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16. ABSTRACT <p>A vast storehouse of information exists on nearly every subject of concern to the transit industry. Much of this information has resulted from both research and the successful application of solutions to the problems faced by practitioners in their daily work. Because no systematic method has been previously identified for compiling such useful information and making it available to the entire transit community, the Center for Transportation Training and Research presents this study that searches out and synthesizes useful knowledge from available sources and creating a state-of-the-art document on current practices in the subject areas of concern.</p> <p>This annotated bibliography is a comprehensive analysis that will serve to reduce employer weaknesses and increase employee strengths for optimum performances. This manual is designed for dissemination to various transit managers for use in human resource management.</p>					
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A Review and Annotated Bibliography
of Factors Contributing to
Decreasing Productivity
(A State-Of-The-Art Document)

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Preface

A vast storehouse of information exists on nearly every subject of concern to the transit industry. Much of this information has resulted from both research and the successful application of solutions to the problems faced by practitioners in their daily work. Because no systematic method has been previously identified for compiling such useful information and making it available to the entire transit community, the Center for Transportation Training and Research presents this study that searches out and synthesizes useful knowledge from available sources and creating a state-of-the-art document on current practices in the subject areas of concern.

This annotated bibliography is a comprehensive analysis that will serve to reduce employer weaknesses and increase employee strengths for optimum performances. This manual is designed for dissemination to various transit managers for use in human resource management.

The preparation of this document involved the assistance of many—including the library staffs at the Metropolitan Transit Authority of Harris County (METRO/Houston) and Texas Southern University.

I. User's Guide

This state-of-the-art document provides a description of key related studies research on assessment factors affecting worker performance in the public and private sectors. Its intent is to cover all the materials existing to date that focus on several aspects of employee performance related to the public transit industry.

The main sections of this research consist of **A Selected Review of the Literature**, which is a brief survey of important research studies, and an **Annotated Bibliography**—a condensed version (quick references) of scholars who provided qualitative statements of many facets of factors deploying productivity. Furthermore, it provides a structuring of the materials according to several major categories: Absenteeism, Attitude, Environment and Motivation. Each of these divisions contain selected references on current theoretical and practicum ideas pertaining to factors affecting the quantity and quality of productivity in the workforce.

II. A Review Of Selected Literature On Factors Affecting Employee Performance

In the United States, the public transit industry has served very vital and important purposes. Many reliable studies have generated various ways in which the public transit industry can be modified in order to produce many more meaningful and useful outcomes. Yet, an evaluation of the scope of the services documented so far in the industry still pinpoint certain criteria and objectives tremendously lacking. For example, earlier this year Northwestern National Life Insurance questioned a random sample of 600 U.S. workers. Almost half (46%) said their jobs were highly stressful and 34% said the stress level was so high they were considering resignation (Farnham, 1991). In addition, Gene Cooper, a partner at Corporate Counseling Associates (a supplier of corporate employee assistance programs), says, "It used to be 3% to 5% of our calls for counseling were stress related; now, more like 8% to 14%. They come from all levels, clerks to vice presidents. Also, corporations are rushing to cut costs and downsize before year end. They want to take their lumps in 1991, in preparation for a stronger rebound in 1992. That means a usually powerful wave of layoffs will sweep through the United States" (Nussbaum, 1991).

These factors that affect the population as a whole can also be quantifiable while applied to the transit industry. Improvements to these pitfalls can be made by not only providing the adequate workforce training necessary to the employees, but also ameliorating those facets of low productivity which employers are often not cognizant of in the work force environment. The modern world, which is always changing due to high technology coupled with market forces in action, will require a significant increase in employee performance in the transit industry to remain competitive. Thus, if proper attention is not given to the growth and improvement of employee performance in the industry, very serious consequences will ultimately hinder the goals and progress desired in the industry.

A. General Overview

The general overlook of studies in the past indicated that various significant factors effect employee performance in the public transit industry. Influencing factors include inadequate training, lack of physical fitness, different wage plans, job titles, improper tools and hazardous environments. In addition, employee performance has been shown to be affected by absenteeism (i.e., dissatisfied with job, transportation, health reasons, and natural/catastrophe); limited supervision (i.e., lack of middle management which inspects driver performance while on duty); and driving safety (i.e., time, vehicle condition, experiences, knowledge of alternative routes, and road conditions). While other factors can also be addressed, the scope of this research focuses on the above identified significant factors.

This state-of-the-art document summarizes previous research relating to specific factors affecting the worker performance in four general categories: 1) worker absenteeism, 2) worker attitude, 3) worker environment, and 4) worker motivation.

B. Employee Absenteeism

Transportation agencies and scholars have begun to analyze the factors that affect employee performance in the public transit industry. Perry, Altman and Jackson (1982) reported in an informal paper prepared for an annual meeting of the Transportation Research Board in Washington, D.C. that increases in absenteeism is the one area affecting human resource productivity among the transit operators where immediate attention is needed. The causes of absenteeism ranged from illness to injury that exceeded the rates found in similar public and private sector industries. This factor not only shows evidence of being costly with present day operations, but those certain kinds of illness, (particularly those related to stress) may have the potential of creating serious financial and operational problems if allowed to continue.

Several authors surveyed absenteeism levels within a company and perceived opportunities for upward mobility that were correlated in a study reviewing the corporate environment. The study was conducted over a number of years involving employers and employees in a similar workforce. According to Dalton (1992), results showed that upward mobility decreased for those who requested transfer who had large amounts of absenteeism from the workplace that corrected the problem of high absentee rates. Whereas, Drago (1992) indicated that workgroup cohesion (the ability of employees to work together harmoniously) was correlated with low amounts of absenteeism if workers enjoyed their jobs and high levels of absenteeism if there appeared to be great job dissatisfaction. Characteristics associated with lower absenteeism rates were male gender, part-time employment status, short job tenures and high wages. Higher rates of absenteeism were correlated with shift-workers, workers with sick leave entitlement and low employment rates. However, the authors found that determinants of whether a worker was absent at least one time in any given year was different from those which determined the amount and length of absenteeism for the same group of workers.

In conclusion, Schwager (1986), suggested that employee absence is a considerable problem in the transit industry. Transit authorities with more rigorous and comprehensive attendance policies in a program reported a lower rate of absenteeism. The goal of the workforce should be to assist in improving rates of absenteeism by providing background information on ways in which to improve attendance by emphasizing the costs and associated impacts of absenteeism.

C. Employee Attitude

Self-defeating behavior is strongly exhibited by employees, in the workplace to ease anxiety or to diffuse issues stemming from interpersonal or intrapersonal organizational issues, (Allcorn, 1992). Employees exhibiting such behavior need to be counseled by experts qualified to define and identify dysfunctional behavior. Supervisors should create environments where employees feel free to express their perceptions when they are communicating the results of feedback.

Greiner (1992) suggested that the appearance of an employee's windows desktop environment indicates the type of attitude they have towards the work environment. On the other hand, Hays (1991) explored employee attitudes about placing family issues first. The employees questioned worked in the hospitality field and felt employers needed to be more sympathetic to work and family issues. Finally, Jacobs (1991) claims that American workers are being bypassed for promotions that bring about the largest percentage of impact on employee attitudes.

D. Employee Environment

Several studies indicated that creating an environment that fosters employee morale can enhance employee productivity. A motivation-support type environment can be created by integrating four vital components that are representative of the personal characteristics of employees. These four characteristics are: 1) the job framework, 2) the distinctive traits of supervisors, 3) the corporate philosophy and 4) personal characteristics of employees (Wiley, 1992; Fernberg, 1992; Kittusamy, 1992; and Milite, 1992). Companies must be careful in making job matches and should consider the individual employee traits and the nature and quality of the job intended for the person (Davidson, 1992). Establishing an atmosphere based upon team spirit, providing open communications with subordinates, and employing fairness, honesty, supportiveness and accessibility are the primary responsibilities inherent in good supervision. Company benefits and company philosophy can also assist in providing a nurturing environment for employees (Bitner, 1992).

E. Employee Motivation

According to Golembewski (1983), public agencies are under continuous scrutiny during the management of highly publicized projects. Executives found that projects that required "hard pushing" resulted in an enormous insensitivity to human factors that affect employee morale. Factors such as employee mental and biological health suffered immensely during such "hard pushing." Organizational issues such as strategic planning, employee communications and staff briefings suffered under such a schematic. Fear

and personal put-downs occurred when executives raised the validity of those human factors. Lack of planning created a quick responding organizational environment that in haste often times created waste that had to be hidden from the scrutiny of public officials. Build-ups due to the lack of acknowledgment of the human factors resulted in frequent explosions and personality clashes. In this type of hard-pushing environment, many executives could experience the exhilaration of project completion.

The Transportation Research Board (1985) explains the background and findings of the survey that was administered in four regional areas (the North Atlantic States, the Southeastern States, the Mississippi Valley States and the Western States). The results of this survey indicated that salary comparisons incorporate a nation-wide sample with commentary on benefit and incentive plans. General working conditions are highlighted and descriptive titles are included for maintenance and operations positions. The report found that the majority of states have a civil service, merit and or similar system. All states reported a retirement plan, benefit packages that included vacation and sick leave. Unionization appears to be waning for both supervisory and non-supervisory personnel. However, forty-six states reported either voluntary or mandatory organized labor unions for maintenance and operations personnel. The majority of states reported that supervisory personnel are paid on a salary rate basis whereas non-supervisory personnel are paid on an hourly rate basis. All states reported that they had a formal job classification. The value of conducting a survey is to report and monitor similarly situated working conditions nationwide and to monitor in a structured manner pay and incentive plans.

Other scholars examined the area of worker motivation in the public and private sectors: Greiner (1986) denotes performance targeting is a motivational strategy that may work in inducing employees to perform and to continue to improve service productivity. "Performance targeting is the process of making the expected level and the type of work performance explicit to employees and providing subsequent feedback on discussions of performance achievements." Cash and monetary incentives are used to bring about the desired performance behaviors of the workers. Performance is also improved through quality circle meetings that involve small groups of employees gathered to suggest ways of identifying and analyzing problems and creating solutions for those problems. In employing motivational techniques in the workplace there can be some conflicts involving resource needs and the compatibility with employee needs, conflicting employee values and attitudes, and the effectiveness of personnel structures and organizations.

Verespej (1988), argues that U.S. companies have employed many forms of worker motivation including group incentives to beat the competition. Some firms believe group incentives increase productivity, lower production costs and create a more competitive company. However, group incentives do have drawbacks. Those workers who are succeeding in their own right with an individual plan, may feel resentment because performance is rated on a group level. If the worker environment is not conducive to group incentives, such a

plan can create more problems than it solves. Many companies have difficulty selling group incentive plans. Employee involvement in changing from individual incentive plans to group incentive plans can make the transition easier for both manager and worker. Employee committees can help in marketing the idea to fellow workers.

The next sections of this report provide annotated bibliographic data and a comprehensive listing of references.

III. Annotated Bibliographic Data

A. General

Belknap, Amos. *A Doctor Looks at Worker's Compensation*, **Mississippi Business Journal**. Vol. 14, July 1992.

This report looks at the allied service field and the amount of money expended for worker's compensation claims.

Brisk, Lloyd Frank. *The Best Years Are Still to Come*, **Telephony**. Vol. 220. June 1991.

This article argues that working conditions in telephone companies have improved because of technological innovations, specifically from the perspective of outside workers. Equipment in the 1940's required employees to do a great deal of manual work. Technological innovations from many different organizations and industries have allowed telephone companies to construct new OSP's to meet the demand for telephone service in the 90's. Shovels have been replaced by mechanically driven and hydraulically powered hole diggers. Cables covered with plastic sheathing are used to maintain the cables and changes have been made in techniques and equipment used to build OSP's.

Bryan, Tom. *Dominican Republic Told It Could Lose Foreign Aid*, **Caribbean Business**, Vol. 19, June 1991.

This report conveys that economic assistance has long been the primary support for the sugar cane industry in the Dominican Republic. Employment and workers in the Dominican Republic would suffer severely if the U.S. were to change its economic policy toward this island.

Causey, Rob. *All Square on Research*, **Electronics Weekly**, Issue 1558, June 1991.

This report depicts the Soviet Union as rivaling the Japanese in the research of electronic equipment for decades. It lags other industrialized nations, however, in the production of electronic equipment.

Coffe, Peter. *Windows Debut Lacked 4 Important Words*, *PC Week*. Vol. 7. June 1990.

This document asserts that the Microsoft Corporation is losing sight of the customer in its new development of the Windows software package. Coffe states that the philosophy of Microsoft is to put a PC on every worker's desk, yet the software package is so tied to a mainframe system that it is impossible for the PC user to work with it in a stand alone situation. For example, the software requires a laser printer which few homes have, as well as a network connection which is impractical for at-home stand alone systems. Home users who wanted what windows provided purchased Macintosh computers long ago. It is time, however, to make the workplace more comfortable and to also make the at home office more comfortable and less stressful.

Conway, Lynn. *Haunted By the Metaphor of the PC*, *Electronics*. Vol. 63. August, 1990.

This research explains how PC users have missed out on many communications issues because each individual system stands alone and is not tied to a major platform of micro-computers. Work-group computing can help connect PC users to micro-computing. The advent of this system will help users and will change the face of business. The incorporation of video computing will impact multi-media systems and influence office design.

Fernberg, Patricia. *Office Design Works Harder and Smarter*, *Modern Office Technology*. Vol. 36. January 1991.

This magazine article explains that the office furniture market has been strong, offering new products and services, and that the computer has had the most significant impact upon this industry. Space factors, lighting and storage have been secondary issues. In selecting a new office system flexibility and cost-effectiveness are key factors. Furniture design and durability must adapt to changing office needs. To train people in its industry, the Facility Management Association is now offering a certification program for its membership.

Ferguson, Gary. *Printer Incorporates Deming*, *Industrial Engineering*, August, 1990.

This project explains how Publishers Press implemented a management philosophy, promulgated by W. Edwards Deming, and adopted a Quality Process Commitment (QPC) program for its

employees. Publishers manager, Mark Zimmer, convinced his President, Frank Simmons, to attend one of Demings seminars. Zimmer and Simmons then called in the Paul Hertz Group to help create a new work environment. Middle management received thorough training and Process Improvement Teams (PIT's) were chosen. Each team coupled employees with managers to work through the process and to establish open communications. What has been immediately noticeable to publishers is a seventeen (17%) percent reduction in order entry errors and an improvement in attitude.

Kirvan, Paul. *Humor in Telecommunications: We Need It Badly*, Communications News, Vol. 28, August 1991.

This author believes that humor is a necessary part of telecommunications, specifically as technology presses forward to greater advancements. As professionals, we sometimes take technology too seriously and force workers to become one dimensional. The author says when this occurs workers become automatons without emotions. The author cites the Video Arts Inc. co-founder, John Cleese, who produces humorous training films. He believes that Cleese's training films make learning more fun and that humor used in almost every situation including successful politicians and professional speakers makes the training film excellent. Cited in the article is an excellent humorous newsletter titled 'The Current Comedy,' a collection of materials that can be added to speeches. The author believes that the telecommunications industry is inundated with technology and that they need to make people laugh.

Legg, Gary. *American Engineers in Japan: Same Profession Different World*, EDN Journal, Vol. 34, October 1989.

This article addresses American engineers, especially women, standing out in Japan as part of an exchange program carried out by Tektronix and NEC Toyaama LTD. Engineers from America went to Japan for two months of extensive language studies before going to work. Employees worked 14 hours per day, six days per week. They were required to put on uniforms and to leave their desk twice during the day for exercise breaks. The rigid view of seniority and structure in the workplace made the Americans quite uncomfortable. Workers who did not listen quietly were scolded for mistakes. Americans found that after-hours drinking sessions were the only times a Japanese worker could speak freely.

Lush, Nick. *Implications of Court Award for Workplace Smoking in Australia*, *The Lancet*, Vol . 339, June 1992.

This articles describes employees in Australia filing suits against companies that were not willing to prohibit smoking in the workplace. Employees who suffered from passive inhalation were awarded monetary sums by the courts.

McCormick, Joel. *Can Booming Thailand Survive Its Success?* *Electronic Business*, Vol. 17, January 1991.

This document explores Thailand's electronic industry growth increasing over the last decade. Can it continue, is the question economists are posing, with indicators like component supplies that are still underdeveloped and research and development declining. Pollution is a major problem there and many residents are experiencing respiratory problems. Thailand has failed to upgrade its communications systems and stands overloaded and inadequate for its business needs. In the early 1970's, an industrial boom began that pushed growth upwards over 40% percent in some sectors. Thailand is short, however, on engineers and suffers from a very poor infrastructure.

Nelson-Horchler, Joan. *The Myth of the Shiftless U.S. Worker*. *Industry Week*, Vol. 240, May 1991.

This article claims that American workers are far from lazy. It accuses management for many of the workplace hazards simply because it often times fails to listen to the ideas of employees. Companies who ignore employee perceptions have the need to re-educate management in order to alleviate current misconceptions regarding employee performance.

Noakes, Susan. *The Workplace Has A New Face*, *The Financial Post*, April 1991.

This report portrays office automation as changing the face of the workplace; it examines the impact of technological innovations upon employees in the workplace.

Penn, Malcolm. *We Can Work It Out*, Government Documents, CD 275, EEUR, 11415192, 1990.

This book depicts Malcolm Penn, Instat's European President, assessing eight different organizations in the Soviet Union to determine their technical capabilities, in April of 1991. He found that the Soviets did not lack high quality technology, but that they did not have the capability of manufacturing in high volumes. He witnessed researchers at the Soviet Institute of Physics and technology working on sub micron photolithography processes and 64M-bit and 256M-bit DRAM cells. Researchers at another facility were developing a Mazaepiplanar CMOS process using ferromagnetic masks. Production engineers had serious problems obtaining supplies and needed commodities such as simple de-ionized water or electricity. In his opinion, Penn felt that the Soviet Union will offer immense potential once production and technology are boosted. He offered as an example the Samsung in Korea who has quickly begun producing DRAM's after investing money in equipment.

Pilenzo, Ronald. *Why Literacy Is Everybody's Business*, Modern Office Technology, Vol. 35, November 1990.

This article argues that impacting the workplace more than ever is the rising number of the functionally illiterate. More and more businesses have installed state-of-the-art equipment, only to find that employees do not have the knowledge with which to operate. Companies cannot survive if employees are not trained. Companies need to adopt life long learning policies that encourage all workers to achieve and maximize their potential. Workplace literacy programs need the support of top management to be effective and should incorporate basic skills, goals and objectives, and a precise measurement of results, in a well defined plan of action.

Swart, J. Carroll. *An Overlooked Cost of Employee Smoking*, Personnel, August 1990.

This article outlines human resource managers of 608 companies surveyed to see what types of smoking policies were in place at their companies and to assess the kinds of related costs that were associated with a reduction in smoking in the workplace. Of those respondents who had a smoking policy in place for a year or more, a 23.3 percent reduction in maintenance costs was reported. Reductions were greatest at those companies which had more restrictive policies.

Vizachero, Rick. *Productivity is Booming in the Computer Age*, **Government Computer News**, Vol. 10, July 1991.

This document explores how worker productivity increased with the assistance of the micro-computer. Training time and increased costs were initially cited by critics as negative factors to computer usage in the office. Yet, in the 1980's, there was a massive infusion of computers into the average office and most workers became higher producers. Government spending increased, hiring increased and the U.S. economy grew at a faster rate than the populations in the 1980's because of the availability of software packages and the micro-computer. Software programs for these computers are easier to use than traditional mainframe computerized programs. Micro-computers can run almost any commercial, off-shelf package.

B. Employee Absenteeism

Bott, Jennifer. *Mazda Motor Manufacturing Corporation: No-Shows Plague Mazda as 92' Changeover Starts: Employee Absenteeism, Profiling the Transplants*, **Ward's Auto World**, Vol. 28, January 1992.

The author describes Mazda employees in the automobile industry and specifically looks at the economic aspects of absenteeism.

Bycio, Peter. *Job Performance and Absenteeism: A Review and Meta-Analysis*, **Human Relations**, Vol. 45, February 1992.

This magazine article argues that individual employee performance and absenteeism were linked using a meta-analysis for data derived from 46 articles published previously. Utilizing this method, a significant correlation was found between frequent absenteeism and poor job performance ratings. The author did point out that verification exists in each individual article reviewed and could not be accounted for by statistical artifacts. These verifications may, however, be accounted for by other factors such as supervisor annoyance and stress reduction.

Dalton, Dan R. and Debra J. Mesca. *The Impact of Employee Initiated Transfers on Absenteeism: A Four Year Cohort Assessment*, **Human Relations**, Vol. 45, March 1992.

This document shows that absenteeism levels within a company and perceived opportunities for upward mobility were correlated in a study reviewing corporate environment. The study was conducted over a

four year period and involved two employee cohorts drawn from two large Western public utility companies. The results showed that upward mobility decreased for those who requested transfer and who had large amounts of absenteeism from the workplace. The authors conclude that transfer policies can be used successfully to correct the problem of high absentee rates. It was pointed out however, that while the use of such policies does not necessarily produce a decline in absenteeism, such policies may assist in alleviating absenteeism problems associated with a lack of child care and job dissatisfaction.

Drago, Robert and Mark Wooden. *The Determinants of Labor Absence: Economic Factors and Workgroup Norms Across Countries*, *Industrial and Labor Relations Review*, Vol. 45 July 1992.

This report highlights causes of absenteeism that were analyzed through a survey across the countries of the United States, Canada and New Zealand. Furthermore, the results were that workgroup cohesion (the ability of employees to work together harmoniously) was correlated with low amounts of absenteeism if there appeared to be great job dissatisfaction. Characteristics associated with lower absenteeism rates were male gender, part-time employment status, short job tenures and high wages. Higher rates of absenteeism were correlated with shift-workers, workers with sick leave entitlement and low employment rates. The authors also found that determinants of employee behavior were different from those which determined the amount and length of absenteeism for the same group of workers.

Geddes, AnnMarie L. *This Employee Benefit helps reduce Absenteeism*, *Business First-Columbus*, Vol. 7, February 1991.

The author describes in this article how child care services can reduce absenteeism. Working parents need child care facilities for both healthy and ill children. Facilities for sick children enable their parents to continue to attend work without interruption.

Martocchio, Joseph J. *The Financial Cost of Absence Decisions*, *Journal of Management*, Vol. 18, March 1992.

This study begins with the personal choice decision to refrain from attending work that was assessed for 176 blue collar workers and 264 clerical staff, by estimation using the reasoned action theory and the behavioral costs approach. The author found that greater functionality is displayed by the theory of reasoned action in determining paid absence outcomes. The author discovered that reasons other than those

provided by the action theory also served to explain paid absence decisions.

Schwager, D.S. and L. C. MacDorman. Transit Employee Attendance Management: Review of Attendance Programs, U.S. Department Transportation, Vol. 1, June 1986.

This study describes employee absence as a considerable problem in the transit industry. The project found that transit authorities with more rigorous and comprehensive attendance policies and programs reported a lower rate of absenteeism. The goal of the report was to assist in improving rates of absenteeism by providing background information on ways to improve attendance by emphasizing the costs and associated impacts of absenteeism. The study identified previous research theories of absenteeism, described alternative attendance programs and reviewed specific programs that appeared to be working. The study also identified management techniques for effective attendance programs within the industry by developing a model for use in the industry.

Unscheduled Absence Costs. Supervision, Vol. 53, June 1992.

This report points out that statistics on unscheduled absences should be compiled by businesses to determine costs in conjunction with rates of absenteeism. The 1992 Survey of Unscheduled Absences Costs Conducted by Commercial Clearing House showed a mean unscheduled rate of 2.21 percent for those 380 firms reporting in the survey. In dollars, this rate was translated into \$1,541,303 or about \$411 per worker. Costs of overtime and temporary replacement employees to cover workers who are absent are also reflected in this figure.

C. Employee Attitudes

Allcorn, Seth. *Self-Defeating Behavior in the Workplace, Supervisory Management. Vol. 37, April 1992.*

This paper describes how self-defeating behavior exhibited by employees in the workplace is often done to ease anxiety or to diffuse issues steaming from interpersonal or intrapersonal organization issues. Employees exhibiting such behavior need counseling with experts to define and identify dysfunctional behavior. Supervisors

should give feedback and listen to employees when they are communicating the results of that feedback. The authors give appropriate suggestions on how to create the proper setting for employees to air their concerns.

Altany, David. *The Influence or Affluence*, **Industry Week**. Vol. 240., May 1991.

This magazine article points out how employee attitudes have shifted with economic conditions. The workforce adjusts when confronted with the realities of economic conditions in terms of wage and benefit reductions.

Bergoen, Tom. *Sweet Associates Adjusts to Marci as President*, **Capital District Business Review**, Vol. 18, October 1991.

The article takes a look at an organization in the construction industry and its employee attitudes under new executive leadership.

Dodson, Robert L. *Speeding The Way To Total Quality*, **Training and Development Journal**, Vol. 45, Issue: No. 6, June 1991.

This report examines an internal quality audit administered in companies to increase employee satisfaction and to improve quality in the workforce. The responsibility to create a positive work environment lies with middle managers to develop a common goal and to encourage employees to reach their utmost potential by coordinating the total quality effort put forth on the job. Several steps were given in implementing an internal audit which includes the following: establishing objectives, developing process measures, auditing the process, solving problems, and reauditing the process.

Emmett, Mark A. and W. Taher. *Public Sector Professionals: the Effects of Public Sector Jobs on Involvement*, **American Review of Public Administration**, Vol. 22, March 1992.

This article explores the attitudes of those employees involved in public sector work to evaluate the degree to which their attitudes impact job satisfaction. It also examines the psychological aspects of public service employment.

Erdman, Andrew. *What's Wrong With Workers?* *Fortune*, Vol. 126, August 1992.

The article explores attitudes and what motivates workers in the trade and textile industry.

Estrada, Edgar. *Employees Cope With Corporate Restructuring.* *Caribbean Business*, Vol. 20, April 1992.

This article asserts that corporate reorganizations often leave employees distraught. It also gives an example of how employees can cope with corporate restructuring.

Franklin, Forrest P. *Over the Edge: Managing Violent Episodes, Security Management.* Vol. 35, September 1991.

This document explains what happens in the banking industry to employees who are constantly under the threat of robbery. The article also examines violent episodes in the banking industry.

Frazier, Charles. *True Believe, Nashville Business and Lifestyle.* Vol. 15, February 1992.

This article gives the author's personal account of factors that impacted his motivation during his tenure as school Superintendent.

Gay, Katherine. *Job-Hoppers Thrive on a Soured Relationship,* *The Financial Post*, PG. 21, November 1991.

This report denotes an examination of employee loyalty, job satisfaction and the impact of employee evaluation upon registration in the banking and finance industry.

Greiner, Lynn. *What's Your Style?* *Computing Canada.* Vol. 18, September 1992.

The author, in this article, suggests that the appearance of an employee's Windows desktop environment is often an indication of the type of attitude they have toward the work environment in general. The book, *How to be Organized in Spite of Yourself*, by Sunny Schlenger and Roberta Roesch is cited for the three main categories

they believe workers fall into. These worker types are (1) the Everything Out Type, who enjoys leaving things out on the desk where they can easily find them, (2) the Nothing Out Type, who is more orderly and secretive and (3) the Right Angler Type, who displays a tendency to clean up or tidy up the areas of others. The author believes these tendencies are reflected in the user interfaces chosen. There is great potential for conflict when all three are placed in a similar working environment is great. Managers should establish fundamental rules regarding licensing software issues and virus protections to ensure the personal freedoms for all types of workers.

Hayes, Lynn O'Rourke. *Try a Little Sympathy, Lodging Hospitality*. Vol. 47, June 1991.

This report conveys employee attitudes about placing family first. The employees questioned, who worked in the hospitality field, felt employers needed to be more sympathetic to work and family issues.

Honda, Hiroshi. *The Modern Work Environment in Japan, Mechanical Engineering*, Vol. 114, January 1992.

This article shows how the work environment in a major manufacturing plant differs from those in the United States. It examines employees attitudes, career development and the social aspects of the work environment in Japan.

Jacobs, Deborah and Laura Suing Stanley. *Japanese Employers, Across the Board*, Vol. 28, October 1991.

This report explains how the Executives of U.S.-based Japanese firms are becoming increasingly aware of differences in their business practices, specifically in the area of human resources. Personnel management, in America, has traditionally allowed employees to express complaints. American workers are now beginning to complain about their Japanese superiors. The complaints center around claims of unfair treatment and practices. American workers claim that they are being bypassed for promotions and that benefit packages are better for the Japanese. These claims assert that American workers are being treated like second-class citizens and that they are further exacerbated by the language and cultural barriers. To avoid more lawsuits, the Japanese firms are now trying to teach Japanese executives American employment laws. The Japanese firms have gone a step further to systematically eliminate those employees who are perceived as causing trouble.

Johnson, Arlene. *Fear of Flexing: Employees Attitudes Toward Flexible Working Programs*. Across the Board, Vol. 29, May 1992.

This document presents employees as being skeptical about participating in flexible work programs because they traditionally believe that quality and productivity are gauged through a time-based measurement of work. To implement flexible work programs successfully, organizations will have to overcome the myths that exist in the corporate culture associated with flex schedules. To alleviate employee doubts about such a program, companies need to provide factual information on flex programs through organized meetings and communications. Company newsletters and employee staff meetings are good ways to accomplish this. Managers should actively participate in this communications effort by holding staff meetings with question and answer sessions and highlighting specific communications for employees that stress the guidelines of the program.

Kee, Herbert W. *Fear and Ferment: Public Sector Management Today*, Canadian Public Administration, Vol. 29., Winter, 1986.

This article discusses the cultural barriers that are against performance measures in the public sector. Incentives for public sector employees are easier to implement at the senior management level than at lower levels. Measures related to macro-level performance are more obtainable than micro-level performance levels. In the private sector, incentives or bonuses are paid more frequently than in the public sector. Lump sum bonuses in the private sector are contingent upon company performance. In the public sector, incentives are based upon performance appraisal systems that tend to be judgmental. Appraisal systems in the public sector need to be improved and managers need to become better educated on how to administer performance appraisals.

Kinicki, Angelo J., Kenneth P. Carson, and George W. Bohlander. *The Relationship Between an Organization's Actual Human Resource Efforts and Employee Attitudes*, Group and Organizational Management, Vol. 17, June 1992.

This report gives data collected from 370 employees of two hotel/resorts used to test the hypothesis that employee attitudes are positively affected by Human Resources (HR) activities. The test analyzed employee perceptions as to their company's commitment to HR, employee motivation, job satisfaction, and employee attitudes toward company values, pride in company affiliation and HR communications. The interaction among HR activities, attitudinal criterion variables and the employee's perception of company

commitment were tested through a correlation analysis. The results showed that employee attitudes are influenced by their company's commitment to HR programs.

Lefkoe, Morty and Beth Enslow. *Unhealthy Business, Across the Board*. Vol. 29, June 1992.

This article explains how work environments influence the health and welfare attitudes of employees. Studies have shown that employees in work environments who feel happy, safe and secure, and who feel wanted, have less accidents and incur less health expenses. The conclusion of this research states that corporations need to create cultures that foster employee job satisfaction and enthusiasm for their professions. Robert Levering, author of 'A Great Place to Work' and 'the one Hundred best Companies to Work for in America,' describes a healthy work environment as one where employees are not penalized for making mistakes nor expressing their feelings, are treated fairly and not exploited, can feel pride in their work, and are made to feel that they are responsible and have control over their own work.

Losey, Michael R. *Managing Stress in the Workplace, Modern Office Technology*, Vol. 36. February 1991.

This document discusses how American businesses are paying more than \$150 billion dollars annually for the problem of employee stress. The causes of stress and the recognition of warning signs should be understood clearly by managers. Corporations set feverish paces that they expect all employees to follow. This may very well be the cause of employee stress. Workers can easily feel that they are on call at all times with technological innovations such as beepers, fax machines, cellular phones and computers. Such automation has lessened the turn-around time on projects. Many employers have taken advantage of this and impose tighter time frames for accomplishing a task. Workforces have been cut and reduced by downsizing and hostile mergers. Employees are constantly threatened with no job security. Managers should be more sensitive and really question the demands they place upon employees. Often times these demands are not realistic.

McCune, Jenny C. *Who are Those People in Blue Suits?* *Management Review*, Vol., September 1991.

This article reveals employee attitudes about the structured management processes IBM had in place. It further explains the

perceptions employees held relative to IBM's personnel policies and procedures.

McFillen, J. M. and William F. Maloney. *New Answers and New Questions in Construction Worker Motivation, Construction Management & Economics*, Vol. 6, Spring 1988.

This survey examines 703 workers who felt their organizational climate was poor because contractors used negative sanctions to eliminate undesirable behavior which created a disincentive leading to poor performance. The study showed that construction workers did not have a clear understanding of what was expected of them. Unionized construction workers were involved in a survey in a major, U.S. midwestern city to collect data on their perceptions of the motivational climate within their company. The study suggested that managers must establish clear expectations for desired performance behaviors and must provide the necessary resources for facilitating the work environment. To achieve a positive environment, managers must encourage good job behaviors through varying reward systems.

Monroe, Linda. *Facilities Challenges in the Information Age, Buildings*, May 1991.

This document denotes that with the advent of computerized systems facilities managers are forced to become more creative and innovative in the design of facilities. Attention must be paid both to exterior concepts and interior designs for employee productivity.

Naderi, Babak and Madina Baggerman. *The Result of Ergonomics at the Forefront of Manufacturing, Industrial Engineering*, Vol. 24, April 1992.

This document explains how quality control is influenced by ergonomics, although it is often thought of as a matter of human comfort. Improving a worker's ability to accomplish a task can help improve quality. Companies are now turning to ergonomics to reduce cumulative trauma disorders (CTD), to meet legislated health and safety regulations and to comply with the Americans with Disabilities Act. Engineers, managers and staffers are often told to develop an ergonomics program, but are given little guidance. An effective plan must include a comprehensive worksite analysis, strategies for preventing and controlling hazards, and solutions for implementation and documentation.

Opinionated Employees are Motivated Employees. Bakery Production and Marketing, Vol. 27, May 1992.

This article discusses reviewed employee attitudes in the bakery industry and found that employees who are willing to speak out on issues concerning their work environment are highly motivated employees.

Pechter, Kerry. Corporate Fitness and Bluecollar Fears, Across The Board, Vol. 23, October 1986.

This author states that blue collar workers have bad health habits which include poor diet and exercise regimes. Blue collar workers are not motivated to participate in health and fitness programs because of several factors. Blue collar workers tend to distrust management proposed programs, and are intimidated and sometimes embarrassed by these kinds of programs. Blue collar workers have unusual schedules and home life stresses that are not experienced by white collar workers. The author recommended that fitness programs should employ well trained personnel and be patient with blue collar workers while involving them in planning programs. Planning should include union representatives and should include record-keeping for attendance.

Prasad, Anurag. Design For Hire: More Stress, More Fun, EDN Journal, Vol. 35. September 1990.

This article examines how electronic companies are attracting and retaining competent engineers simply because they offer variety. Compensation and upward mobility may be limited but engineers who want diversity both in the kinds of projects and the skills training these projects provide are attracted to companies that lack the traditional corporate structure. Freelance engineers are finding success in such environments and frequently support or supplement other in-house kinds of engineering activities. Companies that need freelance engineers the most are product companies, start-up companies and high-tech companies. Freelance engineers are motivated because they avoid the bureaucracy and stick-client relationships that can make or break a project.

Ranson William J. *ADA and Compliance: Facts Every Engineer Should Know*, Industrial Engineering, May 1992.

This author contends that every industrial engineer should have read the ADA Act and should be responsible for compliance. The act calls for sensitivity in the workplace, among other issues that prohibit discrimination against individuals with disabilities. The Department of Justice produces a fact sheet that spells out what actions that are needed and establishes a timetable to follow. Employers cannot discriminate against qualified individuals in hiring or promotional practices. Public transportation buses, after August 26, 1990, must provide access to disabled persons and alternate transport to fixed-route buses must be provided when feasible. Private entities, such as hotels and restaurants, cannot discriminate against disabled persons. Telecommunications companies must offer telephone relay services to persons using telecommunications devices for the deaf.

Renn, Robert. *Employee Attitudes and Behavior*, Human Relations, Vol. 44, November 1991.

This report explains how results found that internal and external (I-E) differences varied according to methodology and construct. The results suggested that a meta-analysis of locus of control (LOC) literature might be necessary to determine whether I-E differences were due to true differences in the LOC construct as opposed to being the result of variations in statistical analysis. Rotter's locus of control research evaluated differences in employee attitudes and behavior relative to white and blue collar workers.

Russell, Robert. *California's Drug Free Workplace Act*, San Francisco Business Times, Vol. 5, August 1991.

This article reviews the requirements of the Drug-Free Workplace Act and addresses its potential impact upon employers and employees.

Saterwhite, Jared. *Employee Medical Program*, Modern Casting, Vol. 81, February 1991.

This article examines benefit programs for employees in the sheet metal and metal working industry. It discusses health and safety for those who are exposed to the pollutants that are second nature in metal industries.

Schneider, Leni. *Double Duty: Taking Care of Baby and Business, Party and Paper Retailer*, Vol. 6, September 1991.

This article discusses the social aspects of managing motherhood and a full time job. Taking children to the workplace is the answer for some working mothers with infants.

Sheridan, Peter J. *How To Handle an OSHA Inspection, Occupational Hazards*, Vol. 53, September 1991.

This article addresses safety regulations in the workplace and takes a look at a typical OSHA on-site inspection.

Staying Alive. *The Economist*, Vol. 319, June 1991.

This document describes labor unions and employee working conditions in an underdeveloped country. It asserts that working conditions in Indonesia are much different than those in more industrialized countries.

Tobenkin, David. *Employees at Security Pacific and Bank of America Await Reverberations from Merger. Los Angeles Business Journal*, Vol. 13, November 1991.

This author reports employee attitudes that were examined after the merger and acquisition of two large banks; the impact of the merger upon employees was assessed.

Underwood, Elaine. *The Cubing of America, Marketing Week*, Vol. 33, March 1992.

This document discusses manufacturers of office furniture introducing their newly designed workstations and cubicles. These workstations are designed to bring about more equality between managerial and support staff. Most workers, however, disliked the loss of privacy with cubicles as workstations. Herman Miller Inc. has attempted to address the problem whereas Steelcase Inc. has a design with no walls at all. Workstation cubicles and their accessories accounted for one third of the \$7.7 billion in office furniture industry sales in 1990.

Veltri, Anthony. *Transforming Safety Strategy and Structure, Occupational Hazards*, Vol. 53, September 1991.

This author addresses safety in the health care profession and some of the occupational hazards health care workers face in the industry.

Verespej, Michael A. *Drug Users Not Testing Anger Workers. Industry Week*. Vol. 241, February 1992.

The article describes how employee attitudes are impacted by co-worker actions. Employees who are suspected of using drugs in the workplace upset others when they refuse to be drug tested.

Whiteley, Norman F.. *Where Restructuring Fails, Across the Board*. Vol. 28, September 1991.

The article examines how employee attitudes often determine the success of a restructuring process more so than a company's business portfolio, the new organizational structure or other strategic business plans. In the case of the Hercules company, an organization that had been restructuring since 1978, it was suggested that cost-cutting, selling off unprofitable businesses or adding businesses were not good determinants of a company's overall success after the restructuring process. The Hercules experience suggests that if a company's objectives are indeed shared by its employees, it is possible to improve the company's performance within a reasonable amount of time.

Workplace Safety. Realtor News, Vol. 12, September 1991.

This article emphasizes the importance of implementing accident-prevention programs; safety and security measures taken in the workplace can prevent accidents.

D. Employee Environment

American Medical Association Takes A Stand On Seating. Modern Office Technology, Vol. 37, Issue: No. 2, February 1992.

This report evaluates office furniture from 35 manufacturers that would be used by managers, clerical workers, secretaries and others. An interior design team tested 35 chairs for two weeks considering lower back support, back flexibility, ease of adjustment, mobility,

esthetics, seat, arm and overall comfort. The final decision led to the right type of furniture selected based on low price and high performance rated by all departments.

Baroni, Barry J. *Unwelcome Advances*, *Training & Development Journal*, Vol. 46, Issue: No. 5, May 1992.

This document conveys the understanding among employers and employees of the true definition of sexual harassment in the work force, and the awareness of alleviating confusion and ignorance of sexual harassment through education and training that will serve as preventive mechanisms. It also formulates and implements a well-defined, extensive sexual harassment policy for employers and employees administered in the organization. A breakdown of this policy includes the importance of reporting any incidents of sexual harassment, and provides details of the reporting procedure and the forms of disciplinary action accorded to violators.

Bitner, Mary Jo. *Service Escapes: The Impact of Physical Surroundings on Customers and Employees*, *Journal of Marketing*, Vol. 56, April 1992.

This article points out that customer and employee behavior are both impacted by physical environments, specifically in service-oriented environments. The impacts of such environments can often determine a company's success or failure. Some issues that must be considered when desiring a physical environment to enhance customer and employee satisfaction are conditions such as lighting, layout of furniture and equipment, and the appropriate use of signal and symbols to communicate service concepts.

Crandell, Judith. *Productivity in the Office*, *Capital District Business Review*, Vol. 18, May 1991.

This article explains how productivity in the office depends upon ergonomics and the management of the office environment. Employees respond to a variety of factors in the workplace; good equipment and a humanitarian environment contribute to employee productivity.

Davidson, Clive. *Visible Horizons: Office of the Future*, *Computer Weekly*, July 1992.

This study explains how the workplace will be impacted by current technical, social and political forces over the next decade. Businesses are vacating high rise, high rent city office buildings and there appears to be a trend toward part-time work at home. The cities have their share of assets and a massive evacuation of the city is highly unlikely, however forecasters have estimated that by 1996 approximately 15 percent of the British workforce will be working from home. It is projected that changes such as these will precipitate more of a liaison between work and recreation. The contributed ease of new technology will also allow more people to engage in the process of continuing education. Additionally, video-based communications and other forms of technology can change the way workers relate to one another. One of the impacts of electronic mail upon communications is that it tends to make people more frank than face-to-face communications.

Dodson, Robert L. *Speeding the Way to Total Quality, Training and Development*, Vol. 45, June 1991.

This study discusses internal quality audits that can be used by companies to increase employee satisfaction and performance. Companies can view themselves in two ways. First, as a group of individual units functioning in tandem and second, as an organization with internal customers. A positive work environment can be created by middle management whereby employees are encouraged to work toward a common goal and maximize their potential. Middle managers can plan and coordinate this effort and achieve total quality. To conduct an internal audit, middle management should establish objectives, devise corresponding measurement, strategically plan the auditing process, and identify both problems and solutions. This activity should be followed up with an established re-auditing process. Internal audits create a quality work environment and boost employee morale.

Erera, Irit Pauline. *Social Support Under Conditions of Organizational Ambiguity*, *Human Relations*, Vol. 45, Issue: No. 3, March 1992.

This report discusses ways in which supervisors perceive social support. At the Department of Social Services in Israel, 62 supervisors participated in an analysis asking what types of support (whether tangible, appraisal, informational or emotional) were provided by subordinates, peers and superiors. The most supported were the subordinate. Peers were perceived to be withholding emotional support which reflects a high degree of mistrust among supervisors.

The least supported were the superiors. In closing, the nature of the workplace relationship between supervisors and the three support sources, with emphasis on specific supervisor roles, was explored.

Fernberg, Patricia M. *Tailoring the Workstation to the Worker, Modern Office Technology*. Vol. 37, June 1992.

This report discusses how worker morale, health and productivity can be improved through carefully designed workstations which take into consideration ergonomic concerns. In the design of any workstation, comfort is the ultimate issue. Studies have proven that workers perform at their best when comfortable and not distracted. The author states that comfort can be defined as the absence of discomfort. Office Managers should consider employee conformation, that is, changes and variances in size, height and weight, and should resist the temptation to make all employees conform to standardized equipment and workstations. The author cites several features to be cognizant of when purchasing equipment that can impact employee morale and productivity: a small overall footprint, space for computer equipment other than desktop, adjustable monitor configurations, easy accessibility to computer equipment, and modularity and durability.

Fernberg, Patricia. *Unique and United, Modern Office Technology*. Vol. 35. December 1990.

This report focuses on the operations control center at United Airlines which has an integrated work environment that has proven effective. The center operates three shifts around the clock that include five departments overseeing an operating fleet of 440 aircraft, with 1900 departures around the world daily. These departments, while unique, are interrelated and work stations reflect improved worker performance. Walls were lowered and work stations angled to permit visual access and to encourage open communications among staff. At the same time, workstations were customized to reflect the special needs of each department. Lighting played a major role in adapting to the overall spirit of the design.

Ferris, Gerald R. and Kacmar, K. Michele. *Perceptions of Organizational Politics, Journal of Management*, Vol. 18, March 1992.

This document summarizes that Ferris, Russ, and Fandt in 1989 developed a model of organizational politics perceptions by conducting two studies. In both studies, four organizations with marked diversity in jobs, age, sex, education and organizational rank were used. A

regression analysis was used in the first study to identify four predictors of variation in organizational politics perceptions. The four predictors of feedback, opportunity for promotion, variety of skills and job autonomy were related to workplace influences. Supervisor behavior, co-employee behavior and corporate practices were identified as significant predictors in the second study. The authors concluded that "a wider coverage and greater definition of the precursors and end results of organizational politics perceptions" were provided by the second study.

Finkel, Coleman. *A Room of One's Own, Training and Development Journal*, Vol. 43, November 1989.

This document focuses on how employees in training can be psychologically affected by their surroundings. Training rooms should be business-like, distraction free and comfortable. The design of a meeting space and the accompanying climate can affect the physical comfort or discomfort of an employee. Individuals who fail to plan around these considerations find that few employees retain the training or are active listeners during training sessions. Training rooms that fail to provide ventilation and alleviate outside noise fail to train employees.

Fleming, G. Ross. *Taking Office Lighting to Task, Modern Office Technology*, Vol. 36, August 1991.

This report explains that an improperly lit office can precipitate a loss of employee productivity, more errors, eyestrain, complaints about energy, headaches and ultimately, a loss of energy. Employers must understand that the lighting requirements for paperwork and working on a monitor are not the same. Setting standards for VDTS has been the task of organizations around the world. These organizations are also concerned with lighting issues, office environments and related furniture and equipment. The Illuminating Engineering Society of North America and the American National Standards Institute have focused upon these issues. The trend has been away from individual office space and cubicles which give employees control of their environments. Employers favor this type of design because it is less expensive to use environmentally friendly lighting sources such as highly efficient fluorescent lamps and ballasts.

Gross, Robert J. *Creating a Perfect Environment, Modern Office Technology*, Vol. 35, June 1990.

This paper summarizes the ADA passing in 1990 requiring employers to accommodate handicapped workers in the work environment. Companies, at the time, were concerned about the costs associated with reasonable accommodation. Furniture considerations and space considerations for the handicapped could be considerable. According to the U.S. Department of Labor, more than 50 percent of those accommodations would have little or no costs associated with them. Yet another 30 percent could cost between \$100 and \$500 dollars. The Internal Revenue did, however, offer tax deductions for such expenditures to provide reasonable accommodations for ADA.

Graham, John R. *What Happens When You Are Out Of Sync? Supervision*, Vol. 53, June 1992.

This author explains how more and more employees are having to take shorter vacations and work longer hours as a result of their fast-paced work environments, just to stay in sync. Studies have shown that employees who spend more hours at work stay in touch with what is going on in the working environment. Computers and other forms of telecommunications can assist employees in staying in touch with the work environment and avoiding isolation. Employees who are successful in the workplace will be those who recognize the changing nature of competition and can interpret information correctly and quickly.

Gunsch, Dawn. *Weapons At Work, Personnel Journal*, Vol. 71, Issue No. 3, March 1992.

This report describes how employees who carry guns in a company with a 'no-weapons-on-the-premises' policy should be investigated. There were three suggested approaches in dealing with this sort of dilemma: set up a meeting with the concerned employee to verify the allegation, inform the concerned individual of existing company policies prohibiting the carrying of a weapon, and elaborate on state laws concerning the carrying of arms.

Jefferson, Bob. *Let There Be Light: A Properly Lit Work Environment Leads to Greater Productivity, Computer-Aided Engineering*, Vol. 11, Issue: No. 2, February 1992.

This report denotes computer aides as one of the latest forms of technology influenced by inferior lighting in the work place. The study detected several problems, caused by improper lighting, which affected productivity. The problems included: glare, reflections, and shadows on computer screens. Strategies for correcting this problem should first focus on repositioning the equipment and reducing reflectivity of white desk tops by using mats or matte-finished sprays. Finally, the replacement of the entire lighting fixture is an option to be considered.

Karon, Paul. *Telecommunication: Homework for Professionals*, EDN Journal, Vol. 35, October 1990.

This article argues that telecommuting is a desirable work arrangement for a growing number of professionals. They number between 100,000 and 200,000 officially. Telecommuters spend at least one day each week working at home. Telecommuting is attractive to a growing number of professionals including engineers. Telecommuting helps individuals to avoid congested roads and traffic conditions, often times prohibitors for dual career couples. A telephone, computer and a quiet spot in the home are the only essentials to telecommuting. Some professions require expensive equipment that may be too much for the employee to duplicate at home. For companies that require close interaction with employees telecommuting would not be effective.

Karpinski, Richard. *Telework, Centers Offer Telecommuting Alternative*, Vol. 222, Issue: No. 10, March 1992.

This report describes an individual workstation pictured as follows: the setting of a desk, a microcomputer and a telephone. The common area setting in a work place includes copy machines, facsimile machines, meeting spaces and a lunch room. A telework center located in an area where employees live functions as a satellite office which is a preferred arrangement for managers who are not altogether comfortable with work-at-home arrangements.

Kittusamy, Nanda K., Geoffrey Okogbaa and A. J. G. Babu. *A Preliminary Audit for Ergonomics Design in Manufacturing Environments*, *Industrial Engineering*, Vol. 24, July 1992.

This document explores the well being of workers as impacted by health and safety features, as well as attention to the appropriate ergonomic design, especially in a manufacturing environment. These factors, in turn, impact employee moral and may improve employee productivity. Companies are spending large sums of money on Worker's Compensation claims. Preventive ergonomics is now gaining in importance as a result of the many lawsuits. Companies are now beginning to realize that the workplace should be designed to optimize worker ability and the general procedures a worker must employ inclusive of hand tools and platforms where work must be performed. The work environment includes some common culprits such as noise, inadequate or inappropriate lighting, glare or shadows, uncomfortable temperature controls and atmospheric conditions. Workers can elicit input into a carefully designed questionnaire to assist companies in designing facilities. Designs that keep the ease and comfort of the worker in mind will eliminate the heavy reliance on the use of personal protective equipment.

Lefkoe, Morty and Beth Enslow. *Unhealthy Business, Across the Board Journal*, Vol. 29, Issue: No. 6, June 1992.

This article explores several studies showing the work environment playing a large part in worker health and attitudes. Nevertheless, considerable evidence suggests that employers that show concern incur less health-care expenses. Corporate consideration concerning employee needs is an important factor that promotes enjoyment and enthusiasm among employees and increases productivity. Workers should not be penalized for making mistakes or expressing their beliefs. They should be treated fairly and not exploited. Employees should be given the opportunity to show their individual responsibility and pride concerning their work.

Lopez, Isabel O. *Cultural Diversity Will Alter the Workplace*, *Colorado Business Magazine*, May 1991.

This article examines the work environment as changing in the demographics area. Increasingly, women and minorities are entering the workplace. Changing demographics will impact corporate culture and policy.

Mandt, Edward J. *The Time Clock Anachronism, Across The Board*, Vol. 23, December 1986.

This article depicts a comparison of hourly wage pay systems and salaried work systems in a study conducted by the Bureau of National Affairs. The results revealed that 86 percent of blue-collar workers are hourly and 70 percent of the clerical employees are salaried. Hourly wages work best with assembly line workers because the work can be measured according to standards of output. Salaried employment is more appropriate when hours and output are not directly related as a result of emphasis on quality of work rather than output or production. Salaried employees believe that they have more control of the quality of work. Hourly systems are perceived as deterring workers from going the extra mile or making the extra effort towards quality. Perceptions of loyalty and commitment differ between hourly and salaried workers and many salaried employees believe that punching a time clock negatively impacts employee production levels.

Matthes, Karen. *A Prescription for Healthier Offices*, H.R. Focus, Vol. 69, April 1992.

This document points out that employers can improve employee satisfaction by improving the health and safety conditions of their workplaces. Lighting enhancements, good ventilation and the easing of physiological discomfort resulting from computer oriented work can eliminate employee frustration and increase employee productivity. Often times, physiological discomfort stems from poor lighting either from indirect types of lighting and/or poor lighting levels. Light is sometimes blocked through a poor arrangement of workstations. Poor ventilation can sometimes cause a sick building syndrome and requires regular cleaning of vents and changing of air system filters. Smoking areas should be designated and extremely well vented so that overall building air circulation is devoid of smoke filled air. Office plants help diffuse air particles and attention should be paid to display terminal radiation. Regular exercise and the use of ergonomic furniture can serve as deterrents to the sick building syndrome.

Matthes, Karen. *Companies Have the Ability to Manage Disability*, Human Resources Focus, Vol. 69, April 1992.

This report discusses growing health care costs causing alarm to those employers faced with rising disability claims. Managing disability in the corporate environment requires the integration of several practices into the organizational structure of the company. A safety-oriented workplace can do much to prevent disability claim costs. Implementing an integrated injury-management process, monitoring

and tracking claims through an evaluative methodology and becoming actively involved within the first 24 hours of an accident can serve to reduce the number of claims and adjudicate existing claims reasonably. Studies have shown that it is helpful to implement a transitional program for disabled employees returning to the workplace. Supervisory concern for the truly injured worker can also assist in getting the employee back to the worksite early.

Mayer, Don. *Workplace Privacy and the Fourth Amendment*, **American Business Law Journal**, Vol. 29, Winter 1992.

This article reveals the privacy litigation that is based on constitutional law, most often involves Fourth Amendment claims. The Fourth Amendment contains the protection of "reasonable expectations of privacy," but the surfacing of "property rights" from recent Supreme Court rulings gives substance to the idea that constitutional rights may be waived by the real-world demands of the workplace. In the 1987 case of O'Connor V. Ortega, limited workplace protection was rendered. The author proposes that more attention be given to rights and not merely individual expectations.

Menkus, Belden. *Protecting Your Computing Investment*, **Modern Office Technology**, Vol. 37, Issue: No. 1, January 1992.

This document presents several guidelines for protecting a company's computing investment. Designate an area in the work place for employees recreation such as smoking, drinking and eating away from the computers to eliminated damage from smoke and spills. Monitor the removal of trash collection and the marking of code on equipment to minimize theft within the company. Restrict access to postage meters, fax machines, copiers and mail chutes during non-business hours. Ensure the integrity of the lock that controls access to the data processing area.

Milite, George. *Dealing With Turf Battles in the Office*, **Supervisory Management**, Vol. 39, January 1992.

This study reveals turf battles emerging within both interdepartmental and intradepartmental areas. Supervisors are often caught in the middle of these and are expected to manage through the friction they cause. Supervisors faced with problems may have the task of redefining an employee's job description. The performance of staff members involved in such turf battles will ultimately impact the total organization's performance. One way to avoid such a battle is to

involve all members of the organization who are expected to work cooperatively on a project. Getting buy-in up front from all participants can save both time and money. Meetings geared to address these issues provide managers with the opportunity to assure fellow supervisors of their desire to complete the project in a mutually productive environment.

Montgomery County, MD. *Expanding Office Finds Wide Open Space, Modern Office Technology*, Vol. 35, March 1990.

This paper describes Montgomery County, Maryland as having a growing staff in the General Accounting Division. They decided to hire an interior designer to assess their needs and to make recommendations based on their limited budget. They looked at the advantages and disadvantages of locuster furniture upon the work environment and communications. The furniture was placed in V-shaped work stations which diminished noise and also assured work privacy which was important for accountants.

Myerson, James. *Health Is Wealth In The Workplace, Management Today*, June 1991.

This article examines employee concern about occupational safety and health hazards in the workplace. Employees are aware of workplace standards as prescribed by OSHA and are more productive in a healthy environment.

Newman, William A., and John P. Kohl. *Americans With Disabilities, Information Executive*, Vol. 4, Fall 1991.

This document points out that the Americans with Disabilities Act has been revised since 1973 and contains some important changes relating to the workplace and specifically to Management Information Systems. Most significant is the language that says the ADA prohibits discrimination on the basis of disability against qualified individuals. Employers must accommodate such individuals to the extent that it does not create an undue hardship to the firm. Undue hardship has its limitations and can be interpreted as the effect it has upon the firm's resources and operations. MIS is primarily responsible for equipment and its own personnel in its department. The ADA may require MIS departments to modify the work environment to permit disabled people to perform their jobs. The costs of compliance revolves around the definition of undue hardship. MIS managers must determine what cost-effectiveness means under the act. They need to determine if

individuals possess the necessary prerequisites for an MIS job and can perform the essential job functions and to what extent the position may or may not have to be modified. It is incumbent upon MIS managers to familiarize themselves with new equipment that will allow a disabled person to perform their job and to function effectively.

Nora, John J. *Harnessing Worker Power at a U.S. Cadillac Plant*, *International Management*, Vol. 41, November 1986.

This report explains how a management pioneer at Michigan's Cadillac plant started implementation of a revolutionary program, in 1979, that transformed the workplace. John J. Nora was a former assembly line worker who helped reduce absenteeism and increased productivity. Nora stated that the motivation for implementing the plan was not humanitarian but rather the stimulus from Japanese competition. The jobs at the Cadillac plant could not be enriched monetarily and therefore Nora concentrated on improving the work environment by permitting workers to take part in the decisions made and in problem-solving tasks.

Page, Leigh. *Resident's Work Reform Possible*, *American Medical News*, Vol. 34, July, 1991.

This report describes the working conditions for medical residents and makes suggestions for reform in the hospital environment.

Philpot, Jerry. *State-of-the-Art German Engineering Moves to America*, *Industrial Engineering*, Vol. 24, Issue: No. 2, February 1992.

This document implements a five-year scheme encompassing today's success and tomorrow's promise through a freestyle production environment that encourages independent work and task completion. Such an environment provides mobility of materials by using overhead cranes that move the escalators through production rather than relying on the traditional conveyor belt model. A well structured management organization was shown dealing with what each employee needs in order to get the job done more efficiently.

Poda, Paula. *Staying Off The Office Disabled List*, *The Business Journal-Milwaukee*, Vol. 9, August 1992.

This document discusses safety and security measures that should be taken in the working environment. Some safety issues highlight the right equipment for ensuring employee health and welfare. Equipment is defined as furniture in the working environment and the article explains how seating can affect employee health.

Productivity Defined At World Book. Modern Office Technology, Vol. 37, Issue: No. 3, March 1992.

This document asserts that World Book Incorporated's new locale has helped to improve creativity and communication in the workforce. Installation was implemented to create a large amount of space that incorporates natural light for employees. Adequate spacing design in the workplace puts a new outlook on employee productivity.

Purdie, James. *Corporations Discover Green Can Be Golden*, *The Financial Post*, July 1991.

This article takes a look at several American companies operating in Canada and the impact of Canadian environmental policies upon operational procedures.

Rogers, Ed. *Ten Nontraditional Aspects of Facility Planning*, *Industrial Engineering Journal*, Vol. 24, Issue: No. 2, February 1992.

This article gives a methodology for facility planning using several aspects in order to achieve a high degree of success. Facility planning and design should include the following: senior management, a cross-section of employees in day-to-day operations, an architect, a developer, a banker, an insurance underwriter and a prime construction contractor. The objective of a facility plan is to support world-class performance in its long-term goals. A perfect process for an aggressive target should be defined for improvement.

Romei, Laura K. *The Home Office is Alive and Well*, *Modern Office Technology*, Vol. 35, August 1990.

This author presents management's full cooperation as being essential to this type of arrangement, in addition to the necessity of a great deal

of trust, open communications and integrity. In the years 1987 through 1988, the number of American home offices doubled from 2.1 million in-home offices to 4.2 million. By the end of 1992, it is projected that more than 31 million people will begin to work from their homes. Home workers like the fact that they don't have long commutes and that they can work virtually uninterrupted. They also enjoy the freedom of wearing comfortable attire. The greatest disadvantage may be in not having access to equipment and resources such as a mainframe computer; modems often work very slowly over normal telephone lines. Yet, more and more employees are willing to risk the at home work environment.

Sievers, Burkard. *Beyond the Surrogate of Motivation, Organization Studies*, Vol. 7, 1986.

This journal reports that "any attempt towards discovering existing dimensions of meaning can be accomplished only if social scientist, managers and workers alike become collectively aware of death as a fact of life." Only in acknowledging mortality can the work environment become aware of humanization. Sievers discusses his experiences in the workplace and how they differ completely with theoretical hypotheses of the concept of motivation and its shortcomings in the real workplace. Sievers believes that the workplace is fragmented and that work and life or work and family are not well integrated in the work environment. As a result of this split relationship workers tend not to be highly motivated to perform their jobs.

Smith, S. I. *Environmental Illness, Occupational Hazards*, Vol. 53, September 1991.

This article takes a look at chemical pollution in the workplace. It also discussed the illnesses employees can be stricken by when exposed to workplace pollutants.

Snell, Ned. *Making Is Accessible, Datamation*, Vol. 38, May 1992.

This research examines the Americans with Disabilities Act (ADA) of 1990 that requires many supervisors and managers to adapt users of computer systems, software and facilities for disabled workers. Several products on the market may help the disabled worker utilize computers. Costs for the adaptations are not as high as many perceive. Some of the products include automated screen readers for the blind,

such as DEC's \$1,495 DECTalk board. There are also systems that automatically enlarge the type on some computer systems.

Inexpensive overlays for keyboard systems can help those workers who may have trouble with motor skills. Both headsticks and mouthsticks can be used by disabled workers. MIS managers should first discuss problems and concerns with the disabled worker to ascertain what the employee feels will work best for them.

Sonnenberg, Frank K. and Beverly Goldberg. *It's A Great Idea But...*, **Training & Development Journal**, Vol. 46, Issue: No. 3, March 1992.

This article explains how the work environment can encourage creativity through an analysis of an organization's work set-up. When mistakes are considered a part of the creativity process, creativity has been successful. Corporate culture is the main obstacle to creativity along with management style, and operation style. The cultural barriers are office politics, static status quo and hierarchical organizational structures. Insufficient employee information and communication, dictatorial managers, the setting of unrealistic deadlines and procrastination are obstacles in the managerial category. On the other hand, the article points out the potential operational barriers which are: business formalities and corporate protocol, interorganizational bureaucracy, and negativism.

Stuart, Peggy. *Murder On The Job*, **Supervisory Management** Vol. 71, Issue: No. 2, February 1992.

This article suggests counseling for employees showing signs of distress. The considerable growth in workplace killings is attributed to the worsening economy and the increase in the number of workers being laid off. Most of the work-related murders reported between 1986 and 1991 were committed by laid-off or disgruntled employees, and members of management were often their victims. It is the employer's job to help employees overcome the emotional damage that can result from witnessing violence or being associated with the company.

Teresko, John. *Amenities a Responsibility?* **Industry Week**, Vol. 241, September 1992.

This report depicts employee benefits in Japan as being different from employee benefits in the United States. It asserts that work environment and work cultures are determinants of employee benefits.

To What Extent is Your Home Life Affected by Your Work? **Sales and Marketing Management**, Vol. 144, April 1992.

This article deals with the psychological affect of work and family in the organizational environment and its impact upon worker productivity.

Vasilash, Gary. *Honda's Human Touch*, **Production**, Vol. 102, July 1990.

This research shows Honda building a 1.4 million square foot building in east Liberty, Ohio, to permit optimum interaction between employees and machines for a total sum of \$350 million dollars. Honda Motor Company wanted to virtually eliminate environmental problems of noise from running equipment and trash that normally piles up in a manufacturing area. Vendors and company officials worked closely together to develop recyclable containers. Overhead monorails reduced the noise from transferring parts from division to division. A network of guided vehicles for larger loads and general assembly trucks was built to facilitate larger parts and the carrying of cars. The result was more satisfied employees and higher rates of production.

Wiley, Carolyn. *Create An Environment for Employee Motivation*, **Human Resources Focus**, Vol. 69, June 1992.

This report depicts an environment that fosters employee morale which can enhance employee productivity. A motivation-support type environment can be created by integrating four vital components that are representative of the personal characteristics of employees. These four characteristics are the job framework, the distinctive traits of supervisors, the corporate philosophy and personal characteristics of employees. Companies must be careful in making job matches and should consider the individual employee traits and the nature and quality of the job intended for the person. Establishing an atmosphere based upon team spirit, providing open communications with subordinates and employing fairness, honesty, supportiveness and accessibility are the primary responsibilities inherent in good supervision. Company benefits and company philosophy can also assist in providing a nurturing environment for employees.

Wright, Mary. *Ruggedized 8088 and 80386-Based PCs Withstand Automotive and Factory Applications*, EDN, December 1990.

This report points out that there are computers that are designed for a harsh environment. Mobile Data Communications Corp's (MDC) lines are designed for such environments as remote locations, factories and inside of vehicles. Temperature extremes do not affect these computers. The display and keyboard can be situated 15 feet from the processor storage modules. The system is immune to spills, smoke and humidity.

E. Worker Motivation

Agarwal, Ajay. *Your Key to Success in the Marketplace*, **Industrial Engineering**, August, 1990.

This report asserts that the manufactures in the United States using the same equipment and technology that the Japanese use does not guarantee quality and efficiency. Why — is the perennial question. The answer may lie in the fact that the Japanese tend to be better people managers and employ a management style that actually nurtures the worker along thereby fostering commitment and loyalty. JIT (just in time) philosophies will never be successful in the United States until American managers learn how to communicate and motive their employees. The entire organization must buy into the system and realize that they, in fact, are responsible for employee motivation and productivity. There are two basic techniques used for improving motivation and job performance. They are behavior modification and job redesign. These coupled with stimulating results help employees to value their work.

Dainty, Paul. *Work Motivation and Job Design: Is Progress Over?* **Journal of Managerial Psychology**, Vol. 2, 1986.

This document explains the controversy in the field of motivational theory. Some even question the validity of any theoretical approach. One of the most controversial theories is the content theory. There have, however, been no major advances in the recent past. Process theory is still the area that receives the most attention, particularly the Expectancy Theory. The Goal Setting theory has been advanced by the practical application of Management By Objectives (MBO). The second area is that of designing jobs. Motivational research appears to be moving away from universal to more contingent theories. The author suggests that "different theories are more relevant to

understanding motivation at different stages in the motivation process."

Di Salvo Chris. **The Business Journal-San Jose**, 1990.

This author believes that music does a company good. Customers enjoy elevator music and employees seemingly enjoy it too.

Drennan, David. *Motivating the Majority, Management Today*, March 1988.

This article suggests that monetary rewards should be paid in lump sums and money incentives should be renewable. Managerial goals should be clear and should be the basis for performance appraisals. Money as a motivator remains the basic assumption behind appraisal and merit pay schemes. Most managers do not perform performance evaluations well and therefore most merit schemes motivate only a minority. For example, managers in the United Kingdom give more than deserved awards, possibly to avoid confrontation. The question arises as to why money does not motivate the majority. Outstanding performance evaluations are given to few employees, usually those in line for promotion. However, for most employees the future remains with the present. These employees will remain at their current level and constitute the majority. While most merit schemes allot monies on a weekly or monthly basis, the appraisal typically covers the prior twelve months of employee performance. The appraiser must discriminate between good, better and best performance. These kind of management techniques can be demotivational for most employees.

Greiner, John M. *Motivational Programs and Productivity in Times of Limited Resources, Public Productivity Review*, Vol. 10, Fall 1986.

This document employs performance targeting as a motivational strategy that may work in inducing employees to perform and to continue to improve service productivity. "Performance targeting is the process of making the expected level and the type of work performance explicit to employees and providing subsequent feedback on discussions of performance achievements." Cash and monetary incentives are used to bring about the desired performance behaviors of the workers. Performance is also improved through quality circle meetings that involve small groups of employees gathered together to suggest ways of identifying and analyzing problems and creating solutions for those problems. In employing motivational techniques in the workplace there can be some conflicts involving resource needs and

compatibility with employee needs, conflicting employee values and attitudes, and the effectiveness of personnel structures and organizations.

Golemblewski, Robert T. and Alan Kiepper. *Lessons from a Fast-Paced Public Project: Perspectives on Doing Better the Next Time Around*, **Public Management Forum**, Carl Steinberg, Editor, November/December 1983.

This article discusses lessons learned during this arduous project and reflected upon better ways of achieving similar success. Public agencies are under continuous scrutiny during the management of highly publicized projects requiring substantial public funding. The rail project tackled by the Metropolitan Atlanta Rapid Transit Authority (MARTA) required executives to meet time and cost constraints. Factors such as employee mental and biological health suffered immensely during such "hard pushing." Organizational issues such as strategic planning, employee communications, and staff briefings suffered under such a schematic. Fear and personal put-downs occurred when executives raised the validity of those human factors. This reflective review by key executives gives suggestions on how human costs might be reduced in similar circumstances. The article arrives at many conclusions, however, the most significant of these is that when employee morale declines to the point of "burnout," there exists little or no appreciation for successful project completion.

Larson, Dr. Thomas and James Scheiner. **Productivity Improvements in State Transportation Agencies--The Pennsylvania Experience**, Pennsylvania Department of Transportation, January 1983.

This study examines several issues concerning productivity in the private sector that can be contrasted with the apparent lack of concern for similar issues in governmental agencies. Typically, governmental agencies have no meaningful measures of productivity, perhaps for some very valid reasons. Many reasons for governmental agencies existing has to do with issues that are deemed unavoidable and therefore exist unquestioned. The government stands as the non-profit sector in business and stands non-competitive with other governmental bodies. Government agencies have inherent systems, such as the civil service system in the federal government, and layers of bureaucracy prevent the natural elimination of jobs even when tasks change. In contrast, the private sector, being profit driven, must always exist in a constant state of change and flux relative to market trends. Accountability is a must in the private sector where decisions invariably affect profit. Public sector agencies, on the other hand, can sometimes become pawns in the hands of certain politicians.

Transportation Research Board, National Research Council, **Progress Report on Maintenance and Operations Personnel**, Circular Number 314, 2-87, Washington, D.C., 1989.

This report elicits information from four regional areas (the North Atlantic States, the Southeastern States, the Mississippi Valley States and the Western States). The Western States paid higher wages on average for all job classifications, while the Southeastern States paid higher wages on average for all job classifications, but paid lower wages on average in comparison to other states.

It was found that the majority of states have a civil service, merit and or similar system. All states reported a retirement plan, and benefit packages that included vacation and sick leave. Unionization appears to be waning for both supervisory and non-supervisory personnel. However, forty-six states reported either voluntary or mandatory organized labor unions for maintenance and operations personnel. The majority of states reported that supervisory personnel are paid on a salary rate basis whereas non-supervisory personnel are paid on an hourly rate basis. All states reported that they had a formal job classification system.

Transportation Research Board, National Research Council, **Transportation Professionals: Future Needs and Opportunities**, Special Report Number 207. Washington DC, 1985.

This document focuses on a comprehensive study, conducted in 1985, of employment and staffing needs for Highway and Mass Transit agencies in state, local and federal government. The largest of these agencies was the Highway Department which in 1985 employed more than 79,000 employees nationwide. Two-thirds of these employees were employed in non-technical positions. Between the years of 1956 and 1971 employment and construction had been facilitated by the Federal Aid Highway Act, however, between 1971 and 1981 employment and highway construction declined approximately 1.8 percent a year.

This study looks at several areas of employment needs. First, it attempted to project new technological areas of growth in the highway department and assess the kinds of multi-skilled level jobs that might be needed in an age of automation. Next, it began to survey the kinds of skilled staff that would be needed to complete rehabilitation projects. These projections were based upon two factors, anticipated new growth and anticipated retirement or replacement factors. There was some significant concern relative to the ability of the highway department to attract the brightest students for civil engineering

careers. These issues had to do with the innovative careers in engineering such as robotics and genetic engineering which might be more attractive to students than the traditional civil engineering fields.

Verespej, Michael. *Strategic Manufacturing: Blue Collar Incentives*, **Industry Week**, July 1988.

This report denotes employee committees helping in marketing the concept of motivation to fellow workers. U.S. companies have employed many forms of worker motivation including group incentives to beat the competition. Some firms believe group incentives increase productivity, lower production costs and create a more competitive company. However, group incentives do have drawbacks. Those workers who are succeeding in their own right with an individual plan may feel some resentment because performance is rated on group incentives. Such a plan can sometimes create more problems than it solves. Many companies have difficulty selling group incentive plans can make the transition easier for both manager and worker.

Wright, Gary. *Motivating Them 100 Percent*, **Manager's Magazine**, Vol. 61, November 1986.

This report suggests that performance evaluations be conducted quarterly and that managers employ constructive criticism. Insurance managers can motivate their sales agents by employing the following steps with their staffs such as goal setting, training, accountability, evaluation, activity and motivation. Training is at the core of the program and should be continuous. Training should involve ways in which to define client need and how to predict a dollar amount for appropriate coverage.

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