utilized were: stress management, practical problem solving, education, and group support.

A follow-up questionnaire was sent to all participants following cessation of their involvement. Forty of the original 62 participants responded. The results were as follows: (a) 75% reported feeling better about their work, (b) 75% still retained their original job, and (c) Of the ten participants who had originally considered filing a worker's compensation stress claim, only five still considered doing so after attending the group.

This study holds great promise for creating other work-stress reducing interventions in the future. It would be particularly significant if other studies target specifically layoff survivors to see which interventions are deemed most effective.

Three dominant theories outling the eitiology of Job Stress have been presented. In addition, several existing measures of Job Stress have been outlined, including the Job Stress Survey (Speilberger & Vagg, 1991) which is utilized in the present study. In addition, the relationship among role conflict, role overload, role ambiguity and job dissatisfaction has been noted. It is anticipated that Job Stress will be a significant factor involved with layoff survivors in the present study.

# CHAPTER III

## Method

Two hundred and four male and female employees were randomly sampled from

nine Fortune 100 and 500 companies located in the United States. Collectively, they

represented seven different work sectors. They were: (a) Manufacturing, (b) Energy,

(c) Healthcare, (d) Financial Services, (e) Telecommunications, (f) Transportation, and

(g) Pharmaceuticals. The following is a breakdown of participants according to work

sector: (a) Manufacturing: 40, (b) Healthcare: 8, (c) Energy: 30, (d) Financial Services:

40, (e) Telecommunications: 46, (f) Transportation: 20, and (g) Pharmaceuticals: 20.

Two different manufacturing companies represented that work sector. Similarly, two

different energy companies represented that work sector. These employees represented

the surviving workforce, spared from a series of downsizings their institution had

undergone in the past several years. Neither consultants nor temporary staff were

recruited for this study. All participants in this research were informed that they would

not receive remuneration and that their responses would be anonymous in order to insure

privacy. While the participants remained anonymous, identifying information was

collected, including age, sex, race, marital status, what percentage of the total family

income they contributed, job title, and how many years they had been employed at the

company. Brief scales assessing Job Burnout, Job Stress, Perceived Procedural Fairness,

and Stress Resiliency will be discussed.

The participants represented varying job categories including: (a) Clerical - Nonexempt, (b) Hourly, (c) Professional – Non-managerial; and (d) Professional – Managerial.

## Instruments

*Maslach Burnout Inventory – General Survey version*

The first version of the MBI that was developed (Maslach & Jackson, 1986) was designed to measure Burnout among workers in the helping professions. An adaptation of this original measure was created shortly afterwards designed for use with workers in other occupations (Schaufeli et al., 1996). The MBI utilizes a six-point, fully anchored response format designed to assess Job Burnout. It's authors define Burnout as a crisis in one's relationship with work, and is a constellation of three factors, represented by three distinct subscales. Burnout is described as a state of exhaustion in which one is cynical about the value of one's job and is doubtful of one's capacity to perform. Furthermore, Burnout is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feeling. As such, Burnout is not viewed as being absent or present. There are a total of sixteen questions comprised of three distinct subscales: Exhaustion, Cynicism, and Professional Efficacy.

*Exhaustion.* This subscale assesses the extent that an individual feels exhausted by one's work. Two sample questions from the Exhaustion subscale are: *I feel emotionally drained from my work* and *I feel used up at the end of the work day.* There are five test items comprising this subscale. Participants rate the frequency each test item is experienced on a six point scale: 0 = *Never*; 1 = *A few times a year or less*; 2 = *Once a*

*month or less*; 3 = *A few times a month*; 4 = *Once a week*; 5 = *Every day*. A low score is indicated by a subscore = < .2.00; An average score is indicated by a subscore between 2.01-3.19; A high score is indicated by a subscore= > 3.20.

*Cynicism*. This subscale assesses the relative extent to which an employee feels indifferent or distant towards work, as a way of coping with exhausting demands. Two sample questions from the Cynicism subscale are: *I just want to do my job and not be bothered* and *I doubt the significance of my work.* There are five test items comprising this subscale. Participants rate the frequency each test item is experienced on a six point scale: 0 = *Never*; 1 = *A few times a year or less*; 2 = *Once a month or less*; 3 = *A few times a month*; 4 = *Once a week*; 5 = *Every day*. A low score is indicated by a subscore = < .1.00; An average score is indicated by a subscore between 1.01-2.19; A high score is indicated by a subscore = >2.20.

*Professional Efficacy*. This subscale assesses feelings of competence and successful achievement in one's work while explicitly measuring an individual's expectations of continued effectiveness at work. Two sample questions from the Professional Efficacy subscale are: *I have accomplished many worthwhile things in this job* and *At my work, I feel confident that I am effective at getting things done.* There are six test items comprising this subscale. Participants rate the frequency each test item is experienced on a six point scale: 0 = *Never*; 1 = *A few times a year or less*; 2 = *Once a month or less*; 3 = *A few times a month*; 4 = *Once a week*; 5 = *Every day*. A low score is indicated by a subscore = >4.00 and represents a low degree of burnout; An average score is indicated by a subscore between 4.01-4.99 and represents an average degree of burnout; A high score is indicated by a subscore = < .5.00 and represents a high

degree of burnout. Thus, Burnout is conceptualized as a continuous, not dichotomous variable.

*Test Reliability.* Internal consistency coefficients for the three subscales on the MBI was obtained from three different populations (Schaufeli et al., 1996). In a sample of Dutch employees, the following Cronbach alphas were obtained: Exhaustion = .87; Cynicism = .73; Professional Efficacy = .77. In a sample of American employees, the following Cronbach alphas were obtained: Exhaustion = .89; Cyncism = .80; Professional Efficacy = .76. In a sample of Finnish employees, the following Cronbach alphas were obtained: Exhaustion = .87; Cynicism = .84; Professional Efficacy = .84. The sample of Dutch employees had the following stability coefficients after a one-year interval: Exhaustion = .65; Cyncism = .60, and Professional Efficacy = .67.

*Test Validity.* Construct validity was demonstrated by Schaufeli, Leiter, and Kalimo (1995). These researchers found that Exhaustion was associated with mental and physical strain, work overload, and role conflict at work. In addition, they found that Professional Efficacy is related to satisfaction, organizational commitment, job involvement, and access to resources. Lastly, Cynicism is primarily related to the same constructs as is Exhaustion, but with negative secondary loadings on the attitudinal constructs that are associated with Professional Efficacy.

Leiter and Schaufeli (in press) examined relationships among the three MBI - General Survey subscales. In an analysis of 853 hospital employees who completed the survey and added their own written comments, the following observations were made: Employees who were more apt to note problems in the quality of care in the hospital tended to score higher on the Exhaustion and Cynicism subscales in contrast to those

who noted more positive aspects of the hospital. In addition, employees who were more apt to criticize management or their immediate supervisor tended to score higher on the Exhaustion and Cynicism subscales. Lastly, employees who commented about harassment or stress at work tended to score higher on the Cynicism subscale.

Discriminant validity was noted among the three subscales of the MBI – General Survey version (Schaufeli, Leiter, & Kalimo, 1995). The strongest correlations were between Exhaustion and Cynicism ($r = .44$ to $r = .61$) and the weakest were between Exhaustion and Professional Efficacy ($r = -.04$ to $r = -.34$). The correlations between Cynicism and Professional Efficacy ($r = -.38$ to $r = -.57$) were slightly weaker than those between Exhaustion and Cynicism.

*Job Stress Survey*

The Job Stress Survey (JSS) is designed to identify sources of generic occupational stress. It measures both the perceived severity of these sources, as well as the frequency. Specifically, it measures thirty common stressor events at work, totally sixty test items. The instrument was designed by Spielberger and Vagg (1991). It consists of three scales and six subscales, measured by responses on a nine point variable scale. The scoring section measuring the amount of stress perceived ranges from 1 = *low stress*; 5 = *moderate stress*; 9 = *high stress*. The scoring section measuring the number of days on which the event occurred during the past six months ranges from 0 to 9+. The three scales are: (a) Job Stress Index, (b) Job Stress Severity, and (c) Job Stress Frequency. The subscales are: (a) Job Pressure Index, (b) Job Pressure Severity, (c) Job

Pressure Frequency, (d) Lack of Organizational Support Index, (e) Lack of

Organizational Support Severity, and (f) Lack of Organizational Support Frequency.

*Scale One: Job Stress Index.* This provides an estimate of the overall level of

occupational stress experienced. It combines severity and frequency ratings of all 30 JSS

test items.

*Scale Two: Job Stress Severity.* This indicates respondents' average rating of

perceived severity for all 30 JSS stressor events.

*Scale Three: Job Stress Frequency.* This represents the average frequency of

occurrence of the 30 JSS test stressor events experienced within the past six months.

*Subscale One: Job Pressure Index.* This assesses the occupational stress

(combined severity and frequency) which can be attributed most directly to the pressures

of the individual's work (i.e., working overtime, meeting deadlines and excessive

paperwork). These ten stressors reflect stressful aspects of the job's structure, design or

duties.

*Subscale Two: Job Pressure Severity.* This assesses the average level of

perceived severity of the ten JSS stressor events most directly related to the pressure of a

job.

*Subscale Three: Job Pressure Frequency.* This assesses the average frequency

of occurrence of the ten JSS stressor events most directly related to the pressures of a job.

*Subscale Four: Lack of Organizational Support Index.* This assesses the amount

of occupational stress (combined severity and frequency) that can be attributed to a lack

of organizational support (i.e., difficulty getting along with supervisors and lack of

opportunity for advancement poorly motivated coworkers). These ten stressors reflect

events involving other people or organizational policies and procedures, rather than specific aspects of the job itself. .

*Subscale Five: Lack of Organizational Support Severity.* This assesses the average level of perceived severity of the ten JSS stressor events that most directly relate to a lack of organizational support.

*Subscale Six: Lack of Organizational Support Frequency.* This assesses the average frequency of occurrence for the ten JSS stressor events that most directly relate to organizational support.

*Test Reliability.* Internal consistency coefficients were obtained by Spielberger and Reheiser (1994). They determined that internal consistency coefficients were .89 or higher for the Job Stress Index scale, the Job Stress Severity scale, and the Job Stress Frequency Scale. They also determined that $r = .80$ or higher for the Job Pressure and Lack of Organizational Support Severity subscale.

*Test Validity.* Construct validity was determined through a factor analysis of the ratings of all thirty JSS Severity items in order to provide a basis for determining the underlying factor structure of the JSS (Turnage & Spielberger, 1991). It was determined that the Job Stress factors and the Job Pressure factors were essentially the same as the factors identified in the analyses of 29 Severity items. Each item had a dominant salient loading on either the Lack of Organizational Support factor or Job Pressure factor, with no dual salient loadings. Convergent validity was determined through correlations of the Job Stress Index scores and Job Pressure and the Lack of Organizational Support Severity

and Frequency subscale scores with the Locus of Control (Rotter, 1966) scale (Turnage & Spielberger, 1991). Positive correlations of the LOC scale were found with three of the five JSS scales $(p < .01)$.

### Perceived Procedural Fairness

This test instrument is designed for employees who have witnessed a downsizing and have retained their jobs. The test measures the extent to which surviving employees perceive how the actual downsizing conducted was fair or not. The twenty-six test items were designed by Jim Westaby (2000) at Columbia University and were based on extensive work by Brockner, DeWitt, Grover, and Reed (1990); Daly (1995); and Davy, Kinicki, & Scheck (1991). Coefficient alphas for two test administrations of subscale were: .79 (Brockner et al., 1993) and .85 (Brockner et al., 1995). Two pilot tests of Westaby's subscale were conducted with both a factory-based population $(N = 42)$, and a hospital-based population $(N = 35)$. Chronbach alphas were .96 and .94, respectively. Items are scored on a continuous Scale of 1 – 5, where in certain questions, *1 = Very Unsupportive* and *5 = Very Supportive; 1 = Very Poorly Planned* and *5 = Very Well Planned; 1 = Very Unfair* and *5 = Very Fair; 1 = Very Unhelpful and 5 = Very Helpful; 1 = Very Ineffective* and *5 = Very Effective.* In other questions, *1 = Not Well thought Out* and *5 = Very Well Thought Out; 1 = Not Justified* and *5 = Very Justified; 1 = Very Bad* and *5 = Very Good; 1 = Very Unnecessary* and *5 = Very Necessary.* Two sample questions are: *Senior management's explanation for the downsizing and layoff have been: Communicated Little to Communicated a Lot* and *Did management consult*

*with employees or employee representatives on the decision to downsize and layoff*

*employees – Very False to Very True.*

.

### Stress Resiliency Profile

This test instrument is designed to measure the degree of an individual's stress resiliency. It was created by Thomas and Tymon (1994) and contains 18 items. Responses are rated on a seven point scale, where 1 = *Strongly Disagree* and 7 = *Strongly Agree*. There are three distinct subscales: (a) Deficiency Focusing, (b) Necessitating, and (c) Low Skill Recognition.

*Deficiency Focusing.* This subscale taps into an individual's tendency to focus upon the negatives of a situation at the expense of positives. Individuals who score high in this subscale tend to view shortcomings and dangers as the center of their attention, usually at the expense of their strengths and other opportunities available to them. This bias in their perspective creates an unbalanced, exaggerated sense of how much is wrong and is likely to go wrong. Individuals scoring high on this subscale tend to experience an unnecessary degree of distress or discouragement. This is similar to Beck's (1995) automatic thought "Disqualifying or Discounting the Positive."

*Necessitating.* This subscale taps into an individual's tendency to resort to imperatives – that is, a tendency to resort to "I need to do this" or "I have to do this" self-imposed mandates. Individuals scoring high in this subscale tend to focus on commitment at the expense of choice. It is a frequent belief among such individuals that they have little choice in their overall decision making and that tasks need to be performed as inflexible demands. There is an additional tendency for these individuals to

place greater demands on themselves. This is similar to a pattern called "Necessitous" (Brown & Beck, 1989; Ellis, 1987).

*Low Skill Recognition.* This subscale taps into an individual's tendency to not recognize the role of one's own abilities in producing successes. Individual's scoring high on this subscale focus on external sources, including the help received from others, and are likely to attribute success to either luck or the easiness of the task. Such individuals underestimate their own competence and contend that success depends on things outside of oneself. This tends to result in feelings of vulnerability when generally facing tasks. Such tasks are likely to be experienced as an excessive demand and are subsequently likely to become a frequent source of stress for such individuals. Seligman (1990) identified Low Skill Recognition as a factor in "learned optimism" in contrast with "learned helplessness."

*Reliability.* Among the three subscales contained within the Stress Resiliency Profile, two studies demonstrated an average internal consistency coefficient of .81 (Thomas & Tymon, 1994) and .79 (Thomas & Tymon, 1995) respectively.

*Validity.* Construct validity was determined through two studies conducted. In the first (Thomas & Tymon, 1994) Deficiency Focusing, Skill Recognition, and a fourth factor, Envisioning Success showed significant correlations with a measure of self-reported stress symptoms. A later study by these same researchers (1995) determined that Envisioning Success was not correlated with stress symptoms, but the interpretive style variable of Necessitating was. This study confirmed the current significant correlation of the variables of Deficiency Focusing, Skill Recogniton, and Envisioning with a self-report measure of stress symptoms (average correlation = .31) and regressions

showed that the three scales cumulatively explained 25% of the variance in stress

symptoms. Construct validity was further evidenced by Sutz (1991): Focusing and Skill

recognition were found to correlate with engineers' intrinsic task motivation (i.e., how

intrinsically rewarding they found their work to be) ($r$ = minus .24 and .46 respectively).

In a study by Thomas and Tyrone (1994), Deficiency Focusing, Skill Recognition, and

Necessitating were correlated with a trait measure of public speaking apprehension

among U.S. naval officers (average correlation = .25). Predictive validity was evidenced

in this same sample, insofar as the Stress Resiliency Profile predicted apprehension levels

2 weeks prior to briefings delivered by these officers (average correlation = .24).

## Procedures

The various companies located within the United States were selected for this

study as they have undergone a number of recent downsizings, and will likely contain

both the type of employees needed to study, as well as post-layoff organizational

climate. Because the morale within the company is likely to be low, and employees are

likely to be wary about responding to an outside investigator, the sampling strategy will

be important. This researcher will utilize intercompany mail, and a packet containing all

four test instruments will be enclosed.

The sample will be selected in the following manner: An employee in the

human resources department will supply a computer-generated printout of all company

employees. From this list, every third name will be highlighted, and test packets will be

mailed to each of these employees at their work address. The packet will include the

following: (a) A brief letter of introduction of the researcher and the study; (b) A letter of

informed consent; (c) An instruction page on how to complete each of the four test

instruments; (d) One copy of the Maslach Burnout Inventory – General Survey version; (e) One copy of the Job Stress Survey; (f) One copy of the Attitude and Climate at Work Survey – containing the questions specific to assessing Procedural Fairness; (g) One copy of the Stress Resiliency Profile; (h) A list of demographic questions; (i) A return, addressed envelope with no identification of the respondent.

Upon receipt of the packets, each completed instrument within the packet will be coded with an identifying number for data entry purposes.

## Study Design

The following study will be a correlational study.

Hypothesis One in this study will investigate the main effect of Perceived Procedural Fairness on Job Burnout. It is predicted that the higher the Perceived Procedural Fairness score (i.e., the more positively perceived) the lower the degree of Burnout.

Hypothesis Two in this study will investigate the main effect of Perceived Procedural Fairness on Job Stress. It is predicted that the higher the Perceived Procedural Fairness score (i.e., the more positively perceived) the lower the degree of Job Stress.

Hypothesis Three in this study will investigate the main effect of Stress Resiliency on Job Burnout. It is predicted that the higher the level of Stress Resiliency, the lower the degree of Job Burnout.

Hypothesis Four in this study will investigate the main effect of Stress Resiliency on Job Stress. It is predicted that the higher the level of Stress Resiliency, the lower the degree of Job Stress.

Hypothesis Five in this study will investigate whether or not an interaction effect exists between the two predictor variables – Perceived Procedural Fairness and Stress Resiliency. It is predicted that Stress Resiliency will moderate the effect of Perceived Procedural Fairness on both Job Burnout and Job Stress.

## Statistical Analysis

Two separate hierarchical multiple regression analyses will be conducted on Job Stress and Job Burnout. The first hierarchical regression will test the main effects of Perceived Procedural Fairness and Stress Resiliency on the two outcome variables (Job Stress and Job Burnout).

The second hierarchical multiple regression will test the interaction effect between Stress Resiliency and Perceived Procedural Fairness.

CHAPTER IV

Results

There were 121 participants in this study. The respondents were recruited from seven different companies, representing six different work sectors. These work sectors were: Financial Services, Pharmaceuticals, Telecommunications, Manufacturing and Transportation (see Table 1). Sixty-four percent of the sample was female and thirty six percent were male. The mean age of the respondents was 47 years ($Md = 49$; $SD = 9.7$ years). With respect to race, 85% describe themselves as being white, 6% were African American, 3% were Asian, 1% were Hispanic and 1% described themselves as Other. Sixty-five percent indicated that they were currently married, 15% were Single, 7% were Divorced, 5% were Widowed, 2% were Separated and 2% were Living with a Partner. Sixty-five percent reported has having earned at least a bachelor's degree. The majority (69%) described themselves as being responsible for providing at least half of their household's total income. Forty-six percent of the sample described their job as being at the management/supervisory level, 41% were Employees and 10% were Senior Managers/Supervisors. Finally, the mean longevity of the respondents working at their company was 14 years ($Md = 12$ years; $SD = 10.3$).

## Creation of Composite Scores

The MBI subscale scores were created using the procedures outlined in the Maslach Burnout Inventory Manual (Maslach et al., 1996). Similarly the Job Stress Survey composite scores were derived using the procedures described in the Job Stress Survey Professional Manual (Spielberger & Vagg, 1999). The overall stress resiliency score was determined by first calculating the three subscale scores (Deficiency-focusing, Necessitating, and Skill Recognition; Thomas & Tymon, 1994). The scores for the first two subscales (Deficiency Focusing and Necessitating) were then reversed coded so that higher scores indicated less of these tendencies (and therefore more Resilient in these areas). These two scores were then summed with the scores from the Skill Recognition subscale so that higher scores indicated higher levels of overall Stress Resiliency. Finally, the overall Perceived Procedural Fairness score was computed by first reverse coding items 1b, 1d, 3, 5b, 5d, 6, 8b, 8d, 8f, 9b and 9e so that higher responses on all items indicated greater agreement with the question. The overall Perceived Procedural Fairness score was then computed by summing all of the responses.

### Test Reliability

Internal consistency coefficients were calculated for the MBI subscales, the Perceived Procedural Fairness measure, and Job Stress Survey. The following Cronbach alphas were obtained for the three MBI subscales: Exhaustion = .91; Cynicism = .87; and Professional Efficacy = .79. The Cronbach alpha for the Perceived Procedural Fairness scale was .93.

The Cronbach alphas for the Stress Resiliency Profile subscales were as follows: Deficiency Focusing = .84, Necessitating = .69, and Low Skill Recognition = .80. Finally, the following were the Cronbach alphas associated with the three Job Stress Survey scales used in this dissertation: Job Stress Severity = .95, Job Stress Frequency = .91, and Job Stress Index = .91.

## Results

*Impact of Stress Resiliency and Perceived Procedural Fairness on Job Burnout*

Table 7 displays the zero-order correlations between the two predictor variables and the three measures of Job Burnout. Stress Resiliency was significantly negatively correlated with the MBI Exhaustion and MBI Cynicism composite scores. Individuals higher in Resiliency tended to report lower feelings of Exhaustion as well as Cynicism. Because of the need to transform the MBI Professional Efficacy composite scores to satisfy the statistical assumptions associated with multiple regression analysis, higher scores on this scale indicate lower levels of reported Professional Efficacy. Consequently, Stress Resiliency was negatively correlated with Professional Efficacy. Higher stress resilient respondents reported higher levels of Professional Efficacy.

Perceived Procedural Fairness scores were also significantly negatively correlated with the MBI Exhaustion and MBI Cynicism scores. The more Perceived Procedural Fairness a person reported experiencing, the less work Exhaustion and work Cynicism the person indicated having. The zero-order correlation between Perceived Procedural Fairness and Professional Efficacy, while in the hypothesized direction, was not significant. The two predictor variables were positively correlated with each other.

Respondents with higher Stress Resiliency reported experiencing higher levels of Perceived Procedural Fairness.

A series of multiple hierarchical regression analyses were used to test the hypotheses concerning the effect of Perceived Procedural Fairness and Stress Resiliency on Job Burnout. The first regression in this series examined the main effect that each of these factors had on Job Burnout. The second regression analysis examined whether or not there was an interaction between the two predictors. Before these analyses were conducted, however, the predictor and criterion variables were evaluated to determine whether the assumptions associated with regression analyses had been met (Tabachnick & Fidell, 2001). The variable that did not satisfy the assumptions associated with regression was the MBI Professional Efficacy subscale. Because these scores were negatively skewed ($z = -4.11$, $p < .0001$), they were transformed using a reflect and square root procedure.

Stress Resiliency and Perceived Procedural Fairness scores were first regressed on MBI Exhaustion subscale scores (see Table 12). $R$ (the overall amount of variance explained in the dependent variable using these two predictor variables) for this equation was significantly different from zero, $F(2, 88) = 5.62$, $p = .005$. However, contrary to the hypothesis, only Stress Resiliency was a significant predictor of MBI Exhaustion scores, $\beta = -.29$, $t = -2.63$, $p = .01$, $sr^2 = .07$. The higher one's Stress Resiliency score was, the less Exhaustion reported by the person. There was not a significant improvement in $R^2$ (the amount of variance explained) by including the interaction term, $F(1, 87) = .022$, $p = .881$.

Hence, the hypothesis predicting that Stress Resiliency would be significantly correlated with Job Burnout was supported. The hypothesis predicting that Perceived Procedural Fairness would be significantly correlated with Job Burnout was not supported, however.

Stress Resiliency scores, the Perceived Procedural Fairness scores, and the interaction term were used in a hierarchical regression to predict MBI Cynicism scores (see Table 13). The $R$ for the first equation was significantly different from zero, $F(2, 88) = 14.37, p < .0001$. The only hypothesis supported was the main effect for Stress Resiliency, $\beta = -.47, t = -4.67, p < ..01, sr^2 = .19$. Respondents who were more Stress Resilient reported experiencing less Cynicism or indifference to their job. The inclusion of the interaction term did not result in significant improvement in $R^2$, $F(1, 87) = .863, p = .355$.

Here again, the hypothesis predicting that Stress Resiliency would be significantly correlated with Job Burnout was supported. The hypothesis predicting that Perceived Procedural Fairness would be significantly correlated with Job Burnout was not supported, however.

Finally, the third measure of burnout was the MBI Professional Efficacy subscale. Because the transformed Professional Efficacy variable was used as the criterion, the lower the score, the higher one's Professional Efficacy was. The $R$ for the regression using Stress Resiliency and the Perceived Procedural Fairness scores as the predictor variables was significantly different from zero, $F(2, 88) = 11.63, p < .0001$ (see Table 14). Only the Stress Resiliency variable emerged as a significant predictor of Professional Efficacy, $\beta = -.44, t = -4.33, p < .001, sr^2 = .16$. Respondents with high

Stress Resiliency tended to have higher Professional Efficacy. This relationship was not moderated by Perceived Procedural Fairness as adding the interaction term to the regression did not result in a significant improvement in $R^2$, $F(1, 87) = .43$, $p = .51$.

As with the two previous calculations, the hypothesis predicting that Stress Resiliency would be significantly correlated with Job Burnout was supported. The hypothesis predicting that Perceived Procedural Fairness would be significantly correlated with Job Burnout was not supported, however. The hypothesis predicting that Stress Resiliency would moderate the effect of Perceived Procedural Fairness on Job Burnout was not supported.

In summary, only one of the main hypotheses concerning Job Burnout was supported. Consistently, Stress Resiliency emerged as a significant predictor of one's level of Job Burnout as measured in three ways by the MBI. The more Stress Resilient a person was, the less degree of Job Burnout the person was currently experiencing. Perceived Procedural Fairness did not appear to be related to one's level of Job Burnout, nor did this perception moderate the relation between Stress Resiliency and Job Burnout.

*Impact of Stress Resiliency and Perceived Procedural Fairness on Job Stress*

Table 8 displays the zero-order correlations between the two predictor variables and the three measures of Job Stress. Stress Resiliency was significantly positively correlated with Job Stress Severity. Interestingly, because Job Stress severity scores had been transformed to meet certain statistical assumptions, this correlation indicates that respondents with higher Stress Resiliency tended to rate the perceived severity of the 30 rated stressor events as more stressful than those with lower Stress Resiliency. This same

relationship emerged with Perceived Procedural Fairness and Job Stress Severity. It appears that individuals with higher Stress Resiliency as well as perceptions of Procedural Fairness saw stressor events as more severe than individuals lower on both measures. However, the higher one's Stress Resiliency was, the fewer stressful events the person reported experiencing during the past 6 months. In addition, the negative correlation between Stress Resiliency and overall Job Stress suggests that the more Stress Resilient individuals were actually experiencing less Job Stress than their less Resilient counterparts. Perceived Procedural Fairness was significantly correlated with the Job Stress Index, but not the Job Stress Frequency scores. The higher perceptions of Procedural Fairness one held, the less overall Job Stress they reported experiencing.

The second set of hypotheses examined how well Stress Resiliency and Perceived Procedural Fairness could predict the amount of Job Stress one was currently experienced as measured by the subscales of the Job Stress Survey instrument. Again, the variables involved were evaluated to determine whether they satisfied the assumptions associated with regression analysis. In addition to the Perceived Procedural Fairness score, only the Job Stress Severity composite score failed to meet these assumptions. Because they were negatively skewed ($z = -3.42$, $p < .001$), the Job Stress Severity scores were transformed using a reflect and square root procedure in order to meet the necessary statistical assumptions (Tabachnick & Fidell, 2001). Therefore, higher scores were associated with more stress.

The first hierarchical regression analysis examined the predictive value of Stress Resiliency and Perceived Procedural Fairness on one's Job Stress Severity score. This measure assesses how stressful the respondent considered 30 different stressor events to

be. For the first analysis, the Stress Resiliency and Perceived Procedural Fairness scores were regressed on the transformed Job Stress Severity composite scores. The $R$ associated with this regression was significantly different from zero, $F(2, 86) = 10.69$, $p < .001$. Similar to the results from the analyses involving Job Burnout, Stress Resiliency emerged as a significant predictor of Job Stress Severity, $\beta = .23$, $t = 2.18$, $p < .032$, $sr^2 = .04$. The more Resilient one was, the less stressful the person considered the stressor events to be. However, unlike the previous set of analyses, the hypotheses involving the role of Perceived Procedural Fairness was supported. The Perceived Procedural Fairness variable was also a significant predictor of Job Stress, $\beta = .30$, $t = 2.80$, $p < .001$, $sr^2 = .12$. The more Perceived Procedural Fairness a person reported experiencing at work, the less stressful the event was perceived as being. This relationship was not moderated by Perceived Procedural Fairness, as adding the interaction term to the regression did not result in a significant improvement in $R$, $F(1, 85) = 1.48$, $p = .23$.

The second job stress composite score examined was Job Stress Frequency, a measure of the average number of stressor events experienced during the prior 6 months. For this measure of stress, however, was not able to be significantly predicted from one's Stress Resiliency score nor one's Perceived Procedural Fairness score, $R = .04$, $F(2, 80) = 2.02$, $p < .14$. It appears that neither Stress Resiliency nor Perceived Procedural Fairness were predictive of the number of stressor events that one has experienced during the prior 6 months. This should not be surprising as the occurrence of stressor events is something that is external to the worker, not cognitive appraisals of one's situation as is in the case of Stress Resiliency or Perceived Procedural Fairness.

The last measure of Job Stress used as a criterion variable was the Job Stress Index, an estimate of one's overall level of Job Stress. While the overall $R$ using Stress Resiliency and Perceived Procedural Fairness did significantly differ from zero, $F(2, 78)$ = 4.86, $p$ = .01, individually neither independent variables emerged as significant predictors of overall Job Stress using the conventional .05 level of significance. Not surprisingly, the inclusion of the interaction term did not significantly improve the predictive power of this regression equation, $F(1, 77)$ = .66, $p$ = .42.

Hence, the hypothesis predicting that Stress Resiliency would be significantly correlated with Job Stress was only partially supported. Similarly, the hypothesis predicting that Perceived Procedural Fairness would be significantly correlated with Job Stress was also only partially supported. Lastly, the hypothesis predicting that Stress Resiliency would moderate the effect of Perceived Procedural Fairness on Job Stress was also only partially supported.

In summary, the major hypotheses with respect to Job Stress were only supported when Job Stress was measured as perception of severity of various stressor events. Additional results examining the relationship between Stress Resiliency, Somatic Compliants, Job Burnout and Job Stress

To examine the relation between Stress Resiliency and one's Somatic complaints, a composite score was created by summing respondents' answers to three yes/no questions: recent experiences of aches/pains, of headaches, and of feeling tired or listless. A score of three meant that the person had indicated he or she had responded yes to all three questions. A score of zero meant that the person had not recently experienced any of these three Somatic Complaints. This "health" variable was used as a predictor along

with Stress Resiliency of Job Burnout and Job Stress. Again, a correlational analyses and a hierarchical regression was used to evaluate whether the influence of one predictor on the criterion varied as a function of the other predictor.

*Job Burnout - MBI Exhaustion*

Table 9 displays the zero-order correlations between Stress Resiliency, extent of one's Somatic Complaints and the three measures of Job Burnout. Because the zero-order correlations between Stress Resiliency and Job Burnout were discussed earlier, only the intercorrelations between Somatic Complaints and the Job Burnout measures will be examined. The significant negative correlations between Somatic Complaints and the MBI Exhaustion and Cynicism scores indicated that individuals with fewer reported Somatic Complaints reported lower levels of job Exhaustion and Cynicism. The positive correlation between Somatic Complaints and Professional Efficacy suggests that those with fewer Somatic Complaints tended to have higher levels of Job Efficacy. Somatic Complaints were also significantly negatively correlated with the other predictor variable, Stress Resiliency. Stress Resilient individuals tended to report fewer Somatic Complaints.

A multiple hierarchical regression was used to predict MBI Exhaustion from one's Stress Resiliency and one's degree of Somatic Complaints (see Table 17). These two predictors resulted in significant $R$, $F(2, 108) = 34.26$, $p < .001$. The Somatic Complaints variable contributed significantly to this prediction, $\beta = .56$, $t = 7.13$, $p < .001$, $sr^2 = .29$. The more areas in which people reported experiencing Somatic problems, the higher their MBI exhaustion score was. Stress Resiliency approached significance as

a predictor of Exhaustion, $\beta = -.16$, $t = -1.96$, $p = .053$, $sr^2 = .02$. The relation between Somatic Complaints and Exhaustion was not moderated by Stress Resiliency as the inclusion of the interaction term in the regression did not result in a significant improvement in $R^2$, $F(1, 105) = 1.06$, $p < .31$.

*Job Burnout - MBI Cynicism*

A similar analysis was performed using Stress Resiliency and Somatic Complaints to predict MBI Cynicism (see Table 9). The $R$ for the regression involving these two independent variables was significantly different from zero, $F(2, 106) = 29.091$, $p < .0001$. Somatic Complaints emerged as a significant predictor of MBI Cynicism scores, $\beta = .34$, $t = 4.14$, $p < .001$, $sr^2 = .10$. The more complaints a person indicated, the higher the person's Cynicism score. Similarly, Stress Resiliency was also a significant predictor of Cynicism, $\beta = -.40$, $t = -4.94$, $p < .001$, $sr^2 = .10$. The inclusion of the interaction term did not significantly improve $R^2$, $F(1, 105) = .02$, $p = .90$.

*Job Burnout - MBI Professional Efficacy*

Somatic Complaints and Stress Resiliency were used as predictors of the last measure of Job Burnout, the transformed Professional Efficacy score (see Table 9). While this regression resulted in a significant $R$, $F(2, 106) = 16.39$, $p < .001$, only Resiliency was a significant predictor of one's transformed Professional Efficacy score, $\beta = -.47$, $t = 5.25$, $p < .001$, $sr^2 = .20$. The more Stress Resilient one was, the higher his or her level of Professional Efficacy. Neither Somatic Complaints nor the interaction term were significant predictors of one's score.

*Job Stress – JSS Job Stress Severity*

Table 10 displays the zero-order correlations between Stress Resiliency, extent of one's Somatic Complaints and the three measures of Job Stress. Because the zero-order correlations between Stress Resiliency and the measures of Job Stress were discussed earlier, only the intercorrelations between Somatic Complaints and the Job Stress will be examined. Respondents with more somatic complaints tended to rate as more stressful specific stressor events compared to individuals with fewer Somatic Complaints. Likewise, individuals who reported a higher frequency of experiencing the rated stressor events during the past six months also reported more Somatic Complaints. Finally, those reporting more Somatic Complaints also indicated higher overall levels of Job Stress.

A multiple hierarchical regression was performed to examine the predictive ability of one's degree of Somatic Complaints and one's level of Stress Resiliency on the one's transformed job stress severity score, a measure of the perceived stress of 30 stressor events (see Table 21). The R resulting from using the two variables as independent predictors was significant, $F(2, 101) = 11.12, p < .001$. Increased Somatic Complaints was predictive of increased perceptions of the stress associated with the rated stressor events, $\beta = -.22, t = -2.3, p < .03, sr^2 = .04$. Stress Resilience was also a significant predictor of evaluations of the stressor events, $\beta = .31, t = 3.32, p = .01, sr^2 = .09$. The more Stress Resilient a person was, the less stressful the event was considered to be. The inclusion of the interaction term did not result in a significant change in $R^2$, $F(1, 100) = 1.11, p < .30$.

*Job Stress – JSS Frequency of Stressful Events Experienced*

Somatic Complaints and Stress Resiliency were used to predict the frequency of stressful events experienced during the past 6 months (see Table 22). Using these two variables as predictors yielded an $R$ that was significantly different from zero, $F(2, 96) = 9.42, p < .001$. However, only Somatic Complaints was predictive of the number of experienced stressful events during the past 6 months, $\beta = .38, t = 3.87, p < .001, sr^2 = .13$. Respondents with more Somatic Complaints tended to have had experienced more stressor events in the recent past. Neither Stress Resiliency nor the interaction term was a significant predictor of stressful events.

*Job Stress – JSS Job Stress Index*

The final multiple hierarchical regression analyses examined the predictive ability of Somatic Complaints and Stress Resiliency on one's overall level of stress (see Table 23). The regression that included just the two independent variables yielded an significant $R, F(2, 94) = 13.88, p < .0001$. Somatic complaints was a significant predictor of overall Job Stress currently being experienced, $\beta = .42, t = 4.44, p < .001, sr^2 = .16$. Respondents reporting the most Somatic Complaints were also the ones currently experiencing the most Job Stress overall. Stress Resiliency was not a significant predictor of overall Job Stress, $\beta = -.14, t = -1.43, p = .16, sr^2 = .02$. The inclusion of the interaction term did not result in a significant improvement in $R^2, F(1, 93) = .02, p < .91$.

Review of Data Analysis

*Hypothesis One: The Higher the Level of Perceived Procedural Fairness, the Higher the Level of Job Burnout*

This hypothesis predicted that the higher the Perceived Procedural Fairness score (i.e., the more negatively the downsizing practices were perceived), the higher the degree of Job Burnout. This hypothesis was not supported by significant findings in this study. While this author still contends that the phenomenon of Perceived Procedural Fairness plays a critical role in the coping processes of layoff survivors, this study was unable to demonstrate such. It is speculated that flaws exist in the current scale used, insofar as the Cronbach alpha for the Perceived Procedural Fairness scale used was only .23. The scale only offered two items measuring distributive fairness (i.e., how layoff survivors perceived how those employees being laid were treated). In addition, questions were not specific enough to elicit a respondent's true feelings. For example, no one question targeted the timeline of when a layoff announcement was made or how specifically it was communicated. Lastly, the format of the scale may have been confusing to respondents, as some left gaps in their responses on that scale.

*Hypothesis Two: The Higher the Level of Perceived Procedural Fairness, the Higher the Level of Job Stress*

This hypothesis predicted that the higher the level of Perceived Procedural Fairness (i.e., the more negatively downsizing practices were perceived), the higher the level of Job Stress. This hypothesis was only partially supported in this study, insofar as Perceived Procedural Fairness emerged as a significant predictor of Job Stress Severity

only. This author again speculates that the reason for this partial finding is that the instrument used to measure Perceived Procedural Fairness in this study was inadequate in certain respects.

*Hypothesis Three: The Higher the Level of Stress Resiliency, the Lower Level of Job Burnout*

This hypothesis was supported by significant findings in this study. Stress Resiliency appears to be strongly related to Job Burnout. Layoff survivors who possessed higher levels of Stress Resiliency reported experiencing lower levels of Job Burnout. Similarly, layoff survivors who experienced lower levels of Stress Resiliency reported experiencing higher levels of Job Burnout. Stress Resiliency can be seen as a critical coping mechanism employed by survivors to offset the experience of Job Burnout in the aftermath of a layoff.

*Hypothesis Four: The Higher the Level of Stress Resiliency, the Lower the Level of Job Stress*

Speilberger and Vagg (1991) have operationally defined job stress as a combination of two measures – Job Stress Severity and Job Stress Frequency. Job Stress Severity assesses how stressful a respondent considers thirty different stressors to be. It does not assess whether the respondent has actually experienced these stressors, but rather taps their perception of how stressful they would imagine any one of them to be. Job Stress Frequency, on the other hand, does measure the actual frequency of how often

certain stressful events were experienced within the past six months. The Job Stress Index is an estimate of one's overall level of Job Stress.

As such, it can be stated that Hypothesis Four was only partially supported. Stress Resiliency only emerged as a significant predictor of Job Stress Severity, but not for Job Stress Frequency or for the Job Stress Index.

It is difficult to speculate why these findings emerged. It is possible that respondents did not answer the questions regarding Job Stress Frequency accurately. In a post-layoff environment, many layoff survivors remain wary and skeptical, not quite knowing when "the other shoe may drop.". They may feel the need to minimize the reality of their new environment (less supervision, more paperwork, etc.) so as not to appear in a negative light to their supervisors, and perhaps be more vulnerable. It is also conceivable that despite the fact that all participants were promised anonymity, perhaps some or many still feared that honest answers to these questions might have deleterious consequences if known by their superiors.

*Hypothesis Four: The Higher the Level of Stress Resiliency, the Lower the Level of Job Stress*

Speilberger and Vagg (1991) have operationally defined job stress as a combination of two measures – Job Stress Severity and Job Stress Frequency. Job Stress Severity assesses how stressful a respondent considers thirty different stressors to be. It does not assess whether the respondent has actually experienced these stressors, but rather taps their perception of how stressful they would imagine any one of them to be. Job Stress Frequency, on the other hand, does measure the actual frequency of how often

certain stressful events were experienced within the past six months. The Job Stress Index is an estimate of one's overall level of Job Stress.

As such, it can be stated that Hypothesis Four was only partially supported. Stress Resiliency only emerged as a significant predictor of Job Stress Severity, but not for Job Stress Frequency or for the Job Stress Index.

It is difficult to speculate why these findings emerged. It is possible that respondents did not answer the questions regarding Job Stress Frequency accurately. In a post-layoff environment, many layoff survivors remain wary and skeptical, not quite knowing when "the other shoe may drop.". They may feel the need to minimize the reality of their new environment (less supervision, more paperwork, etc.) so as not to appear in a negative light to their supervisors, and perhaps be more vulnerable. It is also conceivable that despite the fact that all participants were promised anonymity, perhaps some or many still feared that honest answers to these questions might have deleterious consequences if known by their superiors.

*Hypothesis Five: Stress Resiliency Will Moderate the Effect of Perceived Procedural Fairness on Job Burnout*

This hypothesis was not supported by significant findings in this study. It is speculated that the reasons for this lie in some flaws inherent in the test instrument used to measure Perceived Procedural Fairness. Thus, the predictor variable of Perceived Procedural Fairness was not adequately captured and measured by this study.

*Hypothesis Five – Stress Resiliency will Moderate the Effect of Perceived Procedural Fairness on Job Stress*

This hypothesis was not supported by significant findings in this study. Speculation about the inadequacy of the Perceived Procedural Fairness measure has already been discussed as an explanation for this outcome.

*Additional Results Examining the Relationship between Stress Resiliency, Somatic Complaints and Job Burnout*

Of interest to this author for purposes of considering areas for future research, three questions assessing the experience of Somatic Complaints were added to the demographic questions section. The intent was to uncover any significant relationships between Stress Resiliency, Somatic Complaints, and Job Burnout.

A significant relationship existed between Somatic Complaints and two of the three Maslach Burnout Inventory – General survey version (1996) subscales: MBI Exhaustion and MBI Cynicism. Stress Resiliency emerged as a significant predictor for both the MBI subscales of Cynicism and Professional Efficacy.

Clearly, the uncovering of these significant relationships warrants further research into the interplay of these variables among layoff survivors. In order to draw fair conclusions, however, additional questions tapping Somatic Complaints would need to be added in any future surveys distributed.

*Additional Results Examining the Relationship Between Stress Resiliency, Somatic Complaints, and Job Stress*

A significant relationship existed between Stress Resiliency and Job Stress Severity. This finding only partially supports the contention that Stress Resiliency significantly affects actual Job Stress. However, a significant relationship did exist between Somatic Complaints and Job Stress. This was manifest in a significant relationship between Somatic Complaints and Job Stress Severity, Job Stress Frequency and the Job Stress Index. This finding is the most pronounced among those reported as additional results.

Somatic Complaints appear to be independent of one's Stress Resiliency and more related to the amount of stress one is currently experiencing (according to the Job Stress Frequency). Stress Resiliency may be a more global factor with respect to how one responds to stress, whereas Somatic Complaints may be the result of a more locally experienced stress.

Table 1

*Means for Age, Educational Level, and Job Seniority*

|  | Mean | Standard Deviation | *N* |
|---|---|---|---|
| Age | 47.0 | 9.73 | 113 |
| Education Level (in years) | 15.5 | 2.1 | 116 |
| Job Seniority (in years) | 14.0 | 10.3 | 115 |

Table 2

*Marital Status of Sample (N = 121)*

|  | *n* | Percentage of Sample |
|---|---|---|
| Single | 18 | 15% |
| Married | 79 | 65% |
| Living with Partner | 2 | 2% |
| Separated | 2 | 2% |
| Divorced | 9 | 7% |
| Widowed | 6 | 5% |
| Not Reported | 5 | 4% |

Table 3

*Contribution to Total Household Income (N = 121)*

|  | *n* | Percentage of Sample |
|---|---|---|
| No contribution | 2 | 2% |
| 1-25% | 6 | 5% |
| 26-50% | 26 | 22% |
| 51-75% | 31 | 26% |
| 76-100% | 53 | 44% |
| Not Reported | 5 | 3% |

Table 4

*Racial Composition of Sample (N = 121)*

|  | *n* | Percentage of Sample |
|---|---|---|
| European American | 103 | 85% |
| African American | 7 | 6% |
| Hispanic | 1 | 1% |
| Asian American | 4 | 3% |
| Other | 1 | 1% |
| Not Reported | 5 | 4% |

Table 5

*Job Classification of Sample (N = 121)*

|  | *n* | Percentage of Sample |
|---|---|---|
| Employee | 50 | 41% |
| Manager/Supervisor | 56 | 46% |
| Senior Manager/Supervisor | 12 | 10% |
| Not Reported | 3 | 3% |

Table 6

*Means and Standard Deviations for Scales Used*

|  | Mean | SD | n |
|---|---|---|---|
| Resiliency | 69.3 | 13.16 | 117 |
| Procedural Fairness | 71.4 | 15.76 | 94 |
| MBI Exhaustion | 2.8 | 1.63 | 119 |
| MBI Cynicism | 2.3 | 1.67 | 119 |
| MBI Professional Efficacy | 4.9 | .90 | 118 |
| Job Stress Severity | 5.0 | 1.42 | 113 |
| Job Stress Frequency | 4.0 | 1.70 | 108 |
| Job Stress Index | 22.6 | 11.92 | 105 |
| Somatic Complaints | 1.3 | 1.08 | 115 |

Table 7

*Intercorrelations Between Stress Resiliency, Procedural Fairness, and MBI Subscales*

|  | Procedural Fairness | MBI Exhaustion | MBI Cynicism | MBI Professional Efficacy (transformed)[1] |
|---|---|---|---|---|
| Stress Resiliency | .36** | -.37** | -.52** | -.47** |
| Procedural Fairness |  | -.22* | -.22* | -.18 |
| MBI Exhaustion |  |  | .62** | .31** |
| MBI Cynicism |  |  |  | .57** |

*Note.* [1] Lower scores indicate higher levels of professional efficacy; * $p < .05$ (two-tailed); ** $p < .01$ (two-tailed)

Table 8

*Intercorrelations Between Stress Resiliency, Procedural Fairness, and Job Stress*

*Subscales*

|  | Procedural Fairness | Job Stress Severity (transformed)[1] | Job Stress Frequency | Job Stress Index |
|---|---|---|---|---|
| Stress Resiliency | .36** | .37** | -.25* | -.31* |
| Procedural Fairness |  | .40** | -.18 | -.31* |
| Job Stress Severity (transformed) |  |  | -.49** | -.68** |
| Job Stress Frequency |  |  |  | .93** |

*Note.* [1] Higher scores indicate lower ratings of perceived stress severity; * $p < .05$ (two-tailed); ** $p < .01$ (two-tailed)

Table 9

*Intercorrelations Between Stress Resiliency, Somatic Complaints, and MBI Subscales*

|  | Somatic Complaints | MBI Exhaustion | MBI Cynicism | MBI Professional Efficacy (transformed)[1] |
|---|---|---|---|---|
| **Stress Resiliency** | -.30** | -.37** | -.52** | -.47** |
| **Somatic Complaints** |  | .61** | .45** | .19* |
| **MBI Exhaustion** |  |  | .62** | .31** |
| **MBI Cynicism** |  |  |  | .57** |

*Note.* [1] Lower scores indicate higher levels of professional efficacy; * $p < .05$ (two-tailed); ** $p < .01$ (two-tailed)

Table 10

*Intercorrelations Between Stress Resiliency, Somatic Complaints, and Job Stress*

*Subscales*

|  | Somatic Complaints | Job Stress Severity (transformed)[1] | Job Stress Frequency | Job Stress Index |
|---|---|---|---|---|
| **Stress Resiliency** | -.30** | .37** | -.25* | -.31** |
| **Somatic Complaints** |  | -.31** | .42** | .47** |
| **Job Stress Severity (transformed)** |  |  | -.49** | -.68** |
| **Job Stress Frequency** |  |  |  | .93** |

*Note.* [1] Lower scores indicate higher levels of professional efficacy; * $p < .05$ (two-tailed); ** $p < .01$ (two-tailed)

Table 11

*Percentage of Respondents by Industry*

| Company | Percentage of Respondents |
|---|---|
| Financial Services | 22.3 |
| Pharmaceuticals | 3.3 |
| Telecommunications | 30.6 |
| Manufacturing | 21.5 |
| Transportation | 12.4 |
| Utilities | 9.9 |

Table 12

*Summary of Hierarchical Regression Analysis for Variables Predicting MBI Exhaustion Scores*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| Step 1 | | | | |
| Stress Resiliency | -.034 | .013 | -.28* | -.27 |
| Procedural Fairness | -.009 | .001 | -.10 | -.09 |
| Step 2 | | | | |
| Stress Resiliency | -.04 | .05 | .35 | -.08 |
| Procedural Fairness | -.02 | .05 | -.17 | -.03 |
| Interaction Term | .0001 | .001 | .12 | .02 |

*Note.* $R^2 = .11$ for Step 1; $\Delta R^2 = .000$ for Step 2 $[F(1, 87) = .02, p = .88]$, * $p < .01$

Table 13

*Summary of Hierarchical Regression Analysis for Variables Predicting MBI Cynicism Scores*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.06 | .01 | -.47* | -.43 |
| Procedural Fairness | -.006 | .01 | -.06 | -.06 |
| **Step 2** | | | | |
| Stress Resiliency | -.01 | .05 | -.11 | .02 |
| Procedural Fairness | .04 | .05 | .36 | .07 |
| Interaction Term | .0006 | .001 | -.66 | -.09 |

*Note.* $R^2 = .25$ for Step 1; $\Delta R^2 = .01$ for Step 2 [$F(1, 87) = .86, p = .36$); * $p < .01$

Table 14

*Summary of Hierarchical Regression Analysis for Variables Predicting Transformed*

*MBI Professional Efficacy Scores*

| Variable | $B$ | $SE\ B$ | $B$ | $sr$ |
|---|---|---|---|---|
| Step 1 | | | | |
| Stress Resiliency | -.009 | .002 | -.43* | -.39 |
| Procedural Fairness | .001 | .002 | -.05 | -.05 |
| Step 2 | | | | |
| Stress Resiliency | -.01 | .009 | -.54 | -.12 |
| Procedural Fairness | -.003 | .009 | -1.83 | -.04 |
| Interaction Term | .00004 | .000 | .205 | .03 |

*Note.* $R^2 = .20$ for Step 1; $\Delta R^2 = .001$ for Step 2 $[F(1, 87) = .08, p = .78]$; * $p < .01$

Table 15

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress*

*Severity (Transformed)*

| Variable | *B* | *SE B* | *β* | *sr* |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | .006 | .003 | .23* | .21 |
| Procedural Fairness | .007 | .002 | .30** | .27 |
| **Step 2** | | | | |
| Stress Resiliency | -.007 | .011 | -.26* | -.06 |
| Procedural Fairness | -.006 | .011 | -.28 | -.06 |
| Interaction Term | -.002 | .000 | .91 | .12 |

*Note.* $R^2 = .20$ for Step 1; $\Delta R^2 = .01$ for Step 2 $[F(1, 85) = 1.48, p = .23]$; * $p < .05$

** $p < .01$

Table 16

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress Frequency Scores*

| Variable | $B$ | $SE\ B$ | $B$ | $sr$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.02 | .01 | -.16 | -.14 |
| Procedural Fairness | -.01 | .01 | -.10 | -.09 |
| **Step 2** | | | | |
| Stress Resiliency | .02 | .06 | .16 | .04 |
| Procedural Fairness | .03 | .05 | .27 | .05 |
| Interaction Term | -.0005 | .001 | -.58 | -.08 |

*Note.* $R^2 = .05$ for Step 1; $\Delta R^2 = .01$ for Step 2 $[F(1, 79) = .48, p = .49]$

Table 17

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress Index Scores*

| Variable | $B$ | $SE\ B$ | $B$ | $sr$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.14 | .10 | -.16 | -.15 |
| Procedural Fairness | -.17 | .09 | -.23 | -.21 |
| **Step 2** | | | | |
| Stress Resiliency | .17 | .39 | .20 | .05 |
| Procedural Fairness | .14 | .38 | .19 | .04 |
| Interaction Term | -.004 | .005 | -.67 | -.09 |

*Note.* $R^2 = .11$ for Step 1; $\Delta R^2 = .01$ for Step 2 [$F(1, 77) = .66, p = .42$]

Table 18

*Summary of Hierarchical Regression Analysis for Variables Predicting MBI Exhaustion*

*Scores*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.02 | .01 | -.155* | -.15 |
| Somatic Complaints | .85 | .12 | .56*** | .54 |
| **Step 2** | | | | |
| Stress Resiliency | .005 | .02 | -.04 | -.02 |
| Somatic Complaints | 1.48 | .63 | .99** | -.07 |
| Interaction Term | .206 | .428 | 3.356 | .05 |

*Note.* $R^2 = .39$ for Step 1; $\Delta R^2 = .006$ for Step 2 [$F(1, 105) = 1.06, p = .31$] * p < .055;

** $p < .02$; ***$p < .001$

Table 19

*Summary of Hierarchical Regression Analysis for Variables Predicting MBI Cynicism Scores*

| Variable | B | SE B | β | sr |
|----------|------|------|-------|-------|
| Step 1 | | | | |
| Stress Resiliency | -.05 | .01 | -.40 | -.39 |
| Somatic Complaints | .51 | .12 | .34* | .32 |
| Step 2 | | | | |
| Stress Resiliency | .05 | .02 | -.39* | -.216 |
| Somatic Complaints | .59 | .66 | .39 | .07 |
| Interaction Term | -.001 | .01 | -.05 | -.01 |

*Note.* $R^2 = .35$ for Step 1; $\Delta R^2 = .00$ for Step 2 [$F(1, 105) = .02, p = .90$]; * $p < .01$

Table 20

*Summary of Hierarchical Regression Analysis for Variables Predicting MBI Professional Efficacy Scores*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| Step 1 | | | | |
| Stress Resiliency | -.01 | .002 | -.47** | -.45 |
| Somatic Complaints | .02 | .03 | .06 | .06 |
| Step 2 | | | | |
| Stress Resiliency | .01 | .004 | -.33* | -.18 |
| Somatic Complaints | .16 | .13 | .56 | .10 |
| Interaction Term | .002 | .002 | -.49 | -.09 |

*Note.* $R^2 = .24$ for Step 1; $\Delta R^2 = .008$ for Step 2 $[F(1, 105) = 1.17, p = .28]$; * $p < .05$
** $p < .01$

Table 21

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress*

*Severity (Transformed)*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| Step 1 | | | | |
| Stress Resiliency | .01 | .003 | .31** | .30 |
| Somatic Complaints | .07 | .03 | -.22* | -.21 |
| Step 2 | | | | |
| Stress Resiliency | .01 | .01 | .45** | .25 |
| Somatic Complaints | .10 | .16 | .30 | .05 |
| Interaction Term | -.002 | .002 | -.51 | -.10 |

*Note.* $R^2 = .18$ for Step 1; $\Delta R^2 = .01$ for Step 2 $[F(1, 100) = 1.11, p = .29]$; * $p < .05$

** $p < .01$

Table 22

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress*

*Frequency Scores*

| Variable | B | SE B | B | sr |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.01 | .01 | -.07 | -.07 |
| Somatic Complaints | .54 | .14 | .38* | .36 |
| **Step 2** | | | | |
| Stress Resiliency | .01 | .02 | -.05 | -.03 |
| Somatic Complaints | .62 | .74 | .43 | .08 |
| Interaction Term | -.01 | .01 | -.05 | -.01 |

*Note.* $R^2 = .16$ for Step 1; $\Delta R^2 = .00$ for Step 2 [$F(1, 95) = .01$, $p = .92$]; * $p < .01$

Table 23

*Summary of Hierarchical Regression Analysis for Variables Predicting Job Stress Index*

*Scores*

| Variable | $B$ | $SE\ B$ | $\beta$ | $sr$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| Stress Resiliency | -.12 | .08 | -.14 | -.13 |
| Somatic Complaints | 4.39 | .99 | .42* | .40 |
| **Step 2** | | | | |
| Stress Resiliency | -.13 | .14 | .15 | -.08 |
| Somatic Complaints | 3.78 | 5.15 | .36 | .07 |
| Interaction Term | .01 | .07 | .06 | .01 |

*Note.* $R^2 = .23$ for Step 1; $\Delta R^2 = .00$ for Step 2 $[F(1, 93) = .02, p = .90]$; * $p < .001$

# CHAPTER V

## Conclusions and Recommendations

The prevalence of layoffs within the past decade in the United States is widely known. Multiple work sectors have been affected and virtually none has been spared. Less known however, has been how the remaining work force in a company or organization fares in the aftermath of a layoff. How is this growing population of layoff survivors affected and what interventions can offset the ill effects engendered by a reduction in work force?

To date, no study has critically examined the role which two important factors, Stress Resiliency and Perceived Procedural Fairness, play in the coping processes of layoff survivors. This study has operationally defined coping processes by measuring the separate factors of Job Burnout and Job Stress. It was anticipated that Stress Resiliency and Perceived Procedural Fairness would independently affect Job Burnout and Job Stress. In addition, it was thought that an interaction effect would exist between the two predictor variables as well. This theoretical understanding laid the foundation for this study's subsequent research questions and hypotheses.

Several findings in this study were fully anticipated and realized. Other findings were both surprising and perplexing. As to the former scenario, Stress Resiliency was significantly related to levels of Job Burnout. Specifically, the higher the level of Stress Resiliency, the lower the level of Job Burnout.

Another anticipated finding involved combining the predictors of Stress Resiliency and Somatic Complaints with regard to Job Burnout. It appeared that Stress Resiliency was a significant predictor for two subscales of the Maslach Burnout Inventory (Maslach & Jackson, 1996): Cynicism and Professional Efficacy.

The last solid finding involved combining the predictors of Stress Resiliency and Somatic Complaints with regard to Job Stress. A significant relationship existed between Somatic Complaints and overall Job Stress.

There were several findings that were both surprising and perplexing as well. Most perplexing was the fact that Perceived Procedural Fairness did not play a significant role with regards to job burnout or overall Job Stress. This finding contradicted this researcher's expectations and can possibly be accounted for by some inadequacies in the test instrument for Perceived Procedural Fairness (see Limitations of the study).

Also surprising was the fact that Stress Resiliency played only a partial, yet insignificant role with regard to overall Job Stress. This researcher has already speculated that honest responses to the Job Stress Survey may have been precluded by the wariness and skepticism of some participants to disclose such vulnerable responses.

## Integration of the Findings

*The Relationship Between Stress Resiliency and Job Burnout*

In this current study, Stress Resiliency was found to be significantly correlated with all three measures of Job Burnout. Support for this finding can be drawn from some of the literature on the etiology of stress and cognitive appraisal processes, as well as from literature on Job Burnout.

Holroyd and Lazarus (1982) contend that stress is more likely to occur when a person perceives that the resources they possess are insufficient to meet the demands of a given task or event. Similarly, Thomas and Tymon (1992) note that stress results when people believe that extraordinary demands are being placed upon them. Two of the subscales of their Stress Resiliency Scale (1995) in particular, address this phenomenon. According to the tenets underlying both Deficiency Focusing and Low Skill Recognition, individuals are apt to experience stress by decreasing one's belief that they have the resources necessary to deal with a particular task and are thus less capable of dealing with such a task at all. Thomas and Tymon (1995) believe that there is an interplay between an individual's interpretive style (such as tendency toward Deficiency Focusing, for example) and the qualities of the stressors they are subjected to. Insofar as layoff survivors are encountering an environment ripe with diminished resources, one can see the connection between this and one's cognitive appraisal.

With regard to the current eitiology of Job Burnout, Farber (2000) notes that the recent increase in downsizings often times results in increased workloads as well as diminished resources for remaining employees. It is also often the case that in the aftermath of a layoff, employees are suddenly faced with multiple obligations on the job, coupled with less support. It follows that these ingredients combined could account for the strong connection between a layoff survivor's cognitive appraisal of their own resources and that of a changed work environment now depleted of resources.

Further bolstering the notion that Job Burnout results from an attempt to meet excessive work demands is a meta-analysis conducted by Lee and Ashforth (1996). These researchers investigated how demand and resource correlates and behavioral and

attitudinal correlates were related to each of Maslach's (1986) three dimensions on the Maslach Burnout Inventory – Human Services version. According to these researchers, work demands are perceived as a loss, because in order to meet such demands, resources need to be expended to meet such demands. If an individual's perception of such a loss is great, there is the increased likelihood that even more energy will be expended in order to avert any future loss. Here again, one should note the integral role that the perception of work demands plays in relation to the notion of Stress Resiliency and how one perceives the sturdiness of their own coping mechanisms.

## The Relationship Between Perceived Procedural Fairness and Job Burnout

In this current study, Perceived Procedural Fairness did not significantly correlate with the variable of Job Burnout. This author still maintains that a correlation likely exists in a population of layoff survivors, yet certain flaws inherent in the instrument used to measure Perceived Procedural Fairness were what may have accounted for the lack of a statistically significant relationship.

## The Relationship Between Stress Resiliency and Job Stress

In this current study, Stress Resiliency significantly correlated only with the Job Stress Severity score, one of three major scores obtained in the Job Stress Survey (Spielberger & Vagg, 1991). The Job Stress Severity score is more of a hypothetical measure, assessing how stressful a respondent considered thirty different stressor events to be. According to its authors, job stress is measured by a combination of Job Stress Severity and Job Stress Frequency.

Support for this finding can be found in Lazarus' (1991) work on the conceptualization of work stress. He contends that stressful antecedent conditions (i.e., stressors) interact with an individual's cognitive appraisal of a given situation (whether or not it is perceived as a threat, harm, or challenge). Whether or not a person has any personal stake in a given encounter or what their available coping options are for dealing with threat, harm, or challenge will affect this interaction. If an individual feels they have inadequate resources for dealing with a stressor perceived as threatening, they are likely to experience stress. The relationship between an individual's level of Stress Resiliency and perceptions of work stressors becomes clearer with such a theoretical backing.

*The Relationship Between Perceived Procedural Fairness and Job Stress*

In this current study, Perceived Procedural Fairness and Job Stress significantly correlated only with the Job Stress Severity score, as had Stress Resiliency mentioned above. This author was perplexed to find such a significant finding given this study's inability to obtain a significant relationship between Perceived Procedural Fairness and Job Burnout. While numerous studies were outlined in the Chapter II highlighting the importance of Perceived Procedural Fairness with regard to layoff survivors, none to date examined its relationship with Job Stress.

*The Relationship Between Job Burnout, Stress Resiliency, and Somatic Complaints*

In this current study, the predictor of Stress Resiliency was significantly correlated with Cynicism and Professional Efficacy, two subscales on the Maslach

Burnout Inventory – General survey version (1996). In addition, the predictor of Somatic Complaints was significantly correlated with Exhaustion and Cynicism as well.

Support for these findings can be found in the literature on layoffs effects on health. Greenglass and Burke (2000) found that nurses perceived that restructuring had negatively affected their level of somatization. Specifically, when nurses had a clearer sense of what their hospital's future was, they were less likely to experience psychosomatic reactions. The authors explain this by the fact that having information bolsters an individual's sense of control or predictability.

In addition, Zeitlin's (1995) work on the effects of organizational downsizing and stress-related illnesses warrant mentioning as well. His study of the U.S. maritime shipping industry indicated that in times of downsizing, seamen higher in rank experienced a significantly higher disease rate than seamen lower in rank. He speculated that higher stress resulted from declining job opportunities contributed to the increase in stress-related illnesses.

Further support for the connection between hardiness (of which Stress Resiliency is a subset of) and Somatic Complaints can be found in the work of Wiebe (1991). She investigated the role that hardiness plays as a stress moderator with regard to the experience of certain negative physiological responses. Specifically, she wanted to determine whether hardiness influences the appraisal of the same stressor in individuals differing in levels of hardiness. In addition, she wanted to know whether such appraisal differences influence physiological reactions. In fact, she found that high hardy men experienced significantly lower heart rate elevations than did low hardy men. In addition, she found that men in the high hardiness appraisal condition displayed less

vasoconstriction than did men in the low hardiness appraisal condition.

Lastly, Maddi (1999) investigated the role hardiness plays in moment-to-moment experiencing, coping, and strain reactions. With regard to Somatic Complaints, he found that hardiness correlated significantly with total scores on the Hopkins Symptom Checklist (Derogatis et al. 1974). This checklist measures both physical and physiological strain. Moreover, over a period of 4 years, being low in hardiness significantly corresponded to being high in blood pressure.

*The Relationship Between Job Stress, Stress Resiliency, and Somatic Complaints*

In this current study, Stress Resiliency and Somatic Complaints were significantly correlated with Job Stress Severity (which assesses how respondents perceive 30 different stressor events to be in the Job Stress Survey (Spielberger & Vagg, 1991). In addition, only Somatic Complaints were significantly correlated with Job Frequency (as measured on the Job Stress Survey (Spielberger & Vagg, 1991). Lastly, only Somatic Complaints were significantly correlated with the Job Stress Index (as measured on the Job Stress Survey (Spielberger & Vagg, 1991). This index is a composite index of the two previously mentioned scales.

Support for these findings has been previously described in the previous section titled: *The Relationship Between Job Burnout, Stress Resiliency, and Somatic Complaints.*

Implications of the Study

It seems apparent from this current study that Stress Resiliency plays an integral role in the coping processes of layoff survivors. In particular, the findings indicate that Stress Resiliency is particularly relevant with regard to the experience of Job Burnout. The higher a layoff survivor's Stress Resiliency level was, the lower their level of Job Burnout.

There are several implications to this finding. Tombaugh and White (1990) determined that layoff survivors who reported greater stress expressed a greater intent to leave the organization. In addition, this study indicated that there was a strong correlation between the experience of Somatic Complaints and with two of the three subscales on the Maslach Burnout Inventory – General survey version (1996). This ought to be a wake up call for those in the higher eschalons of business. Layoff survivors who cope less well may experience greater medical problems (and cost the company in terms of benefit expenditures). Even worse, these same companies may be at risk for losing valuable personnel who opt to leave a downsized organization.

It seems clear that Stress Resiliency needs to be bolstered in employees who are recent layoff survivors. The importance of augmenting ones sense of control, through the modification of cognitive appraisals about oneself and one's present situation has received various support. In 1996, the NIMH discussed the notion of Resiliency and control with regard to young girls who were sexually abused. They pointed out that healing can be fostered in such girls if they are allowed to explain, comprehend, and rationalize their traumatic experiences. In essence, they are encouraged through an intellectual channel to regain some sense of control over an event that was in fact, out

of their control. Glass and colleagues (1993) further contend that individuals with higher levels of Burnout perceive less control than those with lower Burnout. They add that those with higher levels of Burnout tended to have higher levels of perceptual accuracy.

Implementing Stress Resiliency training is not an entirely new concept. Lehmer and Bentley (1997) evaluated the efficacy of a weekly, cognitve-behavioral work-stress oriented psychotherapy group offered by Kaiser Permanente's outpatient psychiatry department. What would be more novel, would be the implementation of Stress Resiliency training at companies and organizations where there was an anticipated layoff. Employees lower in Stress Resiliency might then have an opportunity to modify faulty perceptions about themselves and their ability to cope during an organizational upheaval. It is likely that both employee and organization will profit immensely from such an implementation.

## Limitations of the Study

To date, no studies employed the joint predictor variables of Stress Resiliency and Perceived Procedural Fairness with a population of actual layoff survivors. Moreover, no studies employed the joint criterion variables of Job Burnout and Job Stress with this same population. As such, this study truly entered unchartered experimental waters, with little guidance from the existing literature.

This study utilized 121 layoff survivors as participants. This researcher had in fact, attempted to obtain a far bigger pool of participants. However, she encountered unanticipated resistance from the corporate/organizational end in many of the companies she pursued, as they were hesitant to devote the time and resources necessary to

participate in this study. The irony was, that this very hesitancy to be proactive and provide extra manpower (in order to uncover areas of employee dissatisfaction and provide subsequent amelioration) has been at the heart of this study's thesis (i.e., many companies are unfortunately less willing to risk the possibility of incurring unfavorable exposure, even if the end result could benefit the layoff survivors. One has to wonder if this pervasive avoidance can be likened to an organizational defense mechanism: In order to ward off negative feelings and thoughts espoused by survivors, companies might sooner avoid or deny the possibility that such even exists.

This study distributed survey packets to employees in nine companies/ organizations, representing eight different work sectors. Unfortunately, surveys were received back from only seven work sectors, and too few were received from any given work sector to make an individual analysis meaningful. Thus, the generalizability to other companies and industries is diminished. It was hoped that a broader spectrum of work sectors could have been represented including areas such as healthcare, education, government, and the airlines.

With regard to participants, there were several other factors which were not assessed in the present study. For example, there was no differentiation between participants who were union members vs. non-union members. Whether or not union membership could offset some of the negative affects of layoffs can only be speculated at this point.

In addition, while all participants received surveys within a year of the enacted layoff at their company, the precise time interval which participants completed the

surveys varied from company to company. How a longer or shorter time interval might impact a participant's set of post-layoff reactions is unclear.

Participants were not questioned about how many other layoffs they may have survived. It would be fascinating to see if having endured more layoffs actually "seasons" employees to future layoffs, or if just the opposite happens – that in some way their threshold is lowered and they are more prone to experiencing ill effects in the aftermath of a layoff.

In addition, participants were not asked about those workers being laid off (what percentage of the total work force did these employees comprise). It is possible that larger scale layoffs may have different effects on survivors than smaller scale layoffs.

Another consideration to take into account is that there was very little ethnic and race diversity among the participants. The homogeneity of this current pool of participants does not allow for discerning cultural differences which might exist.

While a breakdown of gender among participants was noted, no individual analyses were conducted to determine if any significant differences existed. This data could be useful in formulating future interventions.

The measurement of somatic manifestations might have been more expansive. For example, one might have queried participants (following the recent layoff they witnessed) about any increases in prescription medication usage, increased visits to their primary care doctor or increases in benefit utilization, or number of workers compensation medical claims filed. Such questions might have better tapped an increase in health problems associated with layoffs.

Related to health concerns, there were no questions regarding whether layoff

survivors reported an increase in drug or alcohol usage after the layoffs. This would certainly be important to determine to ascertain whether or not survivors were seeking some form of self-medicating, in order to better cope in the wake of a layoff.

The questions comprising the Perceived Procedural Fairness scale may need to be reexamined and made more concrete. Specifically, three issues might be considered for inclusion:

1.      According to Masse (2002), how employees are deselected in a downsizing is of critical importance, particularly to those surviving the downsizing. Was the selection criteria made known to all in the company? Was it based on individual performance appraisals or was it based on an individual's department's financial performance or viability? Was there the appearance of arbitrariness? According to Longenecker (1989), the latter can have a corrosive effect on an employee's level of trust, motivation, and development.

2.      Were those in upper/senior management given significant raises or bonuses just prior to or in the midst of the layoff?

3.      Did layoff survivors have the opportunity to say goodbye to departing employees and have the chance to have closure or were those employees being laid off abruptly told so and summarily escorted out the company door by security personnel?

The Likert scale format should be reevaluated, as participants responded inconsistently to test items, or simply left entire sections of questions blank.

Lastly, neither the cause for the layoff or the type of layoff conducted (voluntary vs. involuntary) at each of the various companies used were not delineated. For example, was the layoff conducted due to low profitability and the need to cut costs? Was it

conducted because of a merger and acquisition of another company? Of those employees being laid off, were some of these due to a voluntary nature such as the offering of a early retirement incentive? It could well be that perceptions of these separate scenarios could alter layoff survivors' feelings and reactions.

Future Research

This researcher strongly believes that a pre- and post-experimental study be conducted with a sample of layoff survivors to determine the efficacy of an individual or organizational intervention. Specifically, it could prove quite valuable to initially determine a layoff survivor's baseline measures on Stress Resiliency, Perceived Procedural Fairness, Job Burnout, and Job Stress. Following this, participants could either receive an individual intervention of Stress Resiliency training and/or the exposure to a modification of their companies' existing procedural practices regarding the conduct of layoffs. Brockner (1992) has proposed that modifications to the process be planned well in advance of a layoff and divided into three stages: before, during, and after the layoff. An example of what to do before a layoff would be notifying affected individuals well in advance. An example of what to do during a layoff would be making senior managers more accessible. Lastly, an example of what to do after a layoff is to make sure that survivors recognize new opportunities within the company. Measures of the initial four variables would be obtained again for comparison. This would indicate the efficacy of such interventions and provide the rationale for permanent implementation at companies eager to help their remaining workforce. Similarly, this same type of research could be conducted through the implementation of layoff survivor debriefing

groups. Such groups are modeled after debriefing groups held following a disaster or traumatic event, and are aimed at allowing layoff survivors to cathart in a controlled setting (Schonberg, 1995).

It would be quite interesting to conduct a subsequent study utilizing larger sample sizes of different work sectors to determine if there exist differences in different industries. While it could be that certain industries attract people unique to that industry, it could also be that certain industries foster different work cultures and practices. How this would all translate to the coping of the layoff survivor would be of interest.

Given the limitation of sparse cultural diversity among participants in this study, it would be interesting not only to increase the diversity in a subsequent study, but determine if there any differences in Perceived Procedural Fairness among employees and supervisors with differing ethnicity or race.

Other limitations of the present study previously mentioned could warrant future investigation. For example, there would be merit in comparing layoff survivors who have experienced multiple layoffs versus those who have only experienced one layoff. Might the former population have become more calloused and/or immune to the negative effects of a layoff? Or, might the contrary be the case – that a population who has experienced multiple layoffs might have a lowered threshold to such negative effects engendered by a layoff? In addition, there would be merit in comparing layoff survivors who have experienced layoffs for differing reasons and of differing types. That is, might a layoff survivor fare better in a climate where layoffs were voluntary vervus non-voluntary? Or might a layoff survivor fare more poorly in a company who conducted a

layoff for cost cutting purposes versus for the reasons of initiating a merger and acquisition? Lastly, there would be merit in comparing layoff survivors who were alerted to the upcoming layoff with varying amounts of advance notice. Might those survivors given adequate advance notice have a better opportunity to assimilate such information and process it emotionally as compared with those survivors given virtually no advance notice?

Catherall (1995) has written on the topic of secondary trauma which afflicts personnel directly involved in aiding trauma victims. Examples of such personnel would be firefighters, policemen and women, and mental health professionals assisting victims of accidents or related tragedies. Similarly, there is likely merit in exploring the impact on those individuals routinely working with layoff survivors (Employee Assistance Professionals, Human Resource Personnel, and other mental health professionals) to determine if they too, experience any secondary trauma as a result of consistently working with that population.

Noer (1993), who first described the concept of "survivor syndrome," likened the experiences to those individuals surviving a layoff to those who had survived catastrophes and disasters such as natural disasters, plane, and automobile crashes. It would be fascinating to actually compare individuals from both populations and determine what areas of overlap actually exist.

Some researchers (Noer, 1993) contend that layoff survivors experience varying degrees of anger in the aftermath of a layoff. As such, there might be merit in studying the correlation between the incidence of workplace violence in companies who have undergone a recent layoff.

Coutu (2002) contends that organizations, not unlike individuals, can be resilient. She supports this contention by the fact that resilient companies seem to embrace a core value system which seems to bolster employees during rocky times. Johnson and Johnson calls their value system the "Credo," while United Parcel Service refers to theirs as its "Noble Purpose." It would be fascinating to determine what other factors seem to distinguish a resilient organization from a non-resilient organization.

Lastly, there would be merit in doing some longitudinal studies with layoff survivors. At what precise point in time following a layoff do most survivors cope most poorly? At what point in time do these symptoms seem to abate, or do they in fact, worsen over time? Clearly an answer to this would be coupled with targeted interventions that could prove efficacious for this population.

Additional Considerations and Recommendations

Stemming from both this study and related work of other researchers are several additional considerations and recommendations relevant to aiding the coping of layoff survivors.

Following a layoff, oftentimes there is a shifting of jobs and related responsibilities within an organization. Survivors may not know what will become of them – will they be transferred to another department entirely, for example. This can lead to a disruption of familiar roles within the company. Cooper and Cartwright (1994) contend that role ambiguity, role conflict, and the degree of responsibility for others are significant sources of occupational stress. As such, it would be prudent to ensure that new roles adopted by survivors are fully clarified in the post-layoff environment. Caplan

and Teese (1997) add that organizations ought to designate a change manager to exclusively oversee a layoff from beginning to end. Such a change manager would conceivably ensure that evolving roles are transitioned into as smoothly as possible and any conflicts which arose could be dealt with immediately.

Caplan and Teese (1997) further add that there are three critical aspects to an organizations' well-being. These are: competence, connection, and commitment. They describe competence as know-how, expertise and a sense of security and control coming with mastery. Connection is described as a sense of belonging and attachment with bosses, colleagues, and the organization. Commitment is described as an individual employee's and organization's dedication and loyalty to the work and to each other. Following a layoff, there is a disruption in these three critical aspects, which must be regained in order to move forward. Accordingly, regaining competence might take the form of providing adequate training or re-training to those survivors given new responsibilities or shifted into new positions entirely. Regaining connection might need to involve the scheduling of frequent departmental get-togethers in order to help employees adjust to new colleagues or work teams. Regaining commitment could be attained by managers sincerely reassuring subordinates that they are valued by them and the organization at large.

Consideration should be given to offering layoff survivor workshops soon after a layoff is enacted. These will provide a forum for survivors to express their feelings and begin the much needed grieving process in order to move forward. The mere offering of such workshops can send a vital message from upper management to remaining employees that their thoughts and feelings are valued and valid.

Lastly, might some companies reevaluate the validity of conducting a layoff in the first place and consider alternative approaches to cost containment. According to Rigby (2002), investors are actually apt to interpret layoffs in a negative light (i.e., they are likely to see that as a symptom of the company's mismanagement or diminishing demand) and shun the stock. In fact, according to recent research conducted by Bain and Company (year) analyzing S&P 500 companies during the early stages of the present economic downturn, businesses which laid off 3% or less of their employees fared as well (profitably) as those companies who had no layoffs at all. In contrast, companies who laid off between 3 and 10% of their employees had flattened share prices.

Might some companies consider such alternatives to layoffs such as job sharing, or working reduced work weeks? It is clear that present day companies need to take a hard look at their most powerful, yet overlooked resource -- their surviving employees. Enacting much needed changes both individually and organizationally will in the corporate nomenclature, be a "win-win" situation for all.

References

Abdel-Halim, A.A. (1982). Social support and managerial affective responses to job stress. *Journal of Occupational Behavior, 3*, 281-295.

Adams, J. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 2, pp. 267-299). New York: Academic Press.

Allen, N.J. & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-8.

Alloy, L.B. & Abramson, L.Y. (1988). Depressive realism: Four theoretical perspectives. In L. Alloy (Ed.), *Cognitive processes in depression* (pp. 223-265). (New York: Guilford Press)

Applebaum, S. (1991). How to slim successfully and ethically: Two case studies of "downsizing". *Leadership & Organization Development Journal.* 12 (2), 11-16.

Applebaum, S., Simpson, R., & Shapiro, B. (1987). The tough test of downsizing. *Organizational Dynamics,* 68-79.

Applebaum, S., Simpson, R., & Shapiro, B. (1987). Downsizing: The ultimate human resource strategy. *Business Quarterly, 52*(2), 52-60.

Armstrong-Stassen, M. (1994). Coping with transition: A study of layoff survivors. *Journal of Organizational Behavior, 15*(7), 597-621.

Armstrong-Stassen, M. (1997). The effect of repeated downsizing and surplus designation on remaining managers: An exploratory study. *Anxiety, Stress & Coping: An International Journal, 10*(December (4)), 377-384.

Armstrong-Stassen, M. (1998). The effect of gender and organizational level on how survivors appraise and cope with organizational downsizing. *Journal of Applied Behavioral Science, 34*(June (2)), 125-142.

Atella, M. (1999). Crossing boundaries: Effectiveness and health among Western managers living in China. *Consulting Psychology Journal, 51,* 125-134.

Barone, D. (1994). Developing a transactional psychology of work stress. In P. Perrewe & R. Crandall (Eds.), *Occupational Stress: A Handbook on Job Stress* (pp. 29-37). New York, NY: Taylor & Francis.

Barone, D., Caddy, G., Katell, A., Roselione, F., & Hamilton, R. (1988). The Work Stress Inventory: Organizational stress and job risk. *Educational and Psychological Measurement, 48,* 141-154.

Beck, A.T. (1967). *Depression: Clinical, experimental and theoretical aspects.* (New York: Harper & Row)

Beck, A.T (1976). *Cognitive Therapy and the Emotional Disorders.* New York, NY: International Universities Press.

Beck, A.T., Rush, A.J., Shaw, B.F. & Emery, G. (1979). *Cognitive therapy of depression.* (New York: Guilford Press)

Beck, J. (1995). *Cognitive Therapy: Basics and Beyond.* New York, NY: The Guilford Press.

Behavioral, Cognitive & Social Sciences Research Branch of the National Institute of Mental Health. (1996). Basic Behavioral Science Research for Mental Health: Vulnerability and resilience. *American Psychologist, 51*(1), 22-28.

Brayfield, A.H. & Rothe, H.F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35,* 307-311.

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

Brockner, J. (1990). Scope of justice in the workplace: How survivors react to co-worker layoffs. *Journal of Social Issues, 46,* 95-106.

Brockner, J. (1992). Managing the effects of layoffs on survivors. *California Management Review*, 9-27.

Brockner, J., & Wiesenfeld, B. (1996). An integrative framework for explaining reactions to decisions: The interactive effect of outcomes and procedures. *Psychological Bulletin, 120*, 189-208.

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

Brockner, J., DeWitt, R., Grover, S., & Reed, T. (1990). Factors affecting the relationship between managers' explanations of a layoff and survivors' reactions to the layoff. *Journal of Experimental Social Psychology, 26*, 389-407.

Brockner, J., Grover, S., Reed, T., & DeWitt, R. (1992). Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. *Academy of Management Journal, 32*, 413-425.

Brockner, J., Grover, S., Reed, T., & DeWitt, R. (1992). Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. *Academy of Management Journal, 35*(June (2)), 413-425.

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

Brockner, J., Tyler, T., & Cooper-Schneider, R. (1992). The influence of prior committment to an institution. *Administrative Science Quarterly, 37*, 241-261.

Brockner, J., Wiesenfeld, B., & Martin, C. (1995). Decision frame, procedural justice, and survivors' reactions to job layoffs. *Organizational Behavior and Human Decision Processes, 63*, 59-68.

Brockner, J., Wiesenfeld, B., Reed, T., Grover, T., & Martin, C. (1993). Interactive effect of job content and context on the reactions of layoff survivors. *Journal of Personality and Social Psychology, 64*(2), 187-197.

Brown, G., & Beck, A. (1989). The role of imperatives in psychopathology: A reply to Ellis. *Cognitive Therapy and Research, 13,* 315-321.

Bunker, K. (1997). The power of vulnerability in contemporary leadership. *Consulting Psychology Journal: Practice and Research, 49*(Spring), 122-136.

Burke, R., & Greenglass, E. (1991). A longitudinal study of progressive phases of psychological burnout. *Journal of Health and Human Resources Administration, 13,* 390-408.

Burke, R., & Greenglass, E. (1999). Work-family conflict, spouse support, and nursing staff well-being during organizational restructuring. *Journal of Occupational Health Psychology, 4*(October (4)), 327-336.

Burke, R., & Greenglass, E. (2000a). Effects of hospital restructuring on full time and part time nursing staff in Ontario. *International Journal of Nursing Studies, 37,* 163-171.

Burke, W.W. (1990). The executive practices scale. Pelham, NY: Burke Associates.

Cammann, C. Fichman, M., Jenkins, G.D. Jr. & Klesh, J.R. (1983). Assessing the attitudes and perceptions of organizational members. In: Seashore, S.E., Lawler III, E.E., Mirvis, P.H. & Cammann, C. (Eds.) Assessing Organization Change, Wiley, New York, 71-138.

Caplan, R.D., Cobb, S., French, J.R.P., Harrison, R.V. & Pinneau, S.R. (1975). Job demands and worker health, HEW Publication No. NIOSH 75-160, Washington, DC.

Caplan, G., & Teese, M. (1997). *Survivors* (1st ed.) Palo Alto, CA: Davies-Black Publishing.

Catherall, D. (1995). Preventing Institutional Secondary Traumatic Stress Disorder. In C. Figley (Ed.), *Compassion Fatigue: Secondary Traumatic Stress Disorders in Those who Treat the Traumatized* (pp. 232-247). Brighton, NY: Brunner-Routledge.

Chaudron, D. (1994). After the layoffs: Healing and rebuilding. *HR Focus,* 1-4.

Cherniss, C. (1980). *Staff Burnout.* London: Sage Publications.

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

Cooper, C., & Cartwright, S. (1994). Healthy mind; Healthy organization - A proactive approach to occupational stress. *Human Relations, 47455-471*(4).

Cooper, C., Sloan, S., & Williams, S. (1988). *The Occupational Stress Indicator: Management Guide* [Brochure]. Windsor, England: NFER-Nelson.

Coutu, D. (2002). How resilience works. *Harvard Business Review*, 46-55.

Daly, J. (1995). Explaining changes to employees; the influence of justifications and change outcomes on employees' fairness judgements. *Journal of Applied Behavioral Science, 31*, 415-428.

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

Derogatis, L.R., Lipman, R.S., Rickels, K., Uhlenhuth, E.H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A measure of primary symptom dimensions. In P. Pichot (Ed.), *Psychological measurement in psychopharmacology*. Basel, Switzerland: Karger.

Derogatis, L.R. SCL-90-R Symptom Checklist-90-R: Administration, Scoring, and Procedures Manual. Minneaplois, MN: National Computer Systems Inc., 1994.

Dobbins, G.H. & Zaccaro, S.J. (1986). The effects of group cohesion and leader behavior on subordinate satisfaction. *Group and Organization Studies*, 11, 203-219.

Dunlap, J. (1994). Surviving layoffs: A qualitative study of factors affecting retained employeed after downsizing. *Performance Improvement Quarterly, 7*(4), 89-113.

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

Ellis, A. (1987). A sadly neglected cognitive element in depression. *Cognitive Therapy and Research, 11*, 121-146.

Ericksen, W. (2002, January 24). Performance, politics & ethics in corporate downsizing. Retrieved from University of Phoenix Online.

Farber, B. (2000). Introduction: Understanding and treating burnout in a changing culture. *Journal of Clinical Psychology, 56*(May (5)), 589-594.

Farley, J. (1991). Responses of mental health professionals to layoffs. *Hospital & Community Psychiatry, 42*(June), 624-627.

Firth-Cozens, J. (1987*a*). Emotional distress in junior house officers, *British Medical Journal, 295*, 533-536.

Firth-Cozens, J. (1992*a*). Why me? A case study of the process of perceived occupational stress. *Human Relations.*

Firth-Cozens, J. (1992). The role of early family experiences in the perception of organizational stress: Fusing clinical and organizational perspectives. *Journal of Occupational & Organizational Psychology, 65*(March (1)), 61-75.

Flannery, R., Hanson, A., Penk, W., & Pastva, G. (1997). Hospital downsizing and patients' assaults on staff. *Psychiatric Quarterly, 68*(1), 67-76.

Folger, R., & Bies, R. (1989). Managerial responsibilites and procedural justice. *Employee Responsibilities and Rights Journal, 2*, 79-90. .

Folkman, S., & Lazarus, R.S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 29-39.

French, J., & Caplan, R. (1972). Organizational stress and individual strain. In A. Marrow (Ed.), *The Failure of Success* (pp. 30-66). New York, NY: Amacon.

French, J., Caplan, R., & Van Harrison, R. (1982). *The Mechanisms of Job Stress and Strain.* Chinchester, England: Wiley.

Freudenberger, H. (1974). Staff burnout. *Journal of Social Issues, 1*, 159-164.

Freudenberger, H., & North, G. (1985). *Women's Burnout: How to Spot it, how to reverse it, and how to Prevent it.* New York, NY: Doubleday & Company.

Friedman, L. & Harvey, R.J. (1986). Factors of union commitment: The case of lower dimensionality. *Journal of Applied Psychology*, 71, 371-376.

Glass, D., McKnight, J., & Valdimarsdottir, H. (1993). Depression, burnout, and perceptions of control in hospital nurses. *Journal of Consulting and Clinical Psychology*, 61(1), 147-155.

Goldberg, D.P. (1978). *Manual of the General Health Questionnaire*, Windsor: NFER-NELSON.

Gordon, M.E.; Philpot, J.W.; Burt, R.E.; Thompson, C.A & Spiller, W.E. (1980). Commitment to the union: Development of a measure and an examination of its correlates. *Journal of Applied Psychology*, 65, 479-499.

Greenberg, J. (1988). Cultivating an image of justice: Looking fair on the job. *Management Executive*, 2, 155-158.

Greenglass, E., & Burke, R. (2000). The relationship between hospital restructuring, anger, hostility and psychosomatics in nurses. *Journal of Community & Applied Social Psychology*, 10, 155-161.

Greenglass, E., & Burke, R. (2000b). Hospital downsizing, individual resources, and occupational stressors in nurses. *Anxiety, Stress & Coping*, 13(4), 371-390.

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

Grosman, B. (1989). Corporate loyalty, does it have a future? *Journal of Business Ethics*, 1-4.

Hackman, J., & Lawler, E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology*, 55, 259-285.

Hackman, J., & Oldman, G. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60, 159-170.

Hackman, J. & Oldman, G. (1980). Work redesign. (Reading, MA: Addison-Wesley).

Heatherton, T.F. & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology, 60*, 895-910.

Herold, D.M., & Parsons, C.K. (1985). Assessing the feedback environment in work organizations: Development of the job feedback survey. *Journal of Applied Psychology, 70*, 290-305.

Hollenbeck, J.R. & Brief, A.P. (1987). The effects of individual differences and goal origin on goal setting and performance. *Organizational Behavior and Human Decision Processes, 40*, 392-414.

Holmes, T.H., & Rahe, R.H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research, 11*, 213-218.

Holroyd, K., & Lazarus, R. (1982). Stress coping and somatic adaptation. In L. Goldberger & S. Breznitz (Eds.), *Handbook of Stress: Theoretical and clinical aspects* (pp. 21-35). New York, NY: Free Press.

Hunsaker, P., & Coombs, M. (1998). Managing the emotional issues. *Personnel, 56-63*.

Hurrell, J., & McLaney, A. (1988). Exposure to job stress: A new psychometric instrument. *Scandinavian Journal of Work Environment and Health, 14*((Suppl. 1)), 27-28.

Insel, P., & Moos, R.. *Work Environment Scale, Form R* [Brochure]. Palo Alto, CA: Consulting Psychologists Press.

Ivancevich, J., & Matteson, M. (1976). *Stress Diagnostic Survey (SDS): Comments and Psychometric Properties of a Multidimensional Self-report Inventory* [Brochure]. Houston, TX: FD Associates.

Jackson, S. (1983). Participation in decision-making as a strategy for reducing job-related strain. *Journal of Applied Psychology, 68*, 3-19.

Jalajas, D., & Bommer, M. (1999). The influence of job motivation versus downsizing on indiviudal behavior. *Human Resources Development Quarterly, 10*(4), 329-341.

Jick, T.D. (1979). Process and impacts of a merger: Individual and organizational perspectives. Doctoral dissertation, Cornell University. (University Microfilms No. 79-26915).

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

Karasek, K. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24,* 285-306.

Kets de Vries, M., & Balazs, K. (1997). The downside of downsizing. *Human Relations, 50*(1), 11-50.

Krantz, D.S., Glass, D.C., & Snyder, M.L. (1974). Helplessness, stress level, and the coronary-prone behavior pattern. *Journal of Experimental Social Psychology, 10,* 284-300.

Kobasa, S. (1979). Stressfull life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37,* 1-11.

Kobasa, S.. Stressful life events, personality, and health: an inquiry into hardiness. *Journal of Personality and Social Psychology, 37,* 1-11.

Kobasa, S., Maddi, S., & Kahn, S. (1982a). Hardiness and health: A prospective study. *Personality and Social Psychology, 42,* 168-177.

Koco, L. (1996, December). Downsizing spurs disability claims, survey finds. *National Underwriter,* 1-4.

Langner, T.S. (1962). A twenty-two item screening score for psychiatric symptoms indicating impairment. *Journal of Health and Social Behavior, 3,* 269-276.

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

Lazarus, R. (1991). *Emotion and Adaptation.* New York, NY: Oxford University Press.

Lee, C. (1992). After the cuts. *Training, 29*(7), 17-23.

Lee, R., & Ashforth, B. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology, 75*(6), 743-747.

Lee, R., & Ashforth, B. (1996). A meta-analytic examination of the correlates of the three dimensions of burnout. *Journal of Applied Psychology, 81,* 123-133.

Lehmer, M., & Bentley, A. (1997). Treating work stress: An alternative to workers' compensation. *Journal of Environmental Medicine, 39*(1), 63-67.

Lerner, M.J. (1980). The belief in a just world: A fundamental delusion. (New York: Plenum)

Locke, E.A. & Latham, G.P. (1990). A theory of goal setting and task performance. Englewood Cliffs, NJ: Prentice-Hall.

Longenecker, C., & Goff, S. (1992). Performance appraisal effectiveness: A matter of perspective. *SAM Advanced Management Journal, 57*(2), 17.

Luthans, B., & Sommer, S. (1999). The impact of downsizing on workplace attitudes: Differing reactions of managers and staff in a healthcare organization. *Group & Organizational Management, 24*(1), 46-70.

Maddi, S. (1994). The Hardiness Enhancing Lifestyle Program (HELP) for improving physical, mental, and social wellness. In C. Hopper (Ed.), *Wellness Lecture Series.* Oakland, CA: University of California/HealthNet.

Maddi, S. (1996). *Personality Theories: A comprehensive analysis* (6th ed.) Pacific Grove, CA: Brooks-Cole.

Maddi, S. (1999a). The personality construct of hardiness: Effects on experiencing, coping and strain. *Counseling Psychology Journal; Practice and Research, 51*(2), 83-94.

Maddi, S., & Hightower, M. (1999b). Hardiness and optomism as expressed in coping patterns. *Consulting Psychology Journal: Practice and Research, 51*(2), 95-105.

Maddi, S., Kahn, S., & Maddi, K. (1998). The effectiveness of hardiness training. *Consulting Psychology Journal: Practice and Research, 50*(2), 78-86.

Marx, M., Garrity, T., & Bowers, F. (1975). The influence of recent life experience on the health of college freshman. *Journal of Psychosomatic Research,* 19, 87-92.

Maslach, C., & Jackson, S. (1981). *Maslach Burnout Inventory Manual* [Brochure]. Palo Alto, CA: Consulting Psychologists Press, Inc.

Maslach, C., & Jackson, S. (1996). Maslach Burnout Inventory - Human Services Survey (MBI-HSS) [Brochure]. In C. Maslach, S. Jackson, & M. Leiter (Eds.), *MBI Manual* (3rd ed.) Palo Alto, CA: Consulting Psychologists Press, Inc.

Maslach, C.; Jackson, S. & Leiter, M. (1996) (Eds.). *MBI Manual* (3rd ed.) CA: Consulting Psychologists Press, Inc.

Maslach, C., & Leiter, M.. *Maslach Burnout Inventory Manual* (2nd ed.) [Brochure] Palo Alto, CA: Consulting Psychologists Press, Inc.

McDermott, D. (1984). Professional burnout and its relation to job characteristics, satisfaction, and control. *Journal of Human Stress,* 10, 79-85.

McKnight, J., & Glass, D. (1995). Perceptions of control, burnout, and depressive symptomology: A replication and extension. *Journal of Consulting and Clinical Psychology, 63*(3), 490-494.

Mehrabian, A. & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality,* 40, 525-543.

Mellor, S. (1992). The influence of layoff severity on postlayoff union commitment among survivors: The moderating effect of the perceived legitimacy of a layoff account. *Personnel Psychology, 45,* 579-600.

Meyer, J.P., Allen, N.J. & Smith, C.A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology,* 78, 538-551.

Miller, L., Reesor, K., McCarrey, M., & Leikin, L. (1995). Nursing burnout. *Employee Assistance Quarterly, 10*(4), 29-52.

Mishra, A., & Spreitzer, G. (1998). Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice and work. *Academy of Management Review, 23*(3), 567-588.

Mone, M. (1994). Relationships between self-concepts, aspirations, emotional responses, and intent to leave a downsized organization. *Human Resource Management, 33*(2), 281-298.

Moorman, R.R. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology, 76*, 845-855.

Moskal, B. (1992, August 3). Managing survivors. *Industry Week*.

Mowday, R.T., Steers, R.M. & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14*, 224-247.

Mowday, R.T., Porter, L.W., & Steers, R.M. (1982). *Employee-Organization Linkages: The Psychology of Committment*. New York: Academic Press.

Naumann, S., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal, 43*(5), 881-889.

Noer, D. (1993). *Healing the wounds: Overcoming the trauma of layoffs and revitalizing downsized organizations*. San Francisco, CA: Jossey-Bass.

Noer, D. (1997). *Breaking free - A prescription for personal and organizational change*. San Francisco, CA: Jossey-Bass.

Offerman, L., & Gowing, M. (1990). Organizations of the future. *American Psychologist, 45*(2), 95-108.

O'Reilly, C.A. III, & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology, 71*, 492-499.

Osipow, S., & Spokane, A. (1981). *Occupational Stress Inventory Manual: Research Version* [Brochure]. Odessa, FL: Psychological Assessment Resources.

Parker, S., Chmiel, N., & Wall, T. (1997). Work characteristics and employee well-being within a context of downsizing. *Journal of Occupational Health Psychology, 2*(October (4)), 289-303.

Patchen, M. (1970). *Participation, achievement, and involvement on the job.* (Englewood Cliffs, NJ: Prentice-Hall)

Pearce, J.L., Branyiczki, I. & Bakacsi, G. (1994). Person-based reward systems: A theory of organizational reward practices in reform-communist organizations. *Journal of Organizational Behavior, 15*, 261-282.

Pearce, J.L., Sommer, S.M., Morris, A. & Frideger, M. (1992). A configurational approach to interpersonal relations: Profiles of workplace social relations and task interdependence (Working Paper OB92015). Irvine: Graduate School of Management, University of California, Irvine.

Pierce, J.L., Gardner, D.G., Cummings, L.L. & Dunham, R.B. (1989). Organization-based self-esteem: Construct definition, measurement and validation. *Academy of Management Journal, 32*, 622-648.

Quinn, R.P., & Shephard, L. (1974). Quality of employment survey. Ann Arbor, MI: University of Michigan.

Raber, M., Hawkins, M., & Wesley, E. (1995). Organizational and employee responses to surviving the downsizing. *Employee Assistance Quarterly, 10*(4), 1-11.

Reissman, D., Orris, P., Lacey, R., & Hartman, D. (1999). Downsizing, role demands, and job stress. *Journal of Environmental Medicine, 41*(4), 289-293.

Rhodewalt, F., & Agustdottir, S. (1984). On the relationship of hardiness to the Type A behavior pattern: perception of life events versus coping with life events. *Journal of Research in Personality, 18*, 212-223.

Richey, M. (1992). The impact of corporate downsizing on employees. *Business Forum*, 9-13.

Richey, M.. The impact of corporate downsizing on employees. *Business Forum*, 1-7.

Rigby, D. (2002). Look before you lay off. *Harvard Business Review*, 20-21.

Rizzo, J.R., House, R.J. & Lirtzman, S.I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.

Ropp, K. (1987). Restructuring: Survival of the fittest. *Personnel Administrator*, 45-47.

Rosenberg, M. (1965). Society and adolescent self-image. Princeton, NJ: Princeton University Press.

Russell, B. (1995). The subtle labor process and the great skill debate - Evidence from a potash mine-mill operation. *Canadian Journal of Sociology*, 20, 359-385.

Schaufeli, M., Leiter, M., Maslach, C., & Jackson, S. (1996). Maslach Burnout Inventory - General Survey (MBI-GS) [Brochure]. In C. Maslach, S. Jackson, & M. Leiter (Eds.), *Maslach Burnout Inventory Manual* (3rd ed.) Palo Alto, CA: Consulting Psychologists Press, Inc.

Schaufeli, W., Leiter, M., & Kalimo, R. (1995). Extending the burnout construct: Reflecting Changing career paths. *APA/NIOSH conference, Work, Stress and Health '95: Creating a Healthier Workplace. Washington, D.C.: Vol. . The Maslach B urnout Inventory - General Survey: A self-report questionaire to assess burnout in the workplace.*

Schwyhart, W.R. & Smith, P.C. (1972). Factors in the job involvement of middle managers. *Journal of Applied Psychology*, 56, 227-233.

Schonberg, S. (1995). Survivor Syndrome: What one company has done. *Employee Assistance*, 7(9), 19-34.

Schweiger, D., & DeNisi, A. (1991). Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal*, 34, 110-135.

Schweiger, D., Ivancevich, J., & Power, F. (1987). Executive actions for managing human resources before and after acquisition. *Academy of Management Executive*, 1, 127-138.

Shaw, J., & Barrett-Power, E. (1997). A conceptual framework for assessing organization, work group, and indiviudal effectiveness during and after downsizing. *Human Relations, 50*(February (2)), 109-127.

Skarlicki, D., Ellard, J., & Kelln, B. (1998). Third-party perceptions of a layoff: Procedural, derogation, and retributive aspects of justice. *Journal of Applied Psychology, 83*(1), 119-127.

Spielberger, C., & Vagg, P. (1991). *Job Stress Scale* [Brochure]. Odessa, FL: Psychological Assessment Resources, Inc.

Smith, B.J. (1982). *An initial test of a theory of charismatic leadership based on the responses of subordinates.* (Unpublished doctoral dissertation, University of Toronto)

Staw, B., Sandelands, L., & Dutton, J. (1981). Threat-rigidity effects in organizational behavior: A multi-level analysis. *Administrative Science Quarterly, 26,* 501-524.

Sutz, S. (1991). *Sources and consequences of intrinsic task motivation in engineers at the Naval Avionics Center.* Unpublished manuscript, Naval Postgraduate School.

Tabachnick, B., & Fidell, L. (2001). *Understanding Multimariate Statistics* (4th ed.) Boston: Allyn and Bacon.

Taylor, S.E. & Brown, J.D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin,* 103, 193-210.

Thomas, C.B. & Duszynski, K.R. (1974). Closeness to parents and the family constellation in a prospective study of five disease states: Suicide, mental illness, malignant tumor, hypertension and coronary heart disease. *Johns Hopkins Medical Journal,* 134, 251-270.

Thomas, K., & Tymon, Jr., W. (1994). Does empowerment always work? Understanding the role of intrinsic motivation and personal intepretation. *Journal of Management Systems, 6*(2), 1-13.

Thomas, K., & Tymon, Jr., W. (1995). Intrepretive styles that contribute to job-related stress: Two studies of managerial and professional employees. *Anxiety, Stress and Coping, 8,* 235-250.

Thomas, K., & Tymon, W. (1992). *Stress Resiliency Profile* [Brochure]. Tuxedo, NY: Xicom, Inc.

Thomas, K., & Velthouse, B. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review, 15,* 666-681.

Tombaugh, J., & White, L. (1990). Downsizing: An empirical assessment of survivors' perceptions in a postlayoff environment. *Organizational Development Journal,* 32-43.

Turnage, J.J., & Speilberger, C.D. (1991). Job stress in managers, professionals, and clerical workers. *Work & Stress,* 5, 165-176.

Uchitelle, L. & Kleinfield, N.R. (1996). On the battlefields of business, millions of casualties. *New York Times,* March 3.

Weibe, D. (1991). Hardiness and stress moderation: A test of proposed mechanisms. *Personality Psychology, 60,* 89-99.

Westaby, J. (2000). [Attitudes and Climate at Work Scale] Unpublished raw data, Teachers College/Columbia University.

Wiesenfeld, B., Brockner, J., & Martin, C. (1999). A self-affirmation analysis of survivors' reactions to unfair organizational downsizings. *Journal of Experimental Social Psychology, 35,* 441-460.

Wiesenfeld, B., Brockner, J., & Thibault, V. (2000). Procedural fairness, managers' self-esteem, and managerial behaviors following a layoff. *Organizational Behavior and Human Decison Processes, 83*(1), 1-32.

Wong, L., & McNally, J. (1994). Downsizing the army: Some policy implications affecting the survivors. *Armed Forces and Society, 20,* 199-216.

Zeitlin, L. (1995). Organizational downsizing and stress-related illness. *International Journal of Stress Management, 2*(4), 207-218.

Appendix A

Approval for Dissertation Proposal

**SETON HALL UNIVERSITY**
**COLLEGE OF EDUCATION AND HUMAN SERVICES**
**OFFICE OF GRADUATE STUDIES**

## APPROVAL FOR DISSERTATION PROPOSAL

Candidate, _Sue Schonberg_, has successfully completed all requisite requirements. This candidate's proposal has been reviewed and the candidate may proceed to collect data according to the approved proposal for dissertation, under the direction of the mentor and the candidate's dissertation committee.

If there are substantive differences between what has been approved in the proposal and the actual study, the final dissertation should indicate, on a separate page in the Appendix, the approval of the committee for those changes.

Title of Proposed Dissertation: _The role of stress resiliency and perceived procedural Fairness in the coping processes of layoff survivors."_

Dissertation Committee:

Mentor (sign/date): _Sandra Dilly, Ph.D._ _7/8/01_

Committee Member (sign/date): _Diane Lini Asigfeld_ _7-13-01_

Committee Member (sign/date): _____

Committee Member (sign/date): _____

Approved by Seton Hall University Institutional Review Board on _____

Department Chairperson (sign/date): _____

**SETON HALL UNIVERSITY**
COLLEGE OF EDUCATION AND HUMAN SERVICES
OFFICE OF GRADUATE STUDIES

## APPROVAL FOR DISSERTATION PROPOSAL

Candidate, _Sue Schonberg_, has successfully completed all requisite requirements. This candidate's proposal has been reviewed and the candidate may proceed to collect data according to the approved proposal for dissertation, under the direction of the mentor and the candidate's dissertation committee.

If there are substantive differences between what has been approved in the proposal and the actual study, the final dissertation should indicate, on a separate page in the Appendix, the approval of the committee for that changes.

Title of Proposed Dissertation: _The Role of Stress Resiliency and Perceived Procedural Fairness in the Coping Processes of Layoff Survivors._

Dissertation Committee:

Mentor (sign/date): _____

Committee Member (sign/date): _____

Committee Member (sign/date): _____

Committee Member (sign/date): _Jeanell Call_      _7.30 01_

Approved by Seton Hall University Institutional Review Board on _____

Department Chairperson (sign/date): _____

Appendix B

Request for Approval of Research, Demonstration, or Related Activities Involving

Human Subjects

**REQUEST FOR APPROVAL OF RESEARCH, DEMONSTRATION OR
RELATED ACTIVITIES INVOLVING HUMAN SUBJECTS**

**PROJECT TITLE:** The role of stress resiliency and Perceived Procedural Fairness in the coping Processes of layoff survivors

**CERTIFICATION STATEMENT:**

In making this application, I (we) certify that I(we) have read and understand the University's policies and procedures governing research, development, and related activities involving human subjects, and that I(we) shall comply with the letter and spirit of those policies. I(we) further acknowledge my(our) obligation to (1) obtain written approval of significant deviations from the originally-approved protocol BEFORE making those deviations, and (2) report immediately all adverse effects of the study on the subjects to the Chairperson of the Institutional Review Board Involving Human Subjects and to the Director of the Office of Grants and Research Services, Seton Hall University, South Orange, NJ 07079.

_____     4/16/01
**RESEARCHER(S) OR PROJECT DIRECTOR(S)**              DATE
                    **Please print or type out name below signature**

X _____     4/17/01
**RESEARCHER'S ADVISOR OR DEPARTMENTAL SUPERVISOR**   DATE
                    **Please print or type out name below signature**

The request for approval submitted by the above researcher(s) was considered by the IRB for Research Involving Human Subjects Research ___5/01___ meeting.

The application was approved ___✓___ not approved ___ by the Committee. Special conditions were ___ were not ___✓___ set by the IRB. (Any special conditions are described on the reverse side.)

Robert C. Hilling
_____     6/29/01
**CHAIRPERSON, SETON HALL UNIVERSITY INSTITUTIONAL**   DATE
**REVIEW BOARD FOR HUMAN SUBJECTS RESEARCH**

Appendix C

Institutional Review Board Approval Letter

# SETON HALL UNIVERSITY

June 29, 2001

Ms. Sue Schonberg
60-F New England Avenue
r    \ 18 ▒▒▒

Dear Ms. Schonberg:

The Institutional Review Board For Human Subject Research at Seton Hall University reviewed your Proposal entitled "The Role of Stress Resiliency and Perceived Procedural Fairness in the Coping Processes of Layoff Survivors." Your project has been approved as amended by the revisions submitted to the Chair of the IRB. Enclosed please find the signed Request for Approval form for your records.

The Institutional Review Board approval of this project is valid for a one year period from the date of this signed approval letter. Any changes to the research must you carry his cooperation and best wishes for the success of your research.

Sincerely,

Robert C. Halloway, Ph. D.
Acting Chair
Institutional Review Board

cc Sandra Lee, Ph. D.

/s

ENRICHING THE MIND, THE HEART AND THE SPIRIT

Appendix D

Maslach Burnout Inventory and the Stress Resiliency Profile

Subj: Copyrights
Date: 3/24/2003 5:57:20 PM Eastern Standard Time
From:
To:
Sent from the Internet (        )

March 24, 2003

Dear Ms. Schonberg:

As per our phone conversation of this morning, I am writing to you to
further explain our copyright guidelines.

Permission was granted to you to modify and reproduce the Maslach Burnout
Inventory-General Survey and the Stress Resiliency Profile for a one time
use for research purposes only.

Permissions are never granted for inclusion of our copyrighted inventories
in part or in whole in any published or none published media that also
includes electronic reproductions, to do so would be considered a copyright
infringement.

If you would like to include samples in your publication or Dissertation or
Thesis, we have pre-chosen samples that you can obtain from us for a minimal
fee of $75.00 dollars plus $45.00 dollar processing fee for a total of
$120.00 dollars.

If you are interested in obtaining samples, please let me know so I can send
you the permission forms for you to complete.

Thank you,

Eliza McLane
CPP Permissions Coordinator.
650 691-9105
Fax 650 623-9273
E-mail Perms@cpp.com

Appendix E

Job Stress Survey

Subj: Job Stress Survey
Date: 3/25/2003 10:17:30 AM Eastern Standard Time
From:
To:
Sent from the Internet (   )

Dear Ms. Schonberg:


We are not able to grant permission to you to include the entire Job Stress Survey (JSS) in the appendix of your dissertation.


If you have any questions, please do not hesitate to contact me.


Sincerely,


*Patty Drexler*

Executive Assistant to the

Chairman and CEO


Psychological Assessment Resources, Inc.

16204 N. Florida Avenue

Lutz, FL 33549

Tel: (813) 968-3003

Fax: (813) 968-2598

Appendix F

Letter of Informed Consent

To whom it may concern:

I am asking you to volunteer to take part in a research study. It is important that you read and understand the information contained in this letter.

I am currently conducting research on people's attitudes and feelings during times of organizational change. It is hoped that information gathered from this study will aid in understanding how human resource personnel and management can promote needed organizational improvements. This is being done as part of my dissertation work at Seton Hall University. A total of 500 employees will be randomly selected for participation in this study. Recommendations for organizational improvements will be made based upon the thoughts and feelings of these employees.

Participation in this study is strictly voluntary and participants may opt not to participate at any time. If you agree to participate in this research study, you will be asked to complete four brief questionnaires, which should take less than twenty minutes. The four questionnaires are: 1) Maslach Burnout Inventory (which measures levels of job burnout); 2) Job Stress Scale (which measures levels of job stress); 3) Stress Resiliency Scale (which measures levels of stress hardiness); 4) Procedural Fairness Scale (which measures how fairly employees perceived the recent layoffs were conducted). Each questionnaire contains many questions – some which may seem similar to others. In order for proper scoring to occur, it is vital that you answer EVERY QUESTION. This way, I will be able to ensure that accurate feedback is given back to your plant site.

Participation in this study is strictly anonymous and confidentiality will be strictly maintained. As such, please do NOT put your name on these questionnaires. A pre-addressed, stamped envelope will be provided to you to mail the questionnaires back to this investigator. You are free to drop out of this study at any time, if any of the questions make you uncomfortable. Neither electing not to participate in this study or electing to drop out of this study will result in any penalty or loss of benefits to you, which you would otherwise be entitled to. There is no compensation available for participating in this study. You may contact this investigator directly, if you have any questions regarding this research. Please contact Sue Schonberg at: (908) 598-2400 x3 to obtain any further information.

The completion and return of these questionnaires indicates an understanding of this study's purpose, and a willingness to participate.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the Office of Grants and Research Services. The telephone number of the Office is: (973) 275-2974.

Upon receipt of your survey packet, please return your completed questionnaires to me within 2 weeks. Thank you in advance for your interest.

Yours truly,

*Sue Scho*

Sue Schonberg, M.S., L.P.C.

Appendix G

Perceived Procedural Fairness Scale

## SURVEY: ATTITUDES AND CLIMATE AT WORK

The goal of this survey is to get your perceptions about certain events at work. Information from this survey will be used to see how to improve your work environment. Do not put your name on this survey. Your participation is entirely voluntary and anonymous. You have the right to refuse to participate. Please answer the following questions by circling the numbers that best reflect how you feel. Some questions have several parts to them – please answer all of the questions. Thank you.

1. The decision to downsize and layoff employees at this organization was:

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Not Well Thought Out | 1 | 2 | 3 | .4 | 5 | Very Well Thought Out |
   | b) Very Justified | 1 | 2 | 3 | 4 | 5 | Not Justified |
   | c) Very Unfair | 1 | 2 | 3 | 4 | 5 | Very Fair |
   | d) Very Good | 1 | 2 | .3 | 4 | 5 | Very Bad |
   | e) Very Unnecessary | 1 | 2 | 3 | 4 | 5 | Very Necessary |

2. Suppose you were to be laid off. If so, how well do you think the assistance that management actually offered the laid off people would provide for your needs?

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Not At All Well | 1 | 2 | 3 | 4 | 5 | Very Well |

3. Management has adequately taken care of employees who lost their jobs through downsizings and layoffs.

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Very True | 1 | 2 | 3 | 4 | 5 | Very False |

4. The severance pay and services that the organization offered to the laid-off people was a generous amount.

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Very False | 1 | 2 | 3 | 4 | 5 | Very True |

5. How have the efforts been in this organization at actually implementing and carrying out the downsizings and layoffs?

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Very Unsupportive | 1 | 2 | 3 | 4 | 5 | Very Supportive |
   | b) Very Well Planned | 1 | 2 | 3 | 4 | 5 | Very Poorly Planned |
   | c) Very Unfair | 1 | 2 | 3 | 4 | 5 | Very Fair |
   | d) Very Helpful | 1 | 2 | 3 | 4 | 5 | Very Unhelpful |
   | e) Very Ineffective | 1 | 2 | 3 | 4 | 5 | Very Effective |

6. Management consulted with employees or employee representatives on the decision to downsize and layoff employees.

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Very True | 1 | 2 | 3 | 4 | 5 | Very False |

7. Management consulted with employees or employees on how to conduct the layoff.

   | | | | | | | |
   |---|---|---|---|---|---|---|
   | a) Very False | 1 | 2 | 3 | 4 | 5 | Very True |

8. Senior management's explanation for the downsizing and layoff have been:

| | | | | | | |
|---|---|---|---|---|---|---|
| a) Communicated Little | 1 | 2 | 3 | 4 | 5 | Communicated a Lot |
| b) Very Clear | 1 | 2 | 3 | 4 | 5 | Very Unclear |
| c) Very Insincere | 1 | 2 | 3 | 4 | 5 | Very Sincere |
| d) Very Adequate | 1 | 2 | 3 | 4 | 5 | Very Inadequate |
| e) Very Unfair | 1 | 2 | 3 | 4 | 5 | Very Fair |
| f) Very Good | 1 | 2 | 3 | 4 | 5 | Very Bad |

9. In general, other management's decisions to downsize and layoff employees at other organizations is:

| | | | | | | |
|---|---|---|---|---|---|---|
| a) Not Well Thought Out | 1 | 2 | 3 | 4 | 5 | Very Well Thought Out |
| b) Very Good | 1 | 2 | 3 | 4 | 5 | Very Bad |
| c) Not Justified | 1 | 2 | 3 | 4 | 5 | Very Justified |
| d) Very Unfair | 1 | 2 | 3 | 4 | 5 | Very Fair |
| e) Very Necessary | 1 | 2 | 3 | 4 | 5 | Very Unnecessary |