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Postal workers and stress

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POSTAL WORKERS AND STRESS

by
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A Thesis

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ABSTRACT

Bobbie A. Person

Postal Workers and Stress

1999

Advisor: Dr. Dihoff

School Psychology

It is suggested that a plausible theoretical link exists between the management of

change and recent killings in the United States Postal Service. The degradation of labor

associated with the scientific management of technological change produces stress and

frustration that weaken employee integration and undermine existing forms of social

control. Certain employees reject prevailing definitions of situations provided by those in

power and develop alternative meanings and patterns of behavior, including assualtive

violence.

To examine this theory in more depth, 120 Occupational Stress questionnaires

and rating sheets were randomly distributed to 30 Mailhandlers and 30 Machine Clerks

working the "day" shift (7:00 am - 3:30 pm), and 30 Mailhandlers and Machine Clerks working the "graveyard" shift (11:00 pm- 7:00 am).

The Occupational Stress Inventory (OSI) was used to measure levels of occupational stress and psychological strain. Postal workers who worked the "graveyard" shift were found to be significantly more streeful than Mailhandlers and Machine Clerks who worked the "day" shift $F_{(1,13)}=.001$, $p < .000$.

MINI-ABSTRACT

Bobbie A. Person

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The purpose of this study was to determine if Mailhandlers and Machine Clerks

working the "graveyard" shift were more stressful than Mailhandlers and Machine Clerks

working the "day" shift. The results of a two-way analysis of variance indicated that

Mailhandlers and Machine Clerks who worked the "graveyard" shift were significantly

more stressful than Mailhandlers and Machine Clerks who worked the "day" shift

$F(1,13)=.001, p <.001$.

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CHAPTER ONE

The problem

Introduction:

The term "workplace violence" readily calls up frightening images of workplace murders that leave survivors feeling stunned, fearful, and powerless. In fact, in the 1990's we regularly read accounts of workplace homicides in uncomfortable detail. Episodes of violence have occurred in buildings ranging from the Capitol, in Washington, DC to the convenience store located in "Anytown, USA." A study by the US Department of Justice cited "1,063 workplace homicides in 1993. Co-workers or former employees were involved in 59 of these killings; 43 more were committed by customers, tenants or hospital patients. The study predicted that one in four employees will be victimized by workplace violence and found that workplace homicides increased slightly in 1994 to 1,071." Violence in the Postal Service became a main media focus as postal homicides and suicides increased.

Workplace safety is something that can no longer be taken for granted. Perhaps a better understanding of the negative affects of workplace stress, added to the existing body of research, will help create and maintain a safer work environment for all employees.

Purpose:

The purpose of this research is to examine the relationship between workplace stress and the time of day an employee works and to suggest that a plausible theoretical link exist between the management of change and the recent killings in the US Postal Service.

Hypothesis:

Do postal machine clerks and mail-handlers working the hours of 11pm 7:30am (midnight's) exhibit more stress than postal machine clerks and Mail-handlers working the hours of 7am- 3:30pm (days)?

> *Independent Variable:* hours of work (shift) and job descriptions Machine clerks and mail-handlers.
>
> *Dependent Variable: scores* on the Occupational Stress Inventory (OSI).

Background

According to mental health and medical professionals, stress is running rampant in the workplace and despite increased awareness, it's worse now than ever. The United Nations' International Labor Organization identifies stress as "the disease of the modern workplace." In offices around America, the term "going postal" has become synonymous for stressed-out workers who lose their composure and start shooting.

Postal Workers and Stress

The recent rash of post office violence perpetuated by disgruntled postal employees against managers, co-workers and in some cases, subordinates, has become a topic of interest, concern and alarm. Since 1986, 35 postal employees have been murdered by colleagues or committed suicide in 10 separate incidents across the country. No other company, including organizations nearly as larger as the Postal Service, is believed to have experienced any similar level of violence by co-workers. Postal violence has even surfaced in the Nation's capital, where the Postal Service employees approximately 22,000 people. In January 1996, "the manager of a large mail processing facility near Dulles International Airport became so enraged that she fired a gun into an unoccupied car owned by one of her subordinates."

On December 26, 1997, "an employee armed with a shotgun and dressed in camouflage and body armor, walked into a mail facility in Denver and held co-workers hostage for nearly 10 hours before surrendering to police."

On December 20, 1997, "an employee, angry that his request to be transferred to the day shift was denied, opened fire in a mail sorting area killing a co-worker, he apparently disliked, seriously wounded a supervisor who had reprimanded him and injured another worker caught in the line of fire, before killing himself."

On September 3, 1997,"a postal worker of 21 years shot and critically injured his former wife and a female friend as they stood in line inside a crowded post office. He then went outside and shot himself.

On April 17, 1998, "a US Postal Service letter carrier shot a post office clerk to death after they argued in a break area."

In Edmond, Oklahoma (1986), "a part-time letter carrier killed 14 people and himself."

In Royal Oak, Michigan (1991), "a fired postal worker shot and killed four bosses and fatally wounded himself."

In Ridgewood, New Jersey (1991), "a former mail clerk slashed his former supervisor to death with a Samurai sword, shot and killed her fiancée, then drove to his former post office armed with machine guns and grenades and gunned down two more employees."

Assumptions:

It is assumed that the participants in the survey who answered the questionnaires were a random selection of machine clerks and Mailhandlers that varied in age, gender and experience, as did the distribution in the population. It is further assumed that each participant put in an equal amount of attention, thought and honesty when surveyed.

Limitations:

The OSI does not take into account the levels of stress one brings to the workplace. Stress in and of itself is not an uncommon experience. We all experience

some form of stress as an everyday occurrence. Improved performance is linked to increased stress up to a certain point but a point of diminished return is soon reached where excess stress causes performance to deteriorate no matter what the task. Prior to worksite stress, are the small troubles at home that carry over and create stress at work, i.e. a disagreement with a spouse or significant other; an ill child or family member; losing or misplacing items; being delayed in traffic, concerns about weight and/or physical appearance, and feeling overwhelmed with too many things to do. Some of these examples of stress producing situations can be easily be experienced prior to reaching the workplace, where performance demands competes for the scarce resources of time and effort.

According to studies by noted researcher, Richard S. Lazarus, "the little hassles which plague people everyday may be more injurious to mental and physical health than major traumatic life events."

All of the postal workers surveyed were from the Philadelphia, Pa. and Trenton, NJ areas. The results obtained from this study may not generalize to postal workers nationwide.

Overview:

In the chapter that follows, current empirical support for the rationale and undertaking of this study will be discussed. The importance of working conditions, technology and job satisfaction as it relates to stress will be discussed. The project design

will be discussed in chapter 3 as well as information about the selected test and rating scales. An analysis of the results will be presented in chapter 4.

Definitions:

Workplace violence:

Any act against an employee that creates a hostile work environment and negatively affects the employee, either physical or psychologically.

Stress:

An unconscious and automatic reaction to anything we believe may be threatening to us. In the stress response, the body is primed for fight or flight by messages carried to the sympathetic nervous system.

Mailhandler:

Postal employee responsible for loading and unloading trucks, preparing letters flats and parcels for dispatch and/ or distribution, transporting equipment, manual distribution of parcels, dumping sacks and containers and separating mail by type.

Machine Clerks:

Postal employees responsible for preparing, and loading mail on

machines, clearing letter jams, collecting mail from loaded mail bins and

keying codes on letters, flats and parcels.

CHAPTER TWO

Review of the Literature

Introduction:

It is proposed that a plausible theoretical link exists between the management of

change and the recent killings in the United States Postal Service. Certain employees

reject prevailing definitions of situations provided by those in power and develop

alternative meanings and patterns of behavior, include assaultive violence. A National

Institute for Occupational Safety and Health (NIOSH, 1993 b; p.2) study of Occupational

homicide in the 1980's found that post offices have been the setting for at least 34

homicides in the past 12 years. The most celebrated incident occurred in 1986, when

Letter carrier, Patrick Sherrill, shot and killed 14 postal employees and wounded 6 others

at the Edmond, Oklahoma post office (Applebome, 1986a). Two more postal employees

were murdered by 1989, and in October and November 1991, two recently fired postal

workers went back to their respective post offices and exacted revenge, four people died

in each incident (Associated Press, 1991a; Hanley, 1991; Welkos, 1989). The pattern of

deadly violence continued in 1993, when two postal employees murdered a total of three

people in Dana Point, California and Dearborn, Michigan. The unique thing about postal

homicides is that postal workers have come to post offices to kill their supervisors or

postmasters and/or fellow employees. The Institute of Occupational Safety and Health

estimates that 13% of the internecine homicides in the U. S. workplaces during the

1980's occurred at post offices, where less than three-quarters of 1% of the total full time

civilian labor force is employed (US Congress, House, 1993, p.58). This type of homicide direct attention to the ways organizational variables may trigger individual dispositions toward violence.

It is proposed that the degradation of labor under conditions of rapid technological and organizational change cause a form of social disorganization that provides the external conditions for outbreaks of assaultive violence. Employees are objectified, pressured and intimidated by the authoritarian nature of scientific management. Resultant frustration and alienation weaken employee integration and commitment to the organization, which undermines traditional forms of social control. Over time, this frustration and alienation catalyze alternative meanings and patterns of behavior including assaultive violence. It has long been theorized that the external events or conditions frustrate individual efforts at goal attainment, creating distress in the individual that ultimately triggers aggressive behavior (Berkowitz, 1978; Felson, 1982; Parker, 1989). The disruptive effects of rapid technological and organizational change on routine patterns of action and interaction are classic disorganizing conditions. Frustration is an especially likely outcome if employees are not involved in strategic planning associated with the installation of new technology and work structure that cause layoffs (Thomas, 1992). Uncertainty about future job duties, or whether a person will have a job, causes anxiety and frustration among those confronted with new work situations. A sense of uncertainty and lack of control of job-related activity and change is associated with stress that negatively affects personality and behavior (Karesek, 1979; Karesek, Baker, Maxer, Ahlbom & Theorell, 1981). The social interactionist view on

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interpersonal violence argues that acts of aggression are not involuntary reactions

generated by frustration and social disorganization but express longstanding grievances

and serve as alternative mechanisms of social control (Black, 1982; Felson, 1992).

Aggressive acts can be public expressions of what are typically "hidden transcripts", or

fantasies of resistance to organized domination (Scott, 1990, p. 37). The argument is that

for some subordinates, aversive stimuli accumulate over time and are eventually manifest

in calculated acts of goal oriented violence directed at supervisors and / or co-workers.

This fits the experience of the subordinate who feels degraded or personally humiliated,

either by a supervisor or coworker, the pressure of job duties or technology, or the more

abstract "company." Certain people react with violent retaliatory action that is both goal-

oriented and driven by emotion to hurt anyone in the workplace. Issues of social status

related to personal degradation, perceived injustice, and the undermining of self-respect

are particularly relevant sources or degradation and frustration.

The argument developed thus far considers problematic the existence of a stable

normative consensus from which individuals become isolated or alienated. A discourse

of power and domination define what is normative, and an imperfect boundary exists

between front- stage adherence of subordinates to rules and other legitimate mechanisms

of social control, and back-stage plots that express pent-up energy and emotions,

including anger and aggression (Goffman, 1959). Hodson (1995) persuasively argued

that resistance is often designed to deflect what is perceived by workers as unacceptable

abuse cause by coercive labor control and personal degradation. Workplace resistance

requires disorganization, conceived of as external conditions conducive to the rejection of

definitions by situations provided by those in power, and the creation of new meanings and patterns of behavior, some of which are specifically designed to vent pent- up frustration. The above ideas can be synthesized into the following proposition: If authoritarian work organization fundamentally undermines a person's status, honor, or sense of control (e.g., self- respect or "masculinity"), especially in the context of economic crisis or rapid technological and organizational change, it creates grievances that undermine workplace integration and commitment, weaken individual and institutional forms of social control, and catalyze alternative definitions of situations that increase the probability of violence.

Individual and Organizational Accounts of Homicide in the Post Office

Explanations for the pattern of assaultive violence in the post office emphasize individual or organizational variables, depending on the source. Postal managers tend to cite causes of the violence and the absence of any link between particular incidents. Postal workers and psychologists hired to interview survivors of violence tend to report factors in the workplace that trigger individual dispositions toward violence. An examination of research, press accounts, General Accounting Office (GAO) reports, Congressional hearings, and interviews with postal workers, journalists, and psychologists familiar with specific incidents does reveal links between individual perpetrators of violence. In addition, compelling patterns of precipitating environmental factors exist in many postal workplaces where deadly violence occurred.

Patrick Sherill, the part-time letter carrier who killed fourteen co-workers in Edmond, Oklahoma, was described as a loner who loved guns and externalized blame for all his shortcomings.

Thomas McIlvane, who killed four postal workers in Royal Oak, Michigan in 1991, was previously arrested for threatening to kill his supervisor U.S. Congress, House, 1991a). Mark Hilburn, a letter-carrier who killed a co-worker in Dana Point, California, had a history of isolation and manic depression and was fired from the post office for stalking a female co-worker. Larry Jasion, who killed one person and wounded another in Dearborn, Michigan, had previously threatened a supervisor (Messina & Lichtblau, 1993).

These dangerous and "isolated" personalities can be contrasted with John Taylor, a popular extrovert and model letter-carrier, who killed his wife and two co-workers before fatally shooting himself in 1989 at a San Diego, California post office. Several perpetrators came from violent, alcoholic families, and most served in the military, but alcoholism affects nearly 10% of all Americans, and 43% of the total postal workforce has served in the military (U.S. GAO, 1988).

Despite the unique features of each case, it is also true that "lingering friction" between management and labor, stress, or revenge against supervisors was mentioned as an important cause in nearly every case of deadly violence in the post office. The following statement made after the Taylor shootings by Edward Donne, vice president of

the Escondido local of the National Association of Letter Carriers (NACL), targets the postal workplace as a cause of deadly violence, "it may be true that something in their personal life triggers it, but the very fact that they go to the post office to do these terrible, tragic acts make a powerful statement (Gordon & Serrang, 1989, p. 1-19). It is appropriate to explore how the climate within the postal workplace may condition outbreaks of deadly violence.

Mechanization, Automation, and Downsizing at the Post Office

Stress and uncertainty caused by rapid technological and organizational change are prototypical components of a workplace climate conducive to violence (Baron, 1993, p. 104; Barringer, 1993). The contemporary post office features technical control of tasks, particularly the incorporation of employee skills and discretion into mechanized and automated systems. The machine-paced Multiple Position Letter Sorting Machines (MPLSM) is the backbone of mechanized mail processing. Despite impressive performance, its noise level, speed, and intensity of operation make the MPLSM a stressful technology with which to work. Simplified tasks, limited freedom of movement and lack of control of work speed are among the reasons MPLSM operators report significantly lower levels of job satisfaction than postal workers whose pace of work is not dictated by machine (Baxter, 1990). This finding was confirmed in a 1979 National Institute for Occupational Safety and Health (NIOSH) study, entitled "Job Demands for Postal Workers." NIOSH surveyed a national random sample of postal employees engaged in mail processing activities about the conditions of their employment and found MPLSM operators reported lower overall job satisfaction than occupants of more highly

skilled jobs that offered greater substantive complexity and increased control of the methods and pace of work.

Tight budgets, competition, and political pressure to privatize mail processing combined in the 1980's to create a turbulent environment for the post office. High labor costs and improvements in computer technology are additional reasons why the post office proceeded with the automation of mail processing. The primary goal of automation is to process and distribute more mail with cheaper labor inputs. Traditional mail-processing skills of memorization and manual dexterity are, whenever possible, embedded inside machines as a way to reduce labor costs.

The automation of mail processing has degraded, intensified and eliminated the jobs of many postal clerks and letter carriers. Skill requirements and pay status were reduced for thousands of clerks who work with optical character-reader technology (Aaron, 1985). Automation is also supposed to reduce the amount of time letter-carriers spent in the office and increase the time they spent on the street. When automated equipment is installed; many mail routes are lengthened in anticipation that most mail will arrive at the carrier's desk sorted in delivery stop sequence. Despite difficulties in the achievement of this goal, battles continue between letter-carriers and supervisors over route length, overtime, and route adjustments. These battles add to the frustration and uncertainty that already surround automation (USPS and the American Institutes of Research, 1989).

Several homicides and suicides that occurred in and around the San Diego post office in 1989 direct attention to the way disorganizing conditions such as technological change and population growth affect workload and employee frustration. A congressional investigation of labor-management relations in San Diego found that rapid growth of mail routes and mail volume (3.6% per year) had occurred without adequate relief from new employees or automation. Local union people charged that management practiced intimidation and used discipline and the threat of discipline to prevent employees from complaining about excessive workloads in the region. NACL Branch President, Gary Pryor, testified that " disagreements over workload are a daily occurrence," and that carriers are routinely disciplined for "unsafe work practices" when they report on-the-job injuries. Letter carriers were also disciplined for "poor work habits" if they requested special route inspections to curtail routes more than 8 hours in length (U.S. Congress, House, 1989, p. 25). Technical control of postal operations is complimented by cost accounting, performance evaluation, and bureaucratic work organization, all guided by principles of scientific management.

The U.S. Postal Service was created in 1970 to transform the combination of quasi-military authority and political patronage that characterized traditional postal management into the flexible efficiency of the private sector. Postmaster General, Elmer Klassen (19711974) orchestrated a top-down reorganization of the post office that, according to an internal study, "largely ignored the necessity for a negotiated value consensus within the organization." (Strasser, 1983, p. 30). Postal management structure was realigned in 1986 to emphasize service, especially service to business customers.

Lines of authority and communication were shortened and inter-departmental teamwork was promoted through increased use of task forces, special projects, and performance monitoring (USPS, 1986). Local union officials in Edmond, Oklahoma linked the shootings there to increased management pressure and harassment tactics used to improve mail processing and delivery performance after the 1986 reorganization. According to local NACL Secretary, Bob Bearden, "A few of us were talking about it a few weeks ago and somebody said that one of these days someone is going to go off the nut and shoot somebody. This is not an isolated incident. There have been other confrontations. Most people can let off steam and walk away. This time it was taken to the ultimate."

Pressure related to downsizing and pressures to increase productivity were particularly acute in 1991 at the post office in Royal Oak, Michigan. A team of psychologists brought in to counsel survivors after the tragedy there discussed the effects of restructuring and downsizing on the workplace climate, "The post office is fraught with a system of severing employees based on harassment. With the pressures of downsizing and reshaping, lots of those practices are being intensified, as well as work pressures and work tasks...Harassment takes the form of verbal abuse, public devaluation, taunting, and various forms of social murder (Zender, Harrington, & Wittrup, 1992).

As of October 1992, 11,400 postal managers and over 47,000 total employees had taken advantage of an early retirement program designed to reduce the size of the postal workforce (USPS, 1993). An important component of the downsizing was a 40%

reduction in "overhead positions," including employee assistance program counselors and Postal inspectors (U.S. Congress, House, 1993, p. 20). These structural changes contradict the claims of former Postmaster General, Marvin Runyon (1992-1998), who said, "cost squeezes" may have enhanced stress in the workplace. These issues were addressed by recent taskforces on violence that were aimed to change the organizational structure of the post office (U.S. Congress, House, 1993, p.2324). The elimination of many personnel responsible for workplace safety reinforced perceptions that management did not particularly care about employees, in fact, management was trying to get rid of them.

The Imperfect Science of Postal Management

Automation and downsizing of the post office since 1986 are associated with the increased pressure on line managers from upper management cadres concerned with budget deficits and external pressure to privatize the post office. Pressure often takes the form of performance standards that are communicated from industrial engineers to postal supervisors through manuals and target work-hour quotas. Supervisors must also manage fluctuating mail volume and the persistent problem of adequate staffing to meet daily processing and delivery requirements. The supervisor also evaluates the performance of each employee and must reassign them, withhold pay increases, or initiate adverse action against those who consistently perform below minimum standards (USPS, 1979). The turbulent environment and objectification of labor in the post office are personalized in the daily interaction between supervisors and craft employees. The discourse and practice of domination in the post office involves the scientific management of job design

and the performance evaluation. Although the system appears to embody and objective approach to efficiency, competition among managers and pressure on craft employees to achieve productivity goals frequently engender confrontation, intimidation, and acts of resistance that violate legitimate norms of social control. Moe Biller, President of the American Postal Workers Union, summarized the situation, "Management styles, attitudes and rules collectively work to create a high-stress working environment that's intolerable for many employees and may drive some workers over the edge" (U.S. Congress, House, 1993, p. 57).

New postal mangers hired management consultants from McKinsey and Company in 1971 to help the Postal Service develop a Work Load Reporting System (WRS). The WorkLoad Reporting System was obstensibly designed to provide data on mail volume, work hours and costs to help local managers schedule employees and evaluate and control productivity (U.S. Congress, House, 1976). In practice, top managers used the WRS to evaluate local managers for promotion and rank the performance of 80 large post offices. Pressure on supervisors and craft employees to maximize productivity contributed to widespread falsification of WRS numbers. Breakdowns of traditional mechanisms of social control included local managers in San Franciso who offered craft employees unlimited overtime and promotions in exchange for inflated productivity numbers (U.S. Congress, House, 1976, p.14). Presorted mail was "riffled " by clerks and counted as manually sorted mail to inflate processing statistics. Another common tactic was to weigh machinable mail several times to inflate productivity numbers (U.S. Congress, House, 1976).

Changes in workload reporting occurred in 1975 with the introduction of the

Management Operating Data System (MODS), and in 1981 with the National

Work Hour Reporting System (NWRS). MOD's is an electronic data processing network

where operational and administrative data from postal operations are compiled, analyzed,

and distributed to managers (USPS, 1987). Postmasters or installation heads produces a

Management Summary Report each day for use. It contains mail volume, total work

hours, and percentage difference comparisons between actual and planned work hours for

the biweekly accounting period. Labor distribution codes are later added that measure

salary and task distribution of each employee work hour.

Interviews with postal managers repeatedly reveal that tension remains in

relations between headquarters and local managers over the extent to which workload

reporting systems function as tools to improve staffing and the extent to which they serve

as performance evaluation devices that inform decisions about promotion and discipline.

Pressure on managers who work with the system was revealed in this testimony about

management "by the numbers" from Mark Braverman, a psychologist hired by the Postal

Service to investigate workplace violence, "We have spoken to postmasters, level 23

postmasters who have large offices of their own, and they literally cry to us that they are

so pushed from above and so caught in the middle and squeezed between the demands of

their superiors and the needs of their workplaces and limited resources that they can't

function as good managers (U.S. Congress. House. 1992. D. 45). James F. Miller,

President of the National Association of Postmasters, testified before Congress in 1993

that his organization was considering withdrawal from the National Violence Prevention

Commission, established by headquarters managers to address the problem of violence in the post office. His stated reasons included insufficient budget and complements, over-worked postmasters, elimination of supervisors, and proposed cuts in the Postal Inspection Service. He concluded, "the potential for violence has escalated accordingly, and now includes postmasters" (U.S. Congress, House, 1993, p.100).

Line supervisors often find themselves in a squeeze comparable to that experienced by local postmasters when it comes to dealing with productivity numbers and workload reporting. Former Postmaster General, Anthony Frank suggested that too often the attitude of supervisors toward their job demands is, "I ate dirt for 20 years, and now it's your turn" (Messina & Lichblau, 1993). Instructive testimony about the job demands and strategies of supervisors was offered at a 1992 congressional hearing by Vincent Palladino, President of the National Association of Postal Supervisors, "if they don't do things in a certain way or make the numbers, our supervisors are involuntarily moved. If they feel pressured, they are going to apply pressure to the individuals under them...People do what they have to do to survive (U.S. Congress, House, 1992,p.81). Pallidino and former Postmaster General, Frank, describe a pressurized workplace that is also the setting for a daily survival struggle. Serious questions must be raised about the legitimacy of planning and workload evaluation systems as social control devices, given the widespread perception that they are primarily tools of oppression.

Workplace Safety and Health

Another source of frustration and disorganization in the post office is workplace safety and health. From labor's perspective, safety and health take a back seat to productivity because of pressure on supervisors that originate from upper-level managers. Supervisors then pressure employees to do more work in less time, which intensifies safety hazards, causes accidents, and reinforces perceptions that management does not respect employee welfare. Many workers and union officials also report that management uses harassment, intimidation, and discipline instead of improved safety procedures as tactics to reduce accident reports and the accident rate (U.S. Congress, House, 1986). Congressional and GAO investigations of safety conditions at the Los Angeles Bulk Mail Center (BMC) uncovered serious discrepancies between the claims of postal managers and postal workers about the Postal Service's commitment to productivity and safety. William Burrus, executive vice president of the American Postal Workers Union (APWU), testified that, "The APWU submits that the Postal Service does not have a safety program, they have a safety control program...they have no basic information as to whether or not the paper system that they devised in Washington is in fact actually in place throughout the system. They reduced those numbers by intimidating employees, by not reporting all of the accidents that do in fact occur throughout the system. In many areas of the country (e.g., San Diego, Philadelphia), the Postal Service disciplines employees for unsafe work habits to deter the filing of accident reports (U.S. Congress, House, 1986, p.27). Preston Chips, a counselor for the U.S. Department of Labor, reported that many incidents of harassment had resulted from management policies designed to reduce employee disability claims filings in San Diego

(Welkos, 1989). Jerry Fabian, APWU special assistant to the president for safety and

health, had this to say about the Postal Service's approach to accidents, "So what we have

in the Postal Service is a quick look to find out what unsafe act the employee performed,

seizes on that, and then takes action against the employee in the form of discipline, which

is often the case (U.S. Congress, House, 1991b, p.31). Animosity and frustration created

in the contest over safety disorganizes and de-legitimates the social order of the

workplace, fueling dispositions toward violence held by employees who do not

appreciate this institutional dance, this struggle over the content of the official public

safety transcript (Scott, 1990). Testimony at congressional hearings after the San Diego,

Royal Oak, Dana Point, and Dearborn shootings repeatedly pointed out the ways

management's obsession with productivity numbers undermine supervisor employee

relations. Charges of intimidation and unfair discipline were also leveled at postal

management. When Congressman Bates of California asked Gary Pryor, President of

San Diego NALC Branch 2525, "had he (John Taylor) complained to you about stress,"

Pryor responded: He talked to me about the Postal Service and the management and that

he felt stress as to work. He had worked extra hard to be better than average and that's

why he was a model carrier. He did work part of his lunch, and he did it without really

complaining, but there was stress involved. I never realized the extent to which it was

affecting him. He felt that people in management were pinpointing him, they were

looking at him. He had a fear that he would be fired or transferred (U. S. Congress,

House, 1989a, p.27). John Taylor mad it clear that he was bothered by declines in

camaraderie at work, which he attributed to changes in management over the previous 2

to 3 years (Baron, 1993, p.37). The vice-president of the Mailhandlers Union in the San

Diego Division testified that, "We would suggest to the Subcommittee and the Postmaster General that a link does in fact exist in the chain of workplace stress and violence. The link begins with the relationship of postal managers to postal supervisors and postal supervisors to postal employees. Simply put, postal management today is under pressure to meet budgets and achieve automation and productivity goals. Management must push the already reduced employee complements to reach these goals (U.S. Congress, House, 1989a, p.86). The scientific management of organizational change creates pressure for postal managers, who push workers to maximize productivity goals. Letter carrier, Dave Chestnut described the "lingering friction" and experience of personal degradation that characterized labor-management relations at the time of the 1991 shootings in Royal Oak, Michigan, "They rode you all the time. You couldn't even use the bathroom unless it was your break. They sent a guy home this morning for whistling (It's Beginning to Look a Lot Like Christmas), for whistling" (Associated Press, 1991b, p. A-2). Chestnutt's statement is consistent with conclusions of labor people in San Diego, who testified that workplace accident and absenteeism rates were forced down and productivity statistics were forced up by management harassment. A climate of paranoia and fear of reprisals was created in Royal Oak and San Diego for workers who pressed grievances, filed disability complaints, or whistled in a manner unacceptable to their supervisors. This climate is conducive to breakdowns in legitimates mechanisms of social control and engenders a search for alternative definitions of situations, alternative forms of action.

Statements presented by postal employees at the congressional subcommittee hearing held after the Royal Oak shootings repeatedly cited the autocratic management style and paramilitary corporate structure of the post office as a breeding ground for personal confrontation and violence. In his investigation, Senator Carl Levin found a pattern of management harassment, intimidation, and cruelty, as well as allegations of favoritism in promotions and demotions (U.S. Congress, House, 1991). Employees who requested assistance from the union to pursue their collective bargaining rights were particular targets of discipline and harassment. In a climate driven by efforts to improve productivity numbers, the new Sectional Center postmaster had reduced window-service hours, delaying processing of bulk mail, arbitrarily adjusted letter carrier routes, and disrupted mail distribution patterns (U.S. Congress, House, 1991a). An internal management evaluation of Royal Oak later concluded that, although most of the changes were within Postal Service guidelines, and Royal Oak's on-time delivery performance had improved, "too many changes had happened at once" (U.S. Congress, House, 1991a, 1991a, pp19-21).

The Royal Oak tragedy combined rapid change and an oppressive work environment with individuals who had histories of abusive behavior and insubordination. Royal Oak Sectional Center Postmaster, Daniel Prescilla, was previously head of the Indianapolis Sectional Center, Prescilla and several of his supervisors were transferred to Royal Oak after complaints from postal workers and some managers in Indianapolis about his autocratic personality and management by intimidation. In 1989, 2,700 disciplinary actions were taken against a workforce of 4,000 at the Indianapolis Sectional

Center (U.S. Congress, House, 1991a, p. 15). The "in- your- face" management style

practiced at Royal Oak included supervisors standing behind clerks while they worked,

daring them to say something. If they did, a suspension for insubordination would be

forthcoming. The tactic of using discipline to dissuade employees from reporting on the

job injuries were also widely practiced. Carlisle, one of the homicide victims, and one of

the supervisors transferred to Royal Oak from Indianapolis, was notorious for his

fondness for disciplinary action (U.S. Congress, House, 1991a). Thomas McIlvane was a

classic "rebel" who had serious problems with authority, especially authority that he

perceived as arbitrary. He was granted an administrative discharge from the Marine

Corps for insubordination, and his record as a letter carrier was no better (U.S. Congress,

House, 1991a). After a long list of suspensions, he was issued a letter of removal after

his failure to request overtime on a day he went over the allotted time to deliver his route.

McIlvane's volatile personality certainly exacerbated his disciplinary problems.

The interaction of personalities and social structure is instructive in both the

McIlvane and Jasion cases. In both cases, the stress of organizational change and

managerial pressure to produce were personalized by clashes between volatile

supervisors and employees. The pattern of interactions and discipline in McIlvane's

personnel file was taken by Carlisle and Director of Field Operations, Kinsley (also

transferred to Royal Oak form Indianapolis) to constitute sufficient grounds for dismissal.

Shortly after McIlvane lost an arbitration case to get his job back, he entered the Royal

Oak Sectional Center and killed Carlisle and three other postal employees, before killing

himself. The Dearborn post office was the site of problems between labor and

management before the shootings there in May 1993. The local APWU newsletter had given the Dearborn postmaster and Jasion's immediate supervisor the combined "worst postmaster of the Month" awards in February 1993 (U.S. Congress, House, 1993, p. 18). After losing his Equal Employment Opportunity (EEO) complaint about favoritism in promotions, Jasion entered the Motor Vehicle shop at the Dearborn post office. Just before he opened fire, he shouted, "it's time to educate the supervisors" (Barringer, 1993, p. 17).

The aftermath of the Royal Oak shootings was particularly traumatic. A journalist who covered the incident told us that, upon hearing about Carlisle's death, employees in the Royal Oak post office burst into applause. Psychologists hired by the Postal Service to counsel survivors of the tragedy report that "there is no anger at the perpetrator; they (spouses or survivors) only talk about how they can understand how it happened, because their own spouses had experienced such gross and repeated mistreatment" (Zender et al., 1992).

Senator Levin's report about the incident contained this statement from one employee who spoke about McIlvane's threats of violence, "If the aforementioned employee (McIlvane) makes good on his threat, I would not feel too badly about losing a few supervisor's of Carlisle's ilk" (U.S. Congress, House, 19911, 34). These were prevalent sentiments among postal workers at the Royal Oak post office, and I have rarely spoken to a postal worker who has a problem understanding why other postal workers "go off" and shoot certain supervisor's and fellow workers.

Management's Response to Workplace Violence

Assistant Postmaster General, Joseph Mahon, told a congressional sub-committee in 1989 that the transition to automation created some difficulties for the workforce, particularly in areas such as San Diego with its combination of population growth, increased mail volume, and no increase in employment. He argued, however, that grievances, EEO complaints, sick leave, overtime and all other indicators of labor/management climate were down in San Diego (U.S. Congress, House, 1989a, pp. 35-36). Mahon went on to state that the San Diego region was targeted for extra capital investment to handle increased population and mail volume but that federal budgetary constraints had delayed construction of a new general mail facility (U. S. Congress, House, 1989a).

San Diego Postmaster, Margaret Sellers proudly reported that San Diego was the top division in the Western Region and was second in the entire Postal Service on most national productivity measures. Although she decried the tragedies, Postmaster Sellers also stated that she was satisfied that each case was complex and unique, and there was no indication that the Postal Service was at fault in any way (U. S. Congress, House, 1989a, p. 50). Dr. Mark Haffer, a psychologist who was hired by the Postal Service to counsel employees after the Taylor shootings, rounded out testimony about labor/management relations in San Diego. Haffer reported that city carriers generally felt harassed and without much control of their jobs, whereas rural carriers, who worked as independent contractors out of the same office, reported that they generally enjoyed their jobs and felt a great deal of autonomy and control at work (U. S. Congress, House,

1989a, pp. 4849). Northcott and Lowe (1984), mailed a questionnaire on working conditions and job stress to Canadian Postal employees in Edmonton, Alberta (n=992). A comparable sample of non- postal workers (n=173) was obtained from the Edmonton Area Survey. Postal workers, in comparison to other workers in Edmonton, were more likely to report being under pressure at work, more likely to find this pressure problematic, had lower job satisfaction, and reported more psychological distress. Within the Post Office, those employed in the main postal plant, in particular, those working with automated letter sorting machinery, reported more psychological distress than did the letter carriers. Haffer also noted that, compared to private sector employees he had counseled, postal workers dwelled on issues longer and let problems at work affect their morale whereas private sector employees let issues drop more easily. He attributed this difference to the many rights and avenues of appeal possessed by postal workers compared to workers in the private sector. Private sector employees are more likely to realize there is nothing they can do about certain issues and decide either to drop them or quit the job (U. S. Congress, House, 1989a). Several postmasters interviewed at a national convention that started the day after the Edmond shootings in 1986 agreed that the proliferation of private mail carriers and stricter postal management had increased friction in the postal workplace. However, a prevalent belief among postmasters interviewed after the Edmond tragedy was that civil service regulations make it too easy to get a job and too hard to dismiss those who fail to perform at a minimum level of competence.

Discussion:

Are outbreaks of assaultive violence unique to the post office, or do employees in other workplaces kill supervisors or coworkers while at work? This question was addressed with a review of articles in the New York Times that reported homicides between January 1985 and June 1995. A total of 43 cases were coded where an employee killed a coworker (26 cases) or superior (17 cases) at the workplace. Work related motives could plausibly be inferred in 40% of the cases. Nine of the assailants (21%) were suspended or fired employees, eight additional cases (19%) clearly involved frustration or disputes related to workplace climate. The remaining five cases involved disputes over stolen or embezzled money, or other issues not clearly related to conditions at work.

Coding the homicides by occupation / industry was inconclusive but interesting. The largest occupational category (13 cases) was administrative and technical work (e.g., stockbroker, airline ticket agent, and drug counselor). The second largest occupational category (8 cases) was restaurant and fast food employment, followed by factory operative (6 cases), police/military (4 cases), and construction/maintenance (3 cases). Data was not available on the organization of work or recent changes in technology in any of the workplaces, but the fast food setting in particular suggests a time-sensitive scientifically managed workplace with many conditions analogous to the post office (Ritzer, 1993).

The review of homicides outside of the post office does not provide clear support for structural and organizational explanations of assaultive violence in the workplace. The uniquely individual nature of assaultive behavior cautions against overwhelming enthusiasm for the arguments developed above about homicide in the post office. Despite these limitations, this paper has forged a link between organizational climate and workplace violence. In the context of scientifically managed change, pressure on autocratic line managers to improve productivity numbers may be transferred to workers in the form of personal degradation and intimidation that frustrates employee efforts to achieve self-respect. Autocratic management and a paramilitary corporate culture combine to undermine normal mechanisms of social control, leaving the workplace a breeding ground for personal confrontations that occasionally escalate into deadly acts of violence.

In the case of mechanization and automation in the post office, lives are disrupted and livelihoods are threatened by automation, but it is the frequent interpersonal confrontations and frustrations associated with a degrading experience that provoke some employees to violence. In this sense, society does not disintegrate without the rule of law (state) or work rules (organization), but because of them. This brings up a classic argument by Gouldner (1954) that bureaucratic rules are often constructed out of the breakdown of social relations and often serves primarily disciplinary or punitive functions. The oppressive aspects of the law and bureaucracy may well increase frustration and exacerbate propensities toward violence, the goal of which is to deflect

perceived abuses associated with dominant social arrangements. This line of argument has important implications for research on deviance and the sociology of work.

Summary:

The theoretical argument developed in this paper remains tentative. A causal link between external conditions, personal frustration and degradation, and assaultive violence is difficult to sustain. More work needs to be done, for example, to explore the extent to which workplace violence is an expression of pent-up grievances and the extent to which it involves "troubled" individuals who are pre-disposed to violence, which is triggered by frustration and degradation at work. However, if the argument about scientific management and labor control make any sense, it is possible that even those individuals pre-disposed to violence are more likely to express those propensities in certain postal workplaces than in workplaces that are not characterized by rapid technological change, abusive authority, and pressure to improve numbers that represent productivity. Managerial strategies designed to reduce labor costs during periods of rapid technological change have certainly contributed to employee paranoia and perceptions of harassment. These managerial strategies too often have tragic consequences. It is hoped that efforts of postal managers to improve communication and worker participation will mend this dangerous climate.

CHAPTER THREE

Design of the Study

Introduction

The term workplace violence congers up frightening images of workplace homicides that leave survivors feeling stunned, fearful and powerless. Postal violence became a media focus as these internecine homicides and suicides increased nationwide. What is going on in the postal workplace that causes a number of employees to "go postal" and wreck havoc in the very place that many have worked in for years? The purpose of this study was to examine the relationship between workplace stress and the shift an employee works and to suggest that a plausible link exists between the management of change and the recent killings in the United States Postal Service.

Samples:

This study involved a survey of postal employees in Trenton, NJ and Phila., Pa. A total of 120 questionnaires and rating sheets were randomly given to 30 Mailhandlers and 30 Machine clerks who worked the day shift (7 am-3:30pm) at the Phila., Pa. facility. Similarly. 30 Mailhandlers and 30 Machine clerks who worked the "graveyard" shift (11pm-7am at the Trenton, NJ facility were randomly given questionnaires and rating

sheets. All participants were asked to return their completed rating sheets by Nov. 20, 1998.

Only 20 rating sheets were returned by the date requested; however, rating sheets continue to be returned daily. In some cases participants had to be reminded; after the reminders, 37 rating sheets were eventually returned by Feb.1, 1999.

Measures:

An occupational scale entitled Occupational Stress Inventory (OSI), constructed by Samuel H. Osipow, Ph.D. and Arnold R. Spokane, Ph.D. (1992) was used in part, to identify and measure occupational stress, psychological strain and coping resources in postal workers employed as Machine clerks and Mailhandlers. The Occupational Stress domain is measured by a set of six scales which are collectively called the Occupational Roles Questionnaire (ORQ), which consists of 10 items for each of the six scales, totaling 60 items. The Personal Strain Questionnaire (PSQ) is made up of 40 items (10 items per scale), and the Personal Resources Questionnaire (PRQ) which also consists of 40 items (10 items per scale). Respondents completed all questionnaires (140 items) by entering their responses on a separate rating sheet. Responses were made by using a 5- point rating scale, ranging from rarely or never to most of the time.

Reliability:

The internal consistency analysis of the OSI was completed using a sample of 540 working adults. Alpha coefficients for total questionnaire scores were .89 (ORQ), 94 (PSQ), and .99 (PRQ). Coefficients for individual scales ranged from .71 to .94. Alexander (1083) has reported comparable internal consistency data on a sample of 155 military and civilian physicians.

Normative Data

Normative data are available from a sample of 909 adult subjects employed primarily in technical. professional, and managerial positions in schools, service organizations and manufacturing settings. Subjects in this sample were employed in 130 different occupations. This normative data bank is unique among measures of occupational stress (Yanico, 1985) and was complied from data submitted by researchers and practitioners who conducted studies using the OSI. The mean age of the subjects was 44.46. Subjects were employed in their current job for a mean of 6.5 years. The normative sample was 48.8 percent male and 52.2 percent female. Married subjects comprised 60 percent of the sample, while single and divorced subjects comprised 24 and12 percent, respectively. Marital status was not available for the remainder of the subjects. Data on race or ethnic background were not available.

Percentiles and T/scores for male and females are presented in the manual. T/scores have a mean of 50 and a standard deviation of 10.

Validity data for the OSI are derived from four principle sources:

(a) factor analytic studies

(b) correctional studies of the relationships of the scales to variables of practical and theoretical importance

(c) studies using the scales as outcome measures following stress treatment, and

(d) studies of the stress, strain, and coping model-employing comparisons of selected criterion groups.

To date, 14 published studies have appeared in professional journals and the total number of published and unpublished studies, conducted by the authors and independent researchers, has increased to more than 25.

Testable Hypothesis:

The null hypothesis used in the study was as follows:

(1) There is no significant difference in stress levels between Mailhandlers and Machine clerks.

(2) There is no significant difference between the shift one works and stress.

(3) There is no interaction between shift and occupation on stress.

Conversely, the alternative hypothesis was:

(1) There is a significant difference in stress levels between Mailhandlers and Machine clerks.

(2) There is a significant difference between the shift one works and stress.

(3) There is a significant interaction between shift and occupation on stress levels.

The independent variable (s) were:

- shift

- occupation

The dependent variable was:

- stress level

The OSQ and PSQ T-Score which measure occupational stress and psychological strain range from 0 to 70, which is indicative of the following:

70	and above is a statistically significant score and indicates a strong probability of maladaptive stress
60-69	indicate mild levels of maladaptive stress
40-59	normal (within one standard deviation of the mean)
40-0	absence of occupational stress and psychological strain

Design:

The design of the study was a two-way between subject design (ANOVA). The respondents were divided into 4 groups relative to occupation and shift

Occupation	*Shift*
Mailhandler	7 am-3:30pm
Machine clerk	11 pm-7:00am

Analysis:

A two-way analysis of variance (ANOVA) was used to analyze the two independent variables, shift and occupation.

Summary:

The purpose of this study was to examine the relationship between workplace stress and the shift and employee works and to suggest that a plausible link exists between the management of change and the recent killings that occurred in the United States Postal Service. The study involved a survey of postal employees in two postal facilities. A total of 120 questionnaires and rating sheets were randomly distributed to 30 Mailhandlers and 30 Machine Clerks who worked the day shift (7:00-3:30 a.m.) at a Philadelphia, Pa. Facility. Likewise, 30 Mailhandlers and 30 Machine Clerks who worked the "graveyard" shift (11:00 p.m.-7:30 a.m.) in a Trenton, NJ facility were surveyed. Forty Mailhandlers and forty-seven Machine clerks responded to the survey.

The Occupational Stress Inventory (OSI) was used to identify and measure occupational stress and psychological strain in Mailhandlers and Machine Clerks. Responses were made by using a five- point scale, ranging from rarely or never to most of the time.

A two-way analysis of variance (ANOVA) between subjects was used to analyze the relationship between occupation and shift on stress. An alpha level of .001 was used to define the rejection region with 1 degree of freedom.

Results of the statistical findings will be discussed in chapter 4.

CHAPTER FOUR

The Results

Introduction:

This project was undertaken to determine if there is a relationship between occupation and shift on workplace stress and to suggest that a plausible link exists between the management of change and the recent killings in the United States Postal Service.

The Occupational Stress Inventory was used to identify and measure occupational stress and personal strain in Mailhandlers and Machine Clerks in two postal facilities within the tri-state area. Responses were made by using a five-point rating scale, ranging from rarely to most of the time.

Hypothesis:

The null hypothesis used in this study was:

(1) There is no significant difference in stress levels between Mailhandlers and Machine Clerks.

(2) There is no significant difference between the shift one works and stress.

(3) There is no interaction between shift and occupation on stress.

Conversely, the alternative hypothesis was:

(1) There is a significant difference in stress levels between Mailhandlers and Machine Clerks.

(2) There is a significant difference between the shift one works and stress.

(3) There is a significant interaction between shift and occupation on stress.

Variables:

The independent variable(s) in the study were:

(1) occupation

(2) shift

The dependent variable was:

(1) Occupational stress scores, which ranged from 0 (indicating absence of occupational stress) to 70 and above (indicating a statistically significant score and a strong probability of maladaptive stress).

Analysis:

A two-way analysis of variance (ANOVA) between subjects was performed using two factors and two levels. The factors and levels were:

Shift

(a) 7:00 a.m. - 3:30 p.m.

(b) 11:00 p.m. - 7:30 a.m.

Occupation

(a) Mailhandler

(b) Machine Clerk

Findings:

Descriptive statistics were calculated using a two-way ANOVA between subject

design and yielded a mean square of 389.893 with one degree of freedom and a frequency

distribution of 13.542. A very significant difference, beyond the .001 level was obtained

$f(1, 13)=.001$, $p < .000$. As shown in table 4.1.

Table 4.1

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
Shift	1.00	Midnights	34
	2.00	Days	53
occupation	1.00	Mailhandler	40
	2.00	Machine clerk	47

Tests of Between-Subjects Effects

Dependent Variable: Occupational Stress Score

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	471.951ᵃ	3	157.317	5.464	.002
Intercept	244349.72	1	244349.72	8487.081	.000
HOURS	389.893	1	389.893	13.542	.000
OCC	9.837	1	9.837	.342	.560
HOURS * OCC	38.679	1	38.679	1.343	.250
Error	2389.635	83	28.791		
Total	266697.00	87			
Corrected Total	2861.586	86			

a. R Squared = .165 (Adjusted R Squared = .135)

This finding indicates Mailhandlers and Machine Clerks who work the "graveyard" shift are more stressful than Mailhandlers and Machine Clerks who work the "day" shift. There was no significant difference between occupation on stress level, nor was there an interaction between shift x occupation on stress levels.

Summary:

In conclusion, this project was investigated to examine the relationship between Workplace stress and the time of day an employee works, and to suggest that a plausible theoretical link exists between the management of change and the recent killings at the United States Postal Service. Forty Mailhandlers and 47 Machine Clerks responded to the questionnaire. From the current literature reviewed, it was hypothesized that:

(1) Machine Clerks would exhibit more stress than Mailhandlers;

(2) Mailhandlers and Machine Clerks working the night shift (11:00 p.m.-7:00 a.m.) would exhibit more stress than Mailhandlers and Machine Clerks working the day shift (7:00 a.m.- 3:30 p.m.).

(3) There would be and interaction between shift x occupation.

The results of a two-way analysis of variance between subjects did confirm a statistical significant difference at an alpha level of .001, which was used to define the rejection region. Among Mailhandlers and Machine Clerks who worked the night shift; $F(1,13) = .000$, $p < .000$, there was a significant difference, however, there were no differences relative to occupation on stress levels or interactions between shift x occupation on stress, as hypothesized.

In Chapter 5, some explanation for this unanticipated outcome will be offered and areas of future research will be detailed. The relationship between occupation and shift on stress, as well as the interaction between them will be discussed.

CHAPTER FIVE

Summary and Conclusion

Introduction:

The post office presents a useful setting to develop a theory of assaultive violence in the workplace. The rapid progression of mail processing from manual to mechanized and automated technology, with attendant changes in the organization of work, upset established patterns of interaction and replaced direct supervisory control of labor with machine-paced work governed by a logic of scientific management. Uncertainty about jobs, pressure to increase productivity, and frustration associated with management intimidation tactics combine to create an experience of degradation for many workers. Legitimate mechanisms of social control (e.g., work rules, productivity measures, grievance procedures), and internalized taboos against violence breakdown as some workers violently resist perceived degradation and frustration. The above argument has important implications about social disorganization and breakdowns of social control. The uncertainty that accompanies rapid technological change a classic pre-condition of social disorganization. In the case of mechanization and automation in the post office, lives are disrupted and livelihoods are threatened by automation, but it is the frequent interpersonal confrontations and frustrations associated with a degrading experience that provokes some employees to violence.

To examine this theory in more depth, a study was designed to examine the relationship between occupation and shift on the stress levels of Mailhandlers and Machine Clerks in the United States Postal Service.

Sample:

The study involved a survey of postal employees in Trenton, NJ and Phila., PA. A total of 120 questionnaires and rating sheets were randomly given to 30 Mailhandlers and 30 Machine Clerks who worked the "day" shift in the Phila., PA facility. Similarly, 30 Mailhandlers and 30 Machine Clerks who worked the "graveyard" shift were randomly given questionnaires and rating sheets in the Trenton, NJ facility.

The data for this study was collected through the use of the Occupational Stress Inventory (OSI), which was used to measure occupational stress and psychological strain in postal workers employed as Mailhandlers and Machine Clerks.

The null hypothesis was:

1. There is no significant difference in stress levels between Mailhandlers and Machine Clerks.

2. There is no significant difference between the shift one works and stress

3. There is no interaction between occupation and shift on stress.

Conversely, the alternative hypothesis was:

1. There is a significant difference in stress levels between Mailhandlers and

    Machine Clerks.

2. There is a significant difference between the shift one works and stress.

3. There is a significant interaction between occupation and shift on stress.

The independent variable(s) were:

1. occupation

2. shift

The dependent variable:

1. stress scores, which ranged from 0 (absence of occupational stress and / or

    psychological strain to 70 (indicative of statistical significance and a strong

    probability of maladaptive stress).

A two- way Analysis of Variance (ANOVA) between subjects was performed using two

factors and two levels which were:

Shift:

      (a) 7:00 a.m.-3:30 p.m.

      (b) 11:00 p.m.-7:00 a.m.

Occupation:

      (a) Mailhandler

      (b) Machine Clerk

Findings:

A very significant difference was found in the stress levels of Mailhandlers and Machine Clerks who worked the "graveyard" shift as compared to Mailhandlers and Machine Clerks who worked the "day" shift. $F(1,13)=.001, p<.001$. There was no significant difference between occupation on stress levels nor was There an interaction between shift x occupation on stress.

Discussion:

The fact that there was no significant difference in stress levels between Mailhandlers and Machine Clerks is contrary to what was found in the literature. A study conducted by the National Institute of Occupational Safety and Health (NIOSH) entitled, Job Demands for Postal Workers", found that employees engaged in mail processing activities report significantly lower levels of job satisfaction, resulting in stress, than postal workers whose pace of work is not dictated by machine (Baxter, 1990).

The failure to find an interaction between occupation and shift on stress is also contradictory to previous research. The "Edmonton" study found a significant difference in stress levels between postal workers working inside and outside of the post office; inside workers were found to be more stressful than outside workers. The difference in findings could be attributed to the fact that the "Edmonton" study asked respondents to provide answers to questions regarding physiological symptoms of stress using self-reports as opposed to using a more reliable measure. The small sample size (87

respondents) could have limited the power of the statistics to detect only the strongest effects.

Conclusion:

The theoretical argument developed in this paper remains tentative. The causal link between external conditions, personal frustration, degradation and assualtive violence is difficult to sustain. More work needs to be done, for example, to explore the extent to which workplace violence is an expression of pent- up grievances and the extent to which it involves "troubled" individuals who are predisposed to violence, which is triggered by frustration and degradation at work. However, if the argument about scientific management makes any sense, it is plausible that even those individuals predisposed to violence are more likely to express those tendencies in certain postal workplaces than in workplaces that are not characterized by rapid technological change, abusive authority, and heavy pressure to improve numbers that represent productivity. Managerial strategies designed to reduce labor costs during a period of rapid change have certainly contributed to employee paranoia and perceptions of harassment. It is hoped that efforts of postal managers to improve communication and worker participation will mend this dangerous climate.

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