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**A COMPILATION OF HUMAN RESOURCE ISSUES FACING
THE FEDERAL GOVERNMENT MANAGER**

Stefan Haas

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INTRODUCTION

In order for the Federal Government to stay competitive in retaining and recruiting desired levels of competent employees, the government's managers will need to deal with human resource issues. The government manager is facing an increasingly changing world in the area of human resources. It is and will become critically important for managers to stay abreast of current human resource issues in order to facilitate their positions as effective managers.

The intended purpose of this report is to introduce several prevalent human resource issues to the Federal Government manager. Backgrounds, problem statements, facts, and supporting statistics, as well as possible solutions and conclusions will give the manager a better understanding of current human relation issues and how to tackle them in the workplace.

U.S. SCHOOLS AND THE FUTURE WORKFORCE

Problem Statement

There is no doubt that the U.S. school system is not producing the quality people needed to meet future workforce requirements. Repeatedly proven through skill and aptitude testing, students in the U.S. are not achieving the same standard level of education that they once achieved in the past.

The fact that student skills are declining is especially frightening since the American economy is in the process of moving from one that is production and manufacturing oriented to one that is service providing in nature. New jobs in this service economy will require considerably higher skills than the jobs they are replacing. A good indication of how future jobs will require more education, how the occupational structure will be changing in the next 10 years, what types of jobs will be growing fastest, and which will decline is given in tables 1 through 6 and figure 1.

Problem Indicators and Attributing Factors

There are many indicators of our declining educational system. The following is a list of facts and statistics which detail the condition of our educational system:

- 25% of all young people drop out of school
- 50% of all inner city young people drop out of school
- 3,800 teenagers drop out of school every day
- A large number of young adults cannot cope with fractions.

- A large bank that gives a basic math test to prospective tellers shows that only 55% passed in 1987 compared to 70% that passed in 1983.
- A major electronics company is forced to spend 60% of its training budget on remedial education in basic math and reading.
- Average national SAT scores have declined over the past academic year.
- There was a 4% decline in the number of students taking the SAT exams, but only a 1% decline in the graduating class (i.e., less students are college bound).
- 13 to 15% of all American adults are illiterate in English.
- 48% of all minority American youngsters are illiterate; a statistic that is frightfully close to what it was in 1900.
- 72 million American adults are either functionally or marginally illiterate, leaving at least 1/2 the workforce without the basic reading or writing skills required.
- The number of illiterate American adults is growing by 2 million annually.
- Illiteracy is costing the country approximately \$225 billion a year in lost industrial production, unrealized tax revenues, welfare, prisons, crime, and other social ills.
- 25% of all corporations' training budgets must be spent just to teach the basic skills that were not acquired in school.

Recommendations

Throughout the research literature, there are many recommendations made. Several of them are listed below.

- Focus on improving the health and nutrition programs for the young and underprivileged. It is impossible to expect a child to learn when it is ill or undernourished.
- Attempt to increase the low rate of success in educating minority students. This is essential given the fact that nonwhite groups will account for approximately 57% of the growth in the labor force between 1986 and 2000.
- Place more emphasis on teaching math, history, science, and English.
- Allow greater flexibility to hire, fire, and reward teachers.
- Pay teachers more to keep and attract the best ones.

- Lower teacher pupil ratio.
- Administer competence tests to teachers on a regular basis.
- Decentralize school authority and decision making.
- Allow industry executives to serve as teaching aids and mentors.
- Have school administrative bodies seek the advice from industry on management and financial planning.
- Offer more counseling to students.
- Seek involvement from labor unions.
- Create better student reward systems.
- Allow the parents to choose their children's schools. Some argue that this will widen the rich-poor gap.

Conclusion

It has certainly been demonstrated that our educational system is in a steady decline. In order for the United States to successfully compete in the world economy, it has become absolutely imperative that efforts be directed towards improving education in this country. The Federal government has traditionally been a forerunner in setting social policy and stimulating areas in our society that needed reform. It remains to be seen which route the government will take to solve this problem. President Bush's recent educational summit meeting certainly is an indication that America realizes that there is indeed a problem and that collectively it must be solved. It must be remembered that even if a solution was implemented today, it would take many years to become effective since it takes 13 years for a student to go from grade school through high school.

For the Federal Government manager, it seems apparent that their positions will become more difficult in supervising employees whose abilities will barely meet or not meet at all what is demanded by the jobs. Government managers will need to develop skills to effectively choose and use employees in the future. In addition, managers will find it increasingly necessary to plan training and skill building programs to better prepare workers for their careers in the government.

ORGANIZATION ENTRY: EMPLOYER EXPECTATIONS VERSUS COLLEGE GRADUATE MISCONCEPTIONS

Background and Problem Statement

The current problem of matching needs and expectations of employers and college graduates will intensify as the year 2000 approaches. As the pool of candidates decreases over the next decade, there will be less room for error in the staffing process. Over the next 13 years, the population and the workforce will grow more slowly than at any time since the 1930s. The average age of the workforce will rise and the pool of young workers entering the labor market will shrink. To be more specific, the number of young people between the ages of 20 and 29 will shrink from 41 million in 1980 to 34 million in the year 2000; their share of the population will drop from 18% to 13%. The absence of young workers may hamper the ability of the government to grow and/or adapt to changing environments.

Because competition among recruiting employers will increase, employers will have to recruit more selectively and more effectively for the future. The present high turnover rates will not be tolerated, as this will seriously impact the future of the organization. The true cost of employee replacement will not be more than dollar expenditures; this may be viewed as a "depletion of scarce resources." Improvements in human resource planning will be critical in two areas: effective recruitment and satisfactory retention.

Possible Causes

Most employers have failed to provide for effective organizational entry. The reasons for these failures are many. The factors involved are due to both the employer and the prospective employee. Job candidates have a natural tendency to perceive a job as they would like it, instead of the way that it really is. They also have unrealistic job expectations and stereotypes about particular organizations. The nature of prior educational and work experiences also influences job candidates about a job they desire or a job that they are in. For employers, the major factor that hinders effective organizational entry is their recruitment process and philosophies.

Recommendations

There are basically two proposals that will be detailed in this report; (1) what employers can do before they hire a new employee, and what they can do after new employees are hired, (2) what prospective employees need to do to optimize organizational entry.

Proposal 1

Employers need to implement effective recruitment procedures and improved human resource planning.

Pre-hire.

1. Realistic job previews (RJP) may be used to reduce turnover and to influence the relationship between abilities and performance (fig. 2).

2. Staff well-trained, organization-wise personnel administrators in recruitment or prescreening areas.

Post-hire.

1. Effective orientation programs should be devised.

2. New employees should be provided job challenge early.

3. Employees should be given frequent constructive feedback.

4. The employees' first supervisor is critical in helping new employees successfully adapt to the organization.

5. There should be encouragement for mentor relationships.

Proposal 2

College graduates need to take an active, assertive role in the organizational entry process.

Pre-hire.

1. New employees should understand their own preferred work environment.

2. College graduates should develop networks to identify prospective employers.

3. Graduates should develop and refine interview skills.

4. New workforce entrants should assess each prospective employer in order to make a choice.

Post-hire.

1. New employees should make themselves aware of the career opportunities at their organization, should they not be happy in their new job.
2. New employees should influence their environment by making their employers aware of organizational entry improvement opportunities.

The employer and the employee play a large role in successful matching of employees to job openings. In conclusion, tables 7 through 12 add to the insight needed by government managers to effectively hire new employees and to keep workers happy once they have been placed in a new position.

TRAINING: AN AMERICAN BUSINESS NECESSITY

Problem Statement

The existing and increasing lack of qualified employees in our service oriented economy, compounded by the development of new technologies at a rapid rate, has made employee training a necessity. Employee performance is important in any organization, more so in a service organization since the employee is the product. Therefore, as our country's organizations evolve towards service and information, driven by advances in technology, the need for properly trained employees is growing at the same time that the required level of knowledge is increasing for new jobs. These facts are significant to the government manager in light of the fact that much of the work done by the government involves government workers monitoring the work of subcontractors. In essence, much government work is service oriented and becoming more so in future years.

Outline

In order to outline the need for employee training, the first area of concentration is the changing demographics of future workers. It is projected that there will only be a 1% worker population growth through the 1990s. In addition, of all workforce entrants in the year 2000, 29% will be minorities. This is a significant increase from the year 1987 when only 15% of new workers were minorities. It is important to note that new employees will not, for the most part, bring with them the skills to successfully perform in their work positions. Finally, the overall workforce is aging. The average age for workers will increase from the present mean of 36 to 39 in the year 2000. This indicates that it will become crucial for employers to retrain older workers to enable them to perform jobs that require new and more advanced skills.

The second indicator of the need for employee training is the failing public educational system. As was mentioned in the first section of this report, as much as 30% of the American labor force (approximately 27 to 40 million adults) lack the basic reading, writing, and math skills necessary to perform in today's increasingly complex job market. One out of every four teenagers drops out of high school and of those who graduate, 2 out of every 4 has the equivalent of an 8th grade education. As an example, Motorola recently completed a study in which the data indicated that only 20% of the job applicants could pass a simple 7th grade English test or a 5th grade math test.

Finally, it is important to understand increasing job skill and knowledge requirements. Today, the average worker must employ skills of the 9th to 12th grade level, in contrast to the 4th grade level required during World War II. Computer based machines are turning manual labor into mental labor. In addition, the ability to communicate clearly, analyze and solve problems, and work cooperatively with others (called soft skills) is becoming more necessary. Research predicts that more than half of all new jobs will require some education beyond high school and that 30% of those jobs will require a college degree.

Present Status

In recent years, the dollar amount that has been spent on training has tremendously increased and training budgets are expected to grow in coming years. In this country the annual expenditure on training is \$30 billion, which is 1-1/2% of payroll. This training was for approximately 10% of the nations employees. From 1986 to 1988 the annual training funds spent increased 38%. In 1988, average large employers (more than 5000 employees) spent \$520,000; medium employers (500 to 4999 employees) spent an average of \$235,000; and small employers (less than 500 employees) spent an average of \$92,000. The most popular types of training programs were for new employee operations and supervisory skills development. The training methods most often used were audio visual and off-site classes. A listing of various types of training programs and types of training methods are shown in tables 13 and 14.

Effective Training Program Development

The following is a breakdown of steps constituting an effective training program:

A. Assess the employees deficiencies. Conduct voluntary (confidential) testing of employees and all new job applicants so that their present abilities may be measured. This can also be done by talking to and observing employees carefully.

B. Design a training program. The training goals and the employers overall goals should be clear. The most successful programs tend to be taught in the context of everyday applications.

C. Choose the appropriate teachers. It is usually best if a respected member of the organization is the instructor. It is also helpful to have top managers involved and to have an experienced education provider assist with the programs.

D. Evaluate the effectiveness and cost of the training. Although it is very difficult to quantify, evaluation is essential to make sure the program remains effective. This evaluation is also important because many teenagers are reluctant to spend large sums of money if they feel it does not offer adequate return on the investment.

MANAGING DIVERSITY

Facts

There are numerous factors that have and will contribute to the changing faces of American employees. With increased birth control methods and other social factors, the birthrate in the U.S. is slowing dramatically. This will make it increasingly difficult for employers to recruit qualified individuals from the labor force. At present, the increase of the aging population and their high salaries are making companies inefficient. Welfare expense increases and the slowly increasing tax revenues are contributing to the federal deficit, placing a further burden on the country and American employers. Minorities and immigrants are a growing share of the workforce. It has and will become crucial for government managers to successfully manage employees with varying ethnic and religious backgrounds. This is no simple task.

Problems Managers Confront

White Caucasian males will no longer be a majority of the workforce (comprising only 15% of the net additions to the workforce between the years 1985 and 2000). Females, Blacks, Hispanics, and other minorities will dominate the pool of employees. Analyzing the proportional growth of Whites versus minorities, especially in the inner cities, Whites become the biggest minority instead of the majority. At present, the educational system is not effectively teaching or addressing the changing demographics of the populous. To conclude, higher skill job openings are outpacing all others. A good indication of how the demographics in the U.S. are changing, where most immigrants originate from, and what the American public's attitude toward American ethnic groups are shown in figures 3 through 6 and tables 15 and 16.

Today's Employee Issues

For managers to be successful in motivating their workers, a certain requirement is to understand and address issues of their employees. The following will be a compilation of issues facing the future employee groups.

Aging Group

One of the greatest concerns for older workers is the ability for them to reasonably attain health care benefits. Another major issue for older workers is what their pension benefits will be. They are also concerned about being squeezed out by younger upward mobility workers and their lack of ability to adapt to changing work demands.

Women Workers

There are several concerns that are prevalent in women workers. The first is that they may not be able to find suitable day care for their children or that pre-school education will not be satisfactory. The second issue is how to cover the costs of child care and pre-school education. Many look for tax readjustments (such as child care reductions) or employer assistance. The final concern is their employer's benefit policies. They require flexible hours for family emergencies or being able to cover the needs of their children. They look for affordable medical benefits and the assurance that their careers will not be impeded because they are mothers.

Minorities

Minorities are generally concerned about fitting into their new society. Initially the biggest problem for minorities is their language barrier. They also worry about how they perceive and approach others as well as how others perceive and approach them. This has much to do with their old cultures and also their religions. Most immigrants have greatly different cultural values and societal norms.

Immigrants

When dealing with immigrants, a key fact for the manager to be familiar with is that immigrants, in general, have a strong respect for authority. They will generally strive to satisfy the supervisor directing them. However, there are several immigrant characteristics that may make managing them more difficult. Immigrants as well as other workers fear losing face with co-workers. Immigrants usually have a difficulty understanding and speaking the English language. It is therefore very important for the manager to ensure that the worker understands instructions when they are given. It is typical for someone not in full command of a language to shake their head in agreement to conversation that they do not fully understand. It would seem to the manager that the worker understands when they really do not. A good technique to ensure that an immigrant worker understands instructions is to ask the worker to repeat the orders when it seems clear that they do understand. Finally, most immigrants fear humiliations. To avoid future conflicts, it is in the best interest of the manager to make clear that any reprimanding is purely professional in nature and not intended to bring about humiliations, only improved performance.

Problem Solutions

In order to solve human relations problems relating to diversity in the workforce, the following issues will have to be addressed.

- Maintaining the dynamism of the aging workforce
- Reconciling the conflicting needs of women between work and family.
- Pursue the full integration of Black and Hispanic workers into the economy.
- Adapt immigration regulations to allow more professionally capable immigrants to immigrate to the U.S. and educate managers to better be able to deal with immigrant workers.

Managing Diversity Action Plan

For every organization, it is crucial that a comprehensive action plan be initiated to manage the present and upcoming workforce diversity. This plan is intended to cover cross-cultural misunderstandings among employees and to build worker cognition through their understanding of the plan. For the worker, it is important that they understand what action they must take to complete their task. Furthermore, each worker must know exactly what they are accountable for and what their responsibilities are. They must be made aware of when each step of their assignment is to be completed and implemented. Finally, a review of each worker should be made and support given in areas of weakness. Training in the English language would also be a big benefit. Managers, in order to effectively deal with diversity, should be trained in such areas as role reversal, familiarization with worker cultures and societal norms, biases and stereotypical assumptions that affect decision making, as well as, problem solving and listening skills to help workers from other cultures, team building skills to help facilitate worker cohesion, and adaption skills coupled with patience to help cope with the dynamic workplace.

THE MOMMY TRACK: BENEFIT OR CURSE TO THE WORKFORCE

Background and Problem Statement

The fact that the labor market will become increasingly tight in future years has certainly been demonstrated in prior sections. It is also the reason why women are becoming increasingly important to the workforce. Again, birthrates are dropping, and with the educational system in its present decline, fewer well-educated workers will be

available by the year 2000. It is projected that 64% of all new entrants into the workforce between 1985 and the year 2000 will be women. With almost all organizations dealing on a global level, harnessing the skills of qualified, diverse workers will be imperative to remain effective.

The problem for managers is to be able to effectively use an increasing number of women in the workforce, and it is the organizations's responsibility to promote an environment that assists women with their entrance into the workforce and to meet their needs throughout the integration process. This process of incorporating women into the workforce carries with it certain costs; however, most experts feel that the benefits by far outweigh the costs. On the average, women at higher levels in organizations are more costly to employ than their male counterparts since their turnover rate is 2 1/2 times higher. The main reasons for this turnover rate are maternity and socialization factors. These factors have led to the existence of barriers and stereotypes which keep career-oriented women out of higher level positions in most organizations. The present and future demographic breakdown of the American workforce with respect to males and females is shown in figures 7 and 8. How women are gearing up to reach higher levels in organizations and how they are attaining them is demonstrated in figures 9 and 10. Attitudes of career mothers are contained in table 17.

Proposal

From the research material, most experts agree that the best way to address the "Mommy Tracker" issue is for organizations to set up dual career paths for women. Female workers would be identified as either "Career Primary" or "Career and Family." Career primary women would be women who are strictly career oriented. Career and family would be women who have both a career and family. Career primary women should be treated equally with career men. This would mean that these women would be offered the same career opportunities as their male opposites. Career and family women, who are willing to sacrifice career growth in order to raise children, should be offered accommodations so they can both raise a family and simultaneously make contributions to the organizations. In such a circumstance, both the individual and the organizations would benefit from the arrangement.

By establishing a dual career path for women and identifying women with their goals, typical stereotypes will be eliminated. Male workers in higher ranks of the organization will no longer associate all women workers with babies. The ultimate result will be a workplace where women will have the freedom to choose between a career, raising a family, or a combination of both since most professional women aggressively seek careers after their child rearing years.

Summary of Findings

Much research has been done to address the issue of women and careers. The resulting data finds itself along public opinion themes. The following findings outline general opinion about women succeeding in the workplace:

- Choosing the "Mommy Track" is a permanent mark against women.
- Once off the fast track, women are not allowed back on.
- Present dual career tracks reward lack of family.
- Present male/female career tracks promote managers without a good work/family balance, who may be narrow minded.
- Establishing a "Mommy Track" designates child rearing as women's work.
- The family is hurt as women delay child bearing until they have reached higher levels in the organizations to avoid being labeled as "Mommy Trackers." They may find it is too late for them to conceive.
- Women may withdraw from actively participating in raising their children in order to avoid being labeled.
- Women are faced with role confusion: is it wrong to pursue a serious career and a family?

Conclusion

Many conclusions may be drawn about women and their increasing role in the workforce. Institutionalized career tracks have not proven successful in retaining the best and brightest women in the workforce. Flexibility is a better solution since it allows for a healthy balance between career and family for all workers. Each individual should be rated on how they manage their own situation (performance), not the number of hours spent at a desk. Individuals, whether women or men, should not be ostracized for personal leave. High performance should allow them to continue on the fast track when they are ready to resume their careers in full force. Family roles are being redefined to include more parenting by fathers. This will also allow women more time to pursue careers. Finally, with the year 2000 quickly approaching, paying attention to employee's needs is the quickest route to "organization nirvana."

RETIREES: A VALUABLE RESOURCE FOR THE FUTURE LABOR MARKET

Problem Statement

As has been reiterated in other sections of this report, there will be a labor shortage in upcoming years. It is therefore necessary that all employers begin the search for alternate non-traditional ways to satisfy their future labor needs. There are several factors that contribute to indicate that older workers should and must be considered a resource in the labor area.

The first factor is that the median age of the U.S. population is sharply increasing. The baby boomers are now middle age and in the 1990s most boomers will move through or approach their 40s. By the end of the century, the number of people aged 50 to 65 will increase at a rate that is more than twice the rate of the overall population. By 2000, eight million people will be older than age 80 and there will be one retiree for every two workers, versus 3.2 workers today. The second factor to consider in the environment is that the growth of the workforce is falling to 1% a year which is the lowest since the 1950s. The last factor to consider is the fact that the workforce itself is aging. By 1990 there will be 44% fewer 18 to 25 year olds entering the workforce than there were in 1979. By the year 2000, 49% of the workforce will be between the ages of 35 to 54 as opposed to 35% today. Projecting that the workforce today is going to be the workforce for tomorrow most certainly indicates that organizations will need to use different resources to build a strong and productive future workforce.

A Suggested Solution

Most of the research documentation refers to harnessing America's "Grey Power.". The statistics emanating from the research in this area are in support of grey power and also indicate that a trend for older workers to work longer already exists and that this trend will continue well beyond the year 2000. According to the Labor Department, more persons over 65 are taking part-time jobs: 45% of men compared with 35% in 1965 and 60% of women compared with 50% in 1968. Economic and legal changes coupled with changing demographics is forcing increased employment of the aged. The estimated life expectancy of Americans reaching the age of 65 is now 81 and pension and payroll costs to support this group are rising rapidly. Current legislation requires organizations to treat older people equitably in hiring, training, and promotion opportunities. The federal government has been a forerunner in this area. In addition to the previously mentioned facts, the complexity of international economics, including our trend towards a survive economy, demands a workforce that requires sheer wisdom rather than sheer energy.

Overall, the participation of older workers, ages 55 plus, is expected to rise. In 1988, the American Association of Retired Persons (AARP) documented 369 programs and practices that provide innovative options for older employees. These include

retiree employment pools, older-worker hiring programs, as well as phased retirement and retraining programs. Although facts indicate that older workers are here to stay in the labor force, many employers are still hesitant and progress is slow. According to a National Conference Board, 62% of U.S. employers offer early retirement programs while only 4% offer inducements to delay retirement.

Obstacles

There are many obstacles to the employment of older workers. Although mandatory retirement was eliminated in the 1986 amendments to the Age Discrimination in Employment Act, negative attitudes and beliefs about the effectiveness of older workers are likely to continue. According to the U.S. Department of Labor's National Studies on Mandatory Retirement, most studies indicate that companies with flexible retirement options number less than several hundred. In addition, of the 26 million citizens over the age of 65, only 4 million hold a job during any given year.

It may be asked, why are there so many obstacles? Early retirement was fostered in the 50 to 70 age bracket by changes in Social Security eligibility to age 62, by union contracts, employer early retirement and voluntary separation programs, and by a growing number of older people who have gained sufficient economic independence through two incomes to retire early. There has been a growing willingness for employers to slash expenses by eliminating high paying jobs commonly held by those over age 50 and to offer early retirement as opposed to retraining or hiring older workers. There are three primary reasons for this lack of employer response to older workers. They are limited flexible work arrangements, relatively rigid employee benefit policies, and the assumption that older workers bring higher costs.

There are many results from these social and employer based obstacles. Across the board, employers have conflicting policies and practices regarding mature workers. The benefits of progressive, efficiency oriented programs are undone by old policies based on negative stereotypes about the abilities, attitudes, and potential of mature workers. These stereotypes even affect workers down to the age of 50. The American Society of Training and Development estimates that employers are spending \$30 billion a year on formal training courses for employees; however, the subject of aging is absent from any training course lists.

Statistics

Unreliability

The notion that workers become less reliable as they grow older is a fallacy that is still prevalent in our social views. Reliability is defined in terms of attendance, safety performance, and employee turnover.

Attendance. Polaroid Corporation which has more than 13,000 employees, feels that there is not any data supporting the myth that older employees are ill and absent more often than other employees. In fact, 18% of Polaroid's 65 and older employees have perfect attendance versus 10% for the total workforce.

Banker's Life and Casualty Co. in Chicago finds older employee attendance records to be at least equal to those of younger employees.

AARP's Glenn Northrup has found that employees over age 55 take less time off and are less accident prone than younger workers. Their rate of illness is 1% versus a rate of 3.1% for all workers.

Safety Performance. A Bureau of Labor Statistics study of worker's compensation data finds that workers aged 20 to 24 have the highest injury rate; rates then drop off with increased age and drop the sharpest for the over 65 category.

Employee Turnover. Turnover rates are decidedly lower than those of younger employees. AARP data show that an employee aged 20 to 30 stays with a company an average of only 3.4 years; those aged 50 to 60 remain for an average of 15 years.

Insurance Costs

A survey of 400 companies conducted by Yankelovich, Skelly, and White found that 37% of the firms perceived health insurance to be extremely costly for a 30-year old female with two dependents and 32% perceived it to be so for a 30-year old male with two dependents. By comparison, 30% and 29% perceived health insurance to be as costly for 65 year old male and female retirees. However, only 16% and 15% perceived it to be costly for 55 year old females and males, respectively. Sixty-five percent of respondents said that the extra cost for older employees was insignificant compared with the total organization health-care costs.

Studying employment data at a large aerospace company, George Washington University's Malcolm Morrison found that when a worker retired at age 50 to 54, it cost the organization \$40,000 a year for pension and health benefits. If, however, the worker left between the ages 55 to 59, the costs declined to \$30,000 a year. Finally, the cost was only \$23,000 for a worker who retired at an age of 60 or older.

Costs declined partly because pension and benefits were paid out over a shorter period of time; 15 years on the average for a 65 year old versus 25 years for a 55 year old. Also, the more senior the worker, the less likely they were to have school aged children who would use their health benefits.

Performance Deterioration

Research shows that chronological age is an increasingly poor predictor of physical or mental ability. Declines associated with aging, whether aging begins at 30 or 80, are not necessarily relevant to job performance. Department of Labor studies in 1965 found only a slight decline in productivity among 45 and older workers doing physical labor. Among office workers, the group aged 65 and older had the best performance. In a 1977 review by the U.S. Senate of Department of Labor studies, similar results were reported among 3,000 retail, industrial, and managerial workers aged 60 and over.

Recommendations

The following list is intended to help managers effectively manage older workers; however, it may be applied to any of the human relations issues discussed in this report.

- Project the future workforce.
- Examine personnel policies.
- Develop flexible work options.
- Create or redesign suitable jobs.
- Promote career long training.
- Provide a motivational climate.
- Update performance appraisal programs.
- Hold small group meetings with older employees to discuss what it would take to interest them in staying with the organization.

According to a 1986 Gallop Poll conducted by the AARP, 7 of 10 workers over 65 cite the "chance to be of service" as the top consideration of a job. A recent survey of retirees cited in Personnel Administrator suggested that retirees are very willing to come back to work. Overall, 68% said that they would be interested. Among younger retirees, this figure was even higher. This outline of retirees as a resource for the workforce only skims the top of the iceberg. Utilizing retirees as a resource for building a productive and effective workforce is quickly becoming an issue for human resource planning. Organizations are currently not emphasizing this issue enough. In the future, the U.S. and other countries such as Japan (who also have an aging population) will be forced to effectively employ the retired sector as a feasible human resource.

Table 1. Occupations of the future will require more education

	<u>Current Jobs</u>	<u>New Jobs</u>
Total	100%	100%
8 Years or Less	6%	4%
1-3 Years of High School	12%	10%
4 Years of High School	40%	35%
1-3 Years of College	20%	22%
4 Years of College or More	22%	30%
Median Years of School	12.8	13.5

Source: Bureau of Labor Statistics, Hudson Institute.

Table 2. Changing occupational structure, 1984-2000

<u>Occupation</u>	<u>Current Jobs</u> (000s)	<u>New Jobs</u> (000s)	<u>Rate of Growth</u> (Percentage)
<u>Total</u>	<u>105,008</u>	<u>25,952</u>	<u>25</u>
Service Occupations	16,059	5,957	37
Managerial and Management-Related	10,893	4,280	39
Marketing and Sales	10,656	4,150	39
Administrative Support	18,483	3,620	20
Technicians	3,146	1,389	44
Health Diagnosing and Treating Occupations	2,478	1,384	53
Teachers, Librarians, and Counselors	4,437	1,381	31
Mechanics, Installers, and Repairers	4,264	966	23
Transportation and Heavy Equipment Operators	4,604	752	16
Engineers, Architects, and Surveyors	1,447	600	41
Construction Trades	3,127	595	19
Natural, Computer, and Mathematical Scientists	647	442	68
Writers, Artists, Entertainers, and Athletes	1,092	425	39
Other Professionals and Paraprofessionals	825	355	43
Lawyers and Judges	457	326	71
Social, Recreational, and Religious Workers	759	235	31
Helpers and Laborers	4,168	205	5
Social Scientists	173	70	40
Precision Production Workers	2,790	61	2
Plant and System Workers	275	36	13
Blue Collar Supervisors	1,442	- 6	0
Miners	175	- 28	- 16
Hand Workers, Assemblers, and Fabricators	2,604	- 179	- 7
Machine Setters, Operators, and Tenders	5,527	- 448	- 8
Agriculture, Forestry, and Fisheries	4,480	- 538	- 12

Source: Hudson Institute.

Table 3. The jobs

Technical and service jobs will increase the fastest between 1986 and 2000, while private household work and jobs in farming, forestry, and fishing will continue to decline.

(employment by broad occupational group, 1986 and projected to 2000; numbers in thousands)

	1986		2000		percent change 1986-2000
	number	percent	number	percent	
Total	111,623	100.0%	133,030	100.0%	19.2%
Executive, administrative and managerial	10,583	9.5	13,616	10.2	28.7
Professional workers	13,538	12.1	17,192	12.9	27.0
Technicians and related support workers	3,726	3.3	5,151	3.9	38.2
Salesworkers	12,606	11.3	16,334	12.3	29.6
Administrative support (including clerical)	19,851	17.8	22,109	16.6	11.4
Private household workers	981	0.9	955	0.7	-2.7
Service workers (except private household)	16,555	14.8	21,962	16.5	32.7
Precision production, craft, & repair workers	13,924	12.5	15,590	11.7	12.0
Operators, fabricators, and laborers	16,300	14.6	16,724	12.6	2.6
Farming, forestry, and fishing workers	3,556	3.2	3,393	2.6	-4.6

Source: Bureau of Labor Statistics, 1987

Table 4. The biggest gainers

Many of the jobs projected to have the most openings between 1986 and 2000 are in service work and require little education and offer few opportunities for advancement.

(occupations with the largest job growth, 1986-2000, moderate alternative; numbers in thousands)

	employment		change in employment 1986-2000	
	1986	2000	number	percent change
Salespersons, retail	3,579	4,780	1,201	33.5%
Waiters and waitresses	1,702	2,454	752	44.2
Registered nurses	1,406	2,018	612	43.6
Janitors and cleaners, including maids and housekeeping cleaners	2,676	3,280	604	22.6
General managers and top executives	2,383	2,965	582	24.4
Cashiers	2,165	2,740	575	26.5
Truck drivers, light and heavy	2,211	2,736	525	23.8
General office clerks	2,361	2,824	462	19.6
Food counter, fountain, and related workers	1,500	1,949	449	29.9
Nursing aides, orderlies, and attendants	1,224	1,658	433	35.4
Secretaries	3,234	3,658	424	13.1
Guards	794	1,177	383	48.3
Accountants and auditors	945	1,322	376	39.8
Computer programmers	479	813	335	69.9
Food preparation workers	949	1,273	324	34.2
Teachers, kindergarten and elementary	1,527	1,826	299	19.6
Receptionists and information clerks	682	964	282	41.4
Computer systems analysts, electronic data processing	331	582	251	75.6
Cooks, restaurant	520	759	240	46.2
Licensed practical nurses	631	869	238	37.7

Source: Bureau of Labor Statistics, 1987

Table 5. Fastest rising jobs

Many of the jobs that will be increasing the fastest between 1986 and 2000 require at least a college degree.

(fastest growing occupations, 1986-2000, moderate alternative; numbers in thousands)

	employment		percent gain 1986-2000
	1986	2000	
Paralegal personnel	61	125	103.7%
Medical assistants	132	251	90.4
Physical therapists	61	115	87.5
Physical and corrective therapy assistants and aides	36	65	81.6
Data processing equipment repairers	69	125	80.4
Home health aides	138	249	80.1
Podiatrists	13	23	77.2
Computer systems analysts, electronic data processing	331	582	75.6
Medical records technicians	40	70	75.0
Employment interviewers, private or public employment service	75	129	71.2

Source: Bureau of Labor Statistics, 1987

Table 6. Fastest declining jobs

Changing technology as well as global competition means that fewer workers will be needed to fill these jobs.

(fastest declining occupations, 1986-2000, moderate alternative; numbers in thousands)

	employment		percent decline 1986-2000
	1986	2000	
Electrical and electronic assemblers	249	116	-53.7%
Electronic semiconductor processors	29	14	-51.1
Railroad conductors and yardmasters	29	17	-40.9
Railroad brake, signal, and switch operators	42	25	-39.9
Gas and petroleum plant and system occupations	31	20	-34.3
Industrial truck and tractor operators	426	283	-33.6
Shoe sewing machine operators and tenders	27	18	-32.1
Station installers and repairers, telephone	58	40	-31.8
Chemical equipment controllers, operators and tenders	73	52	-29.7
Chemical plant and system operators	33	23	-29.6
Stenographers	178	128	-28.2
Farmers	1,182	850	-28.1
Statistical clerks	71	52	-26.4

Source: Bureau of Labor Statistics, 1987

Table 7. Comparisons of expectations and experiences

A Recruit May Expect that:	A New Employee May Experience that:
1. "I will have a great deal of freedom in deciding how my job gets done."	1. "My boss pretty much determines what I do and how I do it."
2. "Most of my projects will be interesting and meaningful."	2. "It seems like I have an endless stream of trivial, mundane tasks."
3. "I will receive helpful, constructive feedback from my boss."	3. "I really don't know how I am doing on the job."
4. "Promotions and salary increases will be based on how well I do my job."	4. "Promotions and money are tight and they appear to be based on factors other than my performance."
5. "I will be able to apply the latest forecasting (marketing, engineering) techniques to help the organization."	5. "People resist adopting my suggestions, even though the old ways are antiquated and inefficient."
6. "I will be able to balance my work and family responsibilities without much difficulty."	6. "My job and family responsibilities often interfere with one another."

Table 8. What makes the best interviews?

1. Interviewee knew about company ("had done homework," "knows the field")	66%	(174)
2. Interviewee had specific career goals ("knew what he/she wanted," "good fit between our needs and his/hers," "well-thought-out career interests")	41%	(108)
3. Interviewee knowledgeable ("asked good questions," "knew what to ask")	29%	(76)
4. Interviewee socially adept ("rapport," "in tune with me," "outgoing and expressive")	28%	(74)
5. Interviewee articulate ("able to express ideas," "spoke well," "good with tricky questions")	19%	(50)

Based on questionnaire responses from 236 people who recruited at Harvard Business School in 1973. More than one response allowed.

Source: Kottler, Faux, McArthur, *Self-Assessment and Career Development*, © 1978, p. 112. Reprinted by permission of Prentice-Hall, Englewood Cliffs, New Jersey.

Table 9. Changes during the early career

Establishment Themes	Achievement Themes
Fitting In	Moving Up
Dependence	Independence
Learning	Contributing
Testing Competence	Increasing Competence
Insecurity	Self-Confidence
Seeking Approval	Seeking Authority

Table 10. College graduates' values and organizations's perceptions

What College Graduates Consider Important in Choosing First Job	How Organizations View New College Graduates
1. Opportunity for advancement	1. Overly ambitious and unrealistic in expectations regarding advancement and increased responsibility
2. Doing something important	2. Too theoretical, idealistic, and naive to be given important initial assignment
3. Responsibility	3. Too immature and inexperienced to be given much responsibility
4. Opportunities to use special aptitudes and educational background	4. Too security-conscious and unwilling to take risks
5. Challenge and adventure	5. Unwilling to work hard to get ideas across, unable to "sell" ideas
6. Opportunity to be creative and original	6. Potentially useful and innovative but must be "broken in" before this resource becomes available to the organization.
7. High salary	

Table 11. Subordinate needs during the establishment period

Task Needs	Personal Needs
Objectives	Coaching
Plans for Accomplishing Objectives	Performance Feedback
Performance Feedback	On-the-Job Training
	Role-Modeling
	Acceptance and Confirmation
	Protection in High-Risk Situations

Source: Based on material presented in Baird and Kram, 1983.

Table 12. Mentoring Functions

Career Functions*	Psychosocial Functions*
Sponsorship	Role Modeling
Exposure and Visibility	Acceptance and Confirmation
Coaching	Counseling
Protection	Friendship
Challenging Assignments	

Table 13. Types of training programs

Types of Programs	Organizations with			
	All Organizations	5,000 + Employees	500-4,999 Employees	Fewer than 500 Employees
New employee orientation	82%	93%	82%	75%
Supervisory skills development	73	87	80	60
Management skills and development	72	83	79	60
Job-related skills	62	79	61	54
Computer skills	57	74	60	46
Safety	49	53	55	41
Technical skills	41	57	41	30
Sales skills	33	50	32	25
Executive development	32	47	34	21
Other (including health, customer relations, team skills)	3	1	5	9

Source: PERSONNEL JOURNAL subscriber study conducted by Globe Research Corp., 1988.

Table 14. Types of training methods

Types of Programs	Organizations with			
	All Organizations	5,000 + Employees	500-4,999 Employees	Fewer than 500 Employees
Films/cassettes	87%	97%	88%	80%
Off-site training developed by third party	72	73	70	74
Books and publications	65	74	69	57
Training packages (used in-house or off-premises)	57	87	57	39
Computer soft- and hardware (computer-based training)	46	70	45	33
Meeting sites	41	53	41	34

Source: PERSONNEL JOURNAL subscriber study conducted by Globe Research Corp., 1988.

Table 15. Public Attitudes toward American ethnic groups

Group	Has Been Good For Country	Has Been Bad For Country	Mixed Feelings	Don't Know
English	66%	6%	21%	8%
Irish	62	7	22	9
Jews	59	9	24	8
Germans	57	11	23	8
Italians	56	10	25	9
Poles	53	12	25	11
Japanese	47	18	26	9
Blacks	46	16	31	7
Chinese	44	19	27	10
Mexicans	25	34	32	10
Koreans	24	30	31	15
Vietnamese	20	38	31	11
Puerto Ricans	17	43	29	11
Haitians	10	39	26	26
Cubans	9	59	22	10

Source: Public Opinion, 5(June/July 1982): 34.

Table 16. Children will lead the way toward an even more diverse future

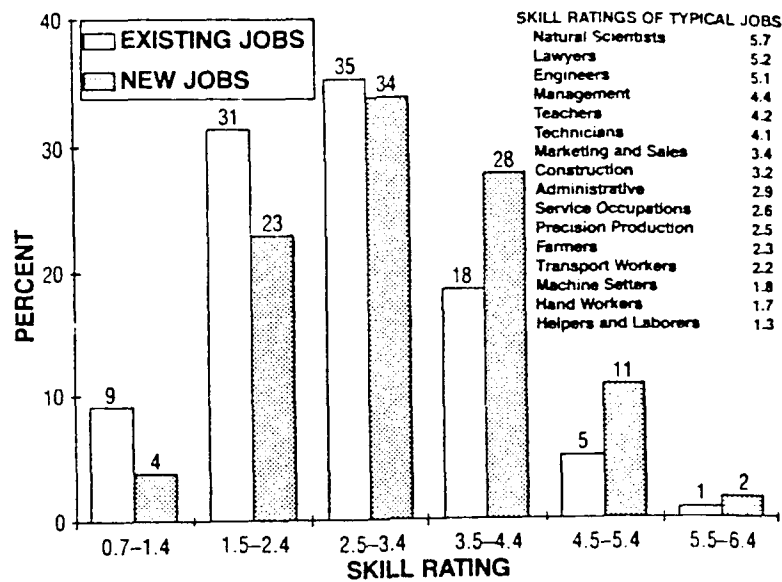
	1990		2000		2010		CHANGE from 1990 to 2010	
	all children under 18	percent minority	all children under 18	percent minority	all children under 18	percent minority	all children under 18 (percent change)	minority share (percentage point change)
Total	64,031	30.7%	65,717	34.0%	62,644	38.2%	-2.2%	7.5
District of Columbia	121	89.7	111	90.9	105	93.2	-13.2	3.6
Hawaii	284	75.5	296	76.4	310	79.5	9.2	4.0
New Mexico	487	67.0	569	70.0	595	76.5	22.2	9.5
Texas	5,065	47.1	5,415	51.9	5,418	56.9	7.0	9.8
California	7,581	46.4	8,402	51.4	8,520	56.9	12.4	10.5
Florida	2,807	46.4	3,244	48.6	3,270	53.4	16.5	7.0
New York	4,246	39.9	4,189	45.8	3,862	52.8	-9.0	12.9
Louisiana	1,324	43.9	1,229	47.3	1,118	50.3	-15.6	6.4
Mississippi	800	47.6	791	48.8	749	49.9	-6.4	2.4
New Jersey	1,861	36.6	2,037	40.2	1,935	45.7	4.0	9.0
Maryland	1,149	38.5	1,267	40.2	1,220	42.7	6.2	4.2
Illinois	3,031	32.7	2,947	36.8	2,684	41.7	-11.4	9.0
South Carolina	946	39.9	968	39.6	931	40.1	-1.6	0.2
Georgia	1,804	36.2	2,056	36.4	2,116	37.9	17.3	1.7
Arizona	1,015	32.3	1,191	33.6	1,229	37.1	21.1	4.8
Delaware	165	29.7	179	32.9	177	37.0	7.3	7.3
Alabama	1,119	34.5	1,111	34.8	1,046	35.6	-6.5	1.1
Nevada	257	27.4	286	30.0	288	33.4	12.1	6.0
North Carolina	1,635	32.3	1,723	32.3	1,684	33.2	3.0	0.9
Colorado	886	25.3	924	28.9	893	33.1	0.8	7.7
Alaska	176	27.5	201	29.5	208	32.7	18.2	5.2
Virginia	1,485	28.5	1,607	29.4	1,549	31.1	4.3	2.6
Michigan	2,440	22.8	2,347	25.5	2,094	29.2	-14.2	6.3
Oklahoma	873	22.1	838	24.8	795	27.5	-8.9	5.4
Connecticut	751	20.8	781	23.4	715	27.0	-4.8	6.1
Arkansas	643	25.5	621	26.1	576	26.8	-10.4	1.3
Tennessee	1,237	23.2	1,204	24.1	1,125	25.3	-9.1	2.1
Ohio	2,783	16.7	2,631	18.6	2,349	20.8	-15.6	4.2
Wyoming	151	12.3	137	17.8	125	20.2	-17.2	7.9
Missouri	1,330	17.3	1,331	18.5	1,236	19.9	-7.1	2.6
South Dakota	200	14.4	193	16.2	180	19.8	-10.0	5.3
Washington	1,173	14.7	1,163	16.9	1,098	19.5	-6.4	4.8
Kansas	654	14.5	633	17.1	585	19.3	-10.6	4.9
Indiana	1,456	14.8	1,382	16.7	1,242	19.2	-14.7	4.3
Pennsylvania	2,765	15.4	2,609	16.7	2,260	18.7	-18.3	3.3
Rhode Island	228	12.9	236	15.5	222	18.6	-2.6	5.7
Massachusetts	1,315	13.5	1,368	15.5	1,267	18.2	-3.7	4.7
Oregon	692	11.8	677	14.1	637	16.8	-7.9	4.9
Wisconsin	1,262	11.5	1,208	13.7	1,067	16.6	-15.5	5.1
Montana	220	10.9	198	13.2	181	15.4	-17.7	4.5
Kentucky	979	11.3	906	12.6	818	14.1	-16.4	2.8
Nebraska	423	9.4	398	10.8	358	13.1	-15.4	3.6
Utah	673	9.3	715	11.2	740	12.4	10.0	3.1
Minnesota	1,131	7.7	1,138	9.1	1,042	11.2	-7.9	3.5
Idaho	309	7.2	291	9.4	275	11.0	-11.0	3.8
North Dakota	182	8.3	157	8.6	138	10.0	-24.2	1.7
Iowa	715	5.6	622	7.0	529	8.7	-26.0	3.1
West Virginia	469	5.9	401	6.7	344	7.3	-26.7	1.4
New Hampshire	284	3.9	329	4.8	317	5.5	11.6	1.6
Vermont	144	3.8	150	4.7	138	5.4	-4.2	1.6
Maine	305	2.8	310	3.0	284	3.1	-6.9	0.3

Table 17. Attitudes of career mothers

	Agree	Disagree
1. It is difficult to pursue a career now that I have a child.	69.1	28.6
2. I would like to spend more time with my child but feel that it would interfere with my career advancement.	54.6	37.0
3. The ideal condition would be for me to leave the workplace now and return when my child is in school.	47.3	43.5
4. I am at a point in my career where it would be unwise to take off to care for my child, even though I feel I might want to do so.	49.6	39.6
5. I do not feel that pursuing my career will have adverse effects on my child.	58.3	26.0
6. I find myself with less interest in my work now that I have a child.	44.2	50.4
7. I feel that my future progress in my career has been compromised since I became a mother.	20.5	74.8
8. I have asked to be excluded from new projects or time-consuming jobs since I became a mother.	22.3	74.7
9. I feel able and willing to pursue both careers, motherhood and work.	76.3	14.6

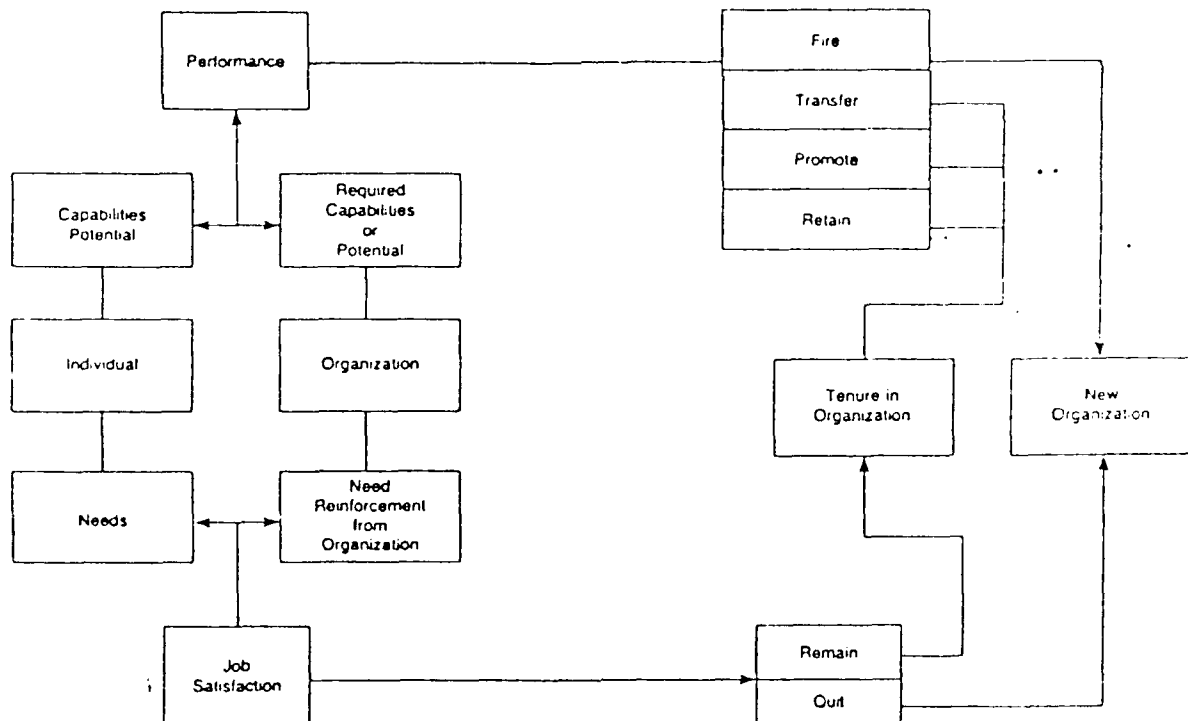
Note: The "Agree" and "Sometimes Agree" and the "Disagree" and "Sometimes Disagree" were collapsed for statistical purposes. The discrepancy in the numbers exists in the "Undecided" response, not recorded here.

SOURCE: Business Horizons, September, 10, 1987.



Source: Hudson Institute.

Figure 1. Low skilled jobs are declining



Source: J. P. Wanous, "Realistic Job Previews: Can a Procedure to Reduce Turnover Also Influence the Relationship between Abilities and Performance?" *Personnel Psychology*, 1978, vol. 31, p. 250. Reprinted with permission.

Figure 2. Matching individual and organization

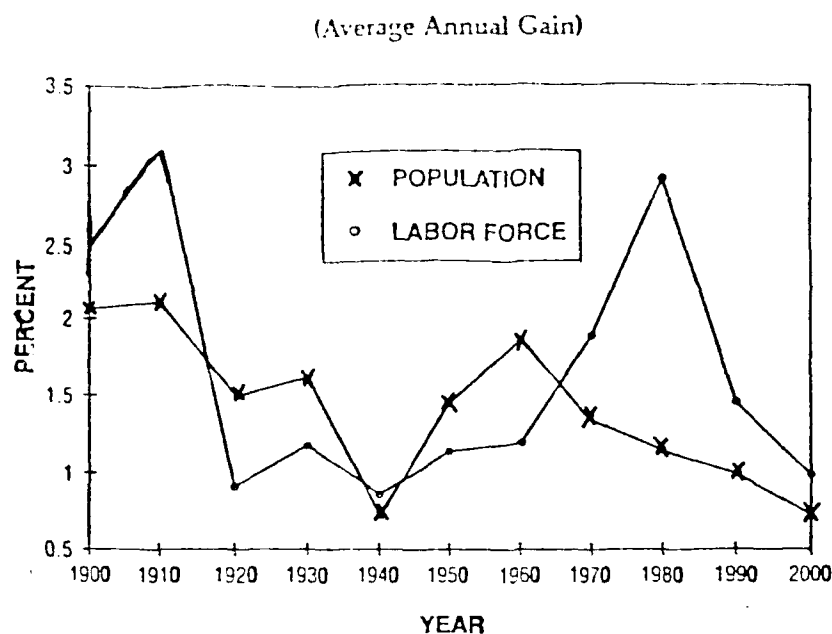
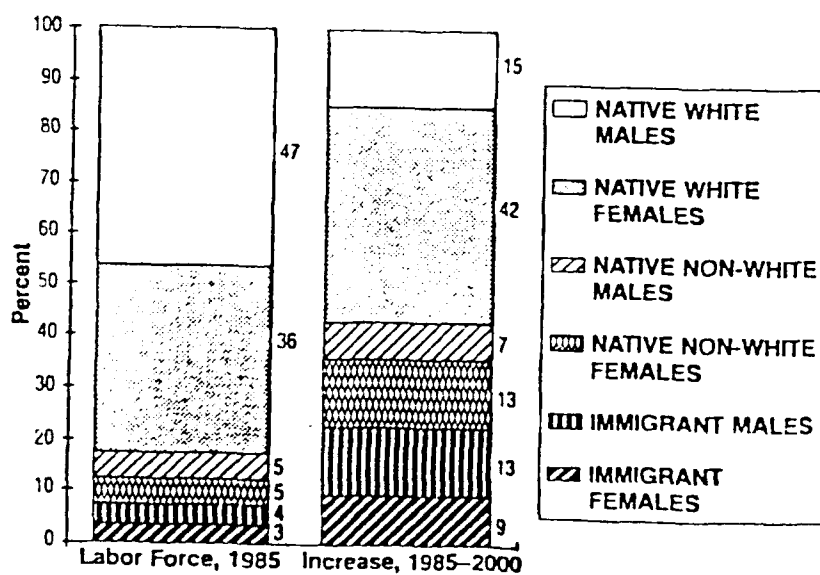


Figure 3. Population and labor force growth will drop by 2000



Source: Hudson Institute

Figure 4. Most new entrants to the labor force will be non-white, female, or immigrants

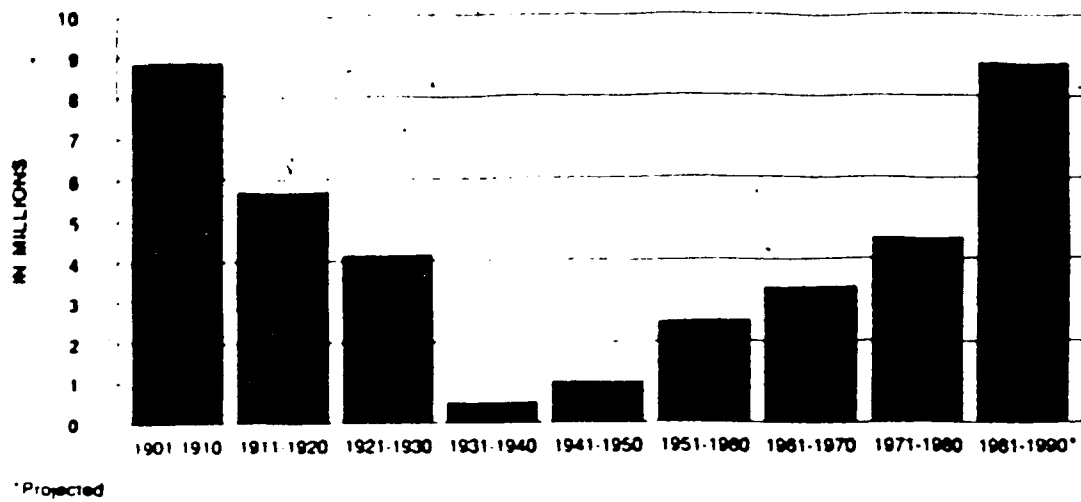


Figure 5. Legal immigrants to the United States by decade

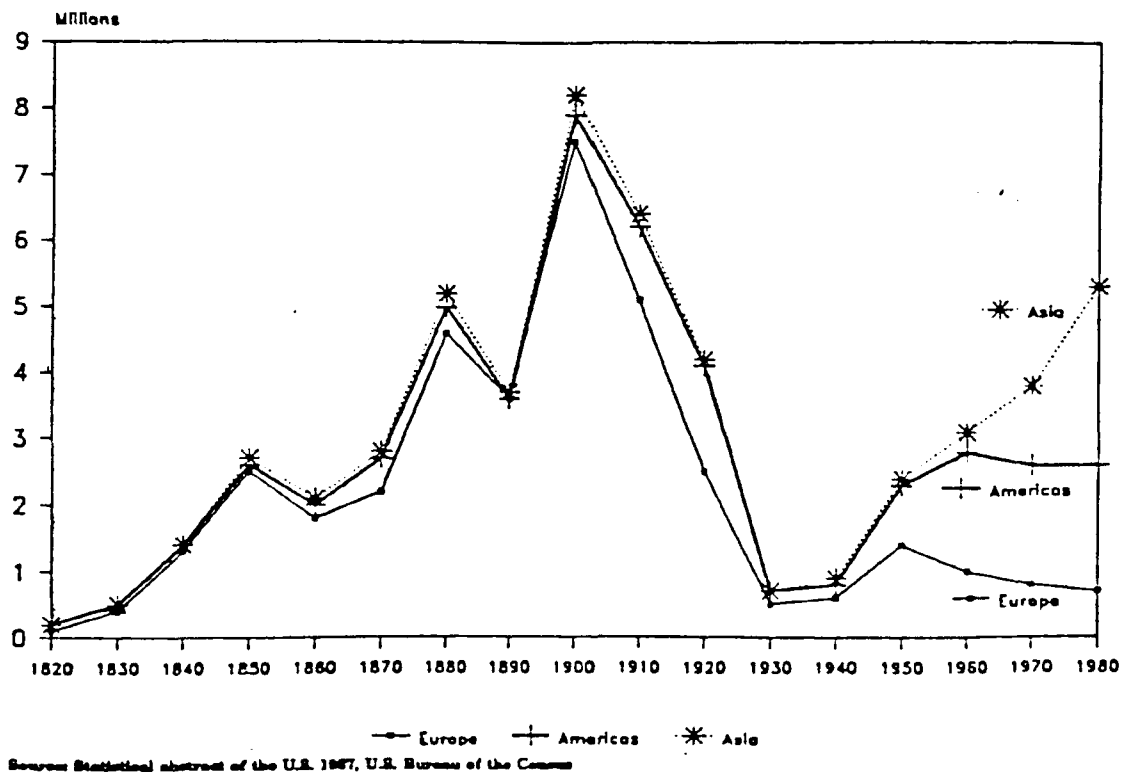


Figure 6. How immigration has changed

(SOURCE: HUDSON INSTITUTE)

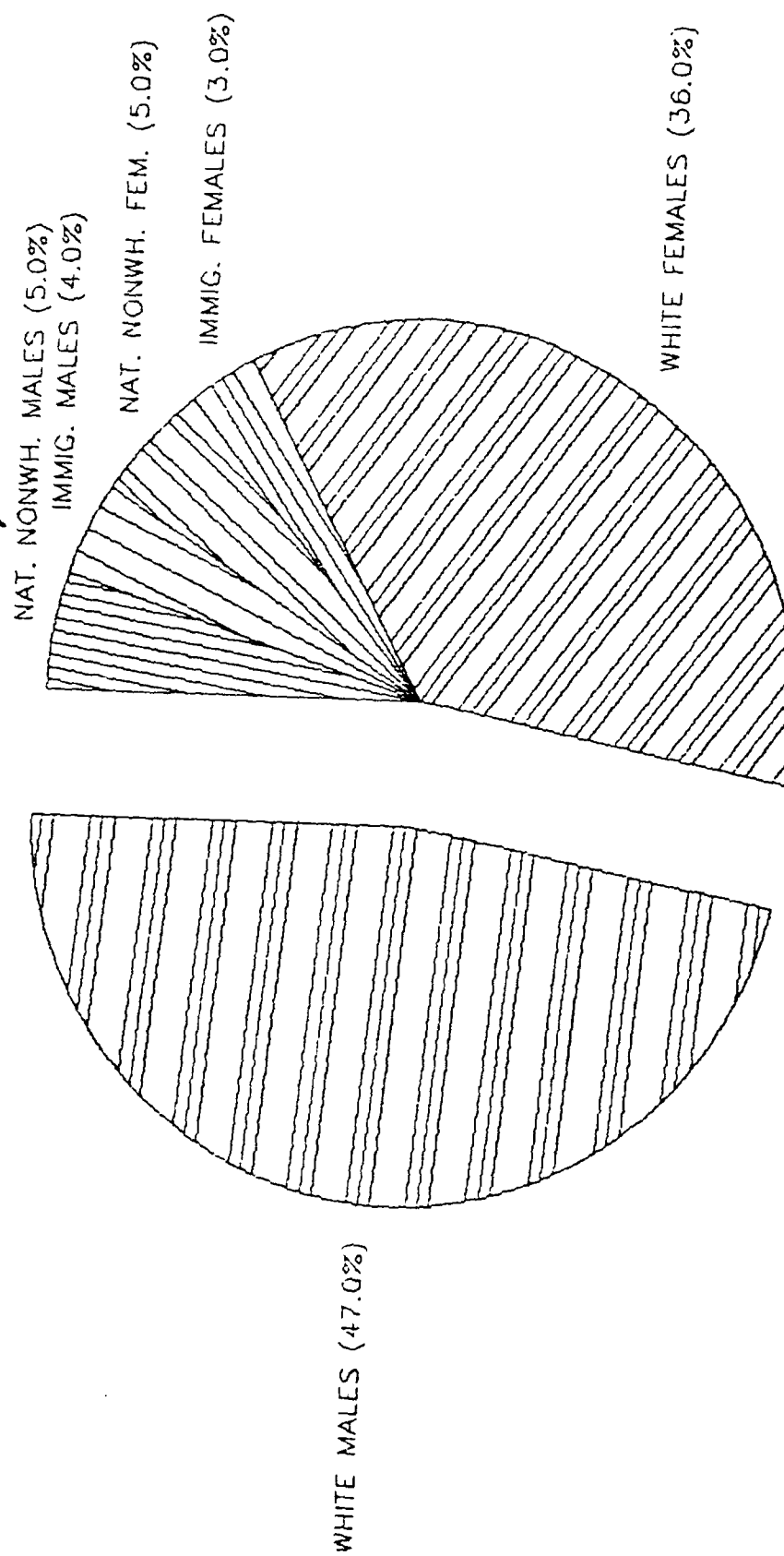


Figure 7. Composition of labor force, 1985

(SOURCE: HUDSON INSTITUTE)

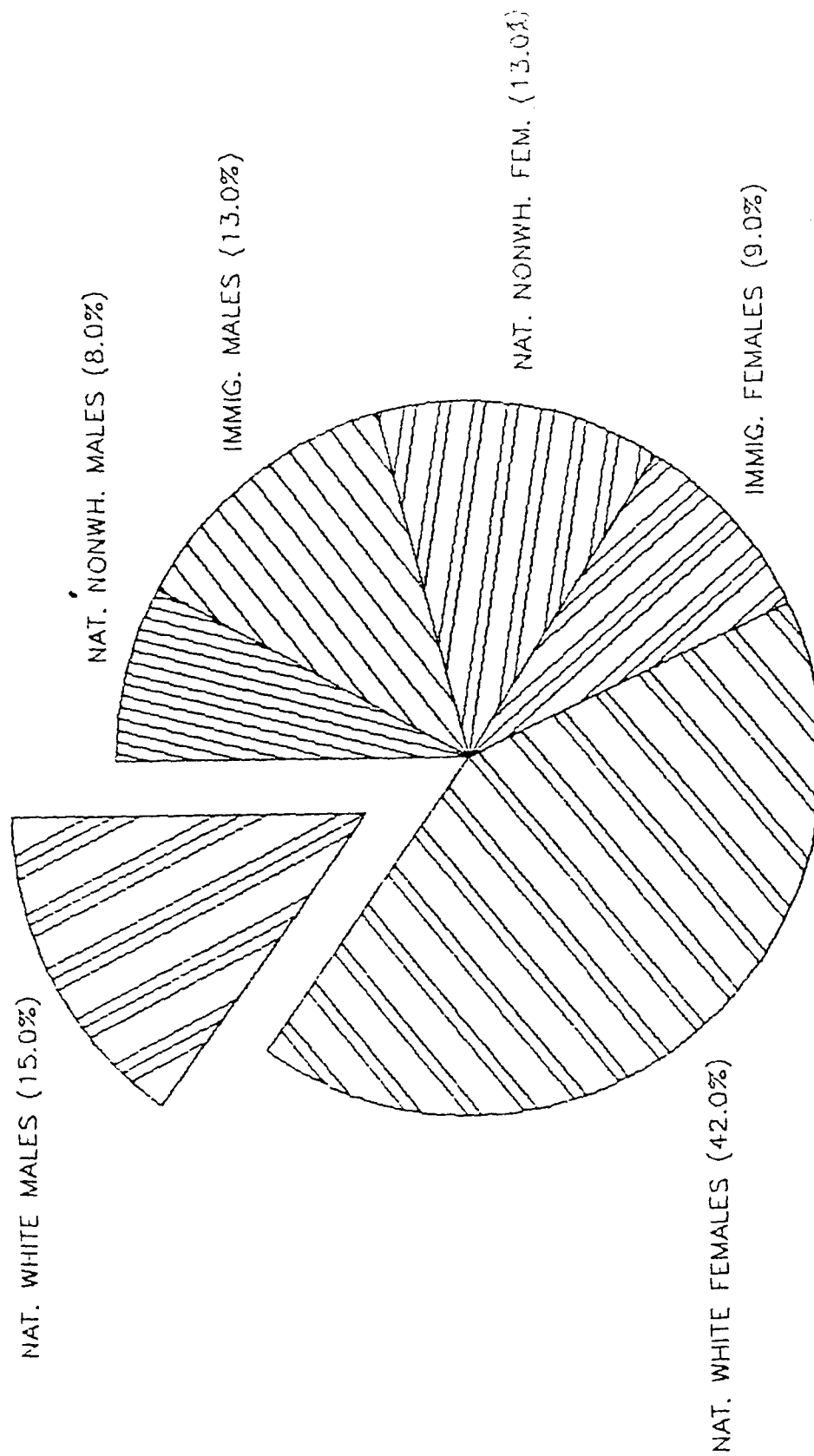
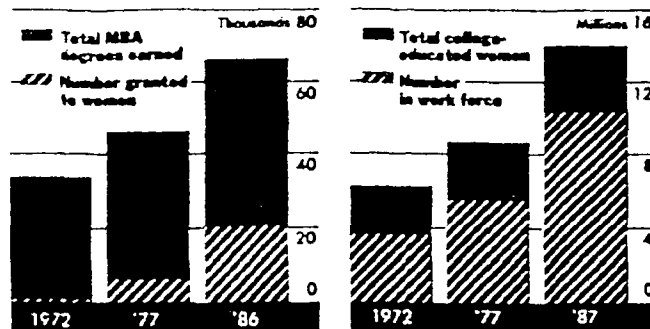


Figure 8. New entrants to workforce, 1985-2000



SOURCE: Fortune, Sept. 12, 1988

Figure 9. Gearing up for the corporate game

	Women as percent of total	
	15 years ago	Now
MANAGERS & ADMINISTRATORS	20	40
GRADUATING ENGINEERS	1	13
GRADUATING LAWYERS	5	39
GRADUATING MBAs	4	31

DATA: NATIONAL PLANNING ASSN., BUREAU OF LABOR STATISTICS

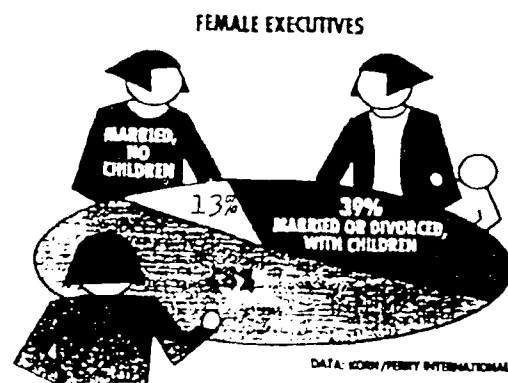


Figure 10. Women are landing better jobs but few mothers have reached the top

BIBLIOGRAPHY

1. Baron, A.S., "Working Partners: Career Mothers and Their Husbands," Nation's Business, pp 12-13, September/October 1987.
2. Berney, K., "Can Your Workers Read?" Nation's Business, pp 26-34, October 1988.
3. Bove, R., "Retaining the Older Worker," Training and Development Journal, p 77, March 1987.
4. Carey, J., Ehrlich, E., Hoerr, J., Mandel, M., Castellon, D., Fins, A., and Mason, T., "The New America," Business Week, pp 91-154, September 25, 1989.
5. Carrenele, A.P. and Gainer, L.J., "The Learning Enterprise," a report prepared for the American Society of Training and Development.
6. Cohen, R., "Governors Flunk States on School Reforms," The Star Ledger, p 6., September 19, 1989.
7. Creager, E., "Working Mom vs. Stay-Home Mom," The Record, L1, L4, September 24, 1989.
8. Dennis, H., "Corporate Training Program Introduces Something New - Aging," Aging, p 34, Winter 1988.
9. Ehrlich, E., "The Mommy Track," Business Week, pp 124-134, March 20, 1989.
10. Ehrlich, E., "Is the Mommy Track a Blessing - Or a Betrayal?" Business Week, pp 98-99, May 15, 1989.
11. Feuer, D., "The Skill Gap," Training, Vol 4, Issue 12, p 27, December 1987.
12. Frangie, C., "Win the Communication Game," The Collegiate Career Women, pp 40-42, Spring 1989.
13. Fraser, J.A., "The Making of a Workforce," Business Month, pp 59-61, September 1989.
14. Gallop, G. Jr., Forecast 2000, New York: William Morrow and Company Inc., 1984.
15. Gilliam, L.L., "How to Succeed When You're New on the Job", The Collegiate Career Women, p 17, Spring 1989.

16. Geger, B., "Pushing for Part-Time," Training, pp 59-66, December 1987.
17. Goddard, R.W., "How to Harness America's Grey Power," Personnel Journal, pp 33-40, May 1987.
18. Goddard, R.W., "Workforce 2000," Personnel Journal, pp 66-71, February 1989.
19. Goddard, R.W., "Combating Illiteracy in the Workplace," Management World, Vol 18, Issue 2, p 8, March/April 1989.
20. Gorman, C., "The Literacy Gap," Time, pp 56-57, September 19, 1988.
21. Greenhouse, J.H., Career Management, Orlando, Florida, The Dryden Press, 1987.
22. Gross, N., "The Portable Executive," Business Week, pp 102-112, October 10, 1988.
23. Hall, L., "Radio Days for Kids," The Star Ledger, p 18, September 18, 1989.
24. Hallett, J.H., "Redefining Retirement," Personnel Administrator, pp 26-28, November 1986.
25. Hamilton, P.W., "Helping Out With the Kids," D & B Reports, pp 18-21, March/April 1989.
26. Harragan, B.L., Games Mother Never Taught You, Brattleboro, VT, The Book Press, 1977.
27. Herren, L.M., "The Right Recruitment Technology for the 1990s," Personnel Administrator, Vol 34, Issue 4, p 48, April 1989.
28. Holden, C., "Adjusting to the Aging Population," Science, p 16, May 15, 1987.
29. Johnson, H.E., "Older Workers Help Meet Employment Needs," Personnel Journal, pp 100-105, May 1988.
30. Johnston, W.B. and Packer, A.H., Workforce 2000, Indianapolis, Indiana, Hudson Institute, 1987.
31. Kirrane, D.E., "Training: HR's Number One Priority," Personnel Administrator, p 70, December 1988.
32. Kraut, A.I., "Retirees: A New Resource for American Industries," Personnel Administrator, pp 26-28, August 1987.

33. Lee, C., "Basic Training in the Corporate Schoolhouse," Training, Vol 25, Issue 4, p 27, April 1988.
34. Leonard, B., "Why Johnny Drops Out," Forbes, Vol 140, Issue 11, p 242, November 16, 1987.
35. Lewis, J., "Breaking Through the Crech Barrier," Management Today (UK), pp 104-106, February 1989.
36. Lock, R.D., Taking Charge of Your Career Direction, Pacific Grove, California, Brooks/Cole Publishing Co, 1988.
37. Machan, D., "Cultivating the Gray," Forbes, pp 126-128, September 4, 1989.
38. MacPhearson, K., "Science Lessons Must Be Made More Palatable," The Star Ledger, p 17, September 18, 1989.
39. McGee, L.F., "Setting Up Work at Home," Personnel Administrator, pp 58-62, December 1988.
40. McLaughlin, "The Executive of the 21st Century, A Change of Mind," New England Business, pp 43-53, April 1989.
41. Meiers, M., "Parental Leave and the Bottom Line," Personnel Journal, pp 108-113, September 1988.
42. Miller, W.H., "Employers Wrestle With Dumb Kids," Industry Week, Vol 237, Issue 1, p 47, July 4, 1988.
43. Morris, R. and Scott, A.B., "A New Class in America: A Revisionist View of Retirement," Social Policy, pp 38-43, Spring 1988.
44. Nye, D., "Writing Off Older Assets," Across the Board, pp 44-52, September 1988.
45. Orr, J.S., "Bush and Governors Join to Push National Standards for Education," The Star Ledger, p 1. September 29, 1989.
46. Orr, J.S., "Education Summit," The Star Ledger, p 1. September 28, 1989.
47. Patterson, W.P., "Gray Can Be Beautiful," Industry Week, pp 48-49, September 5, 1988.
48. Pennar, K., "The New America," Business Week, pp 92-148, September 25, 1989.

49. Putka, G., "Scores on College Entrance Tests Fall, Adding to Concern About U.S. Schools," The Wall Street Journal, p A24, September 13, 1989.
50. Ramires, A., "Making Better Use of Older Workers," Fortune, pp 179-187, January 30, 1989.
51. Rast, B., "Bad Schools Pave the Way for Economic Decline," The Star Ledger, p. 20, September 18, 1989.
52. Riche, M.F., "America's In," American Demographics, Vol 10, Issue 2, p 34, February 1989.
53. Schwartz, F.N., "Corporate Women," Vital Speeches of the Day, pp 173-176, December 1989.
54. Sher, M.L. and Brown, G., "What to do with Jenny," Personnel Administrator, pp 31-41, April 1989.
55. Sherman, E., "Back to the Basics to Improve Skills," Personnel, pp 21-23, July 1989.
56. Smith, A.M., "What Makes a Good Leader?" Working Women, p 2, May 1989.
57. Townley, P., "Business and Education Reform," Vital Speeches of the Day, Vol 55, Issue 12, p 354, April 1, 1989.
58. Washer, L., "How to Get the Most for your Training Dollar," Working Woman, pp 19-20, December 1988.
59. Weinraub, B., "Bush and Governors Set Education Goals," New York Times, p A10, September 29, 1989.
60. Williams, M.J., "Women Beat the Corporate Game," Fortune, pp 128-138, September 12, 1988.
61. Zarate, V.R., "Cities Called Key to Turning the Labor Shortage Tide in Sea of Prosperity," The Star Ledger, Sec 3, p 5, September 24, 1989.
62. "Bringing the Retired Back from Retirement," Business Week, pp 113-118, September 19, 1988.
63. "Class of 2000," CAM Report, Vol 12, No. 10, E. Lansing, Michigan, Priam Publications Inc., March 1, 1989.

64. "Crisis on Campus," The Economist, p 22, April 30, 1988.
65. "Five Years On," The Economist, p 21, April 30, 1988.
66. "Ten Wary Careers," CAM Report, Vol 12, No. 7, E. Lansing, Michigan, Priam Publications Inc., January 15, 1989.
67. "U.S. Aims to Bridge the Skills Gap," The Workplace Report, Vol 6, Issue 4, p 10, 1988.
68. "What's Going On?" Field Service News, Bethlehem, Pennsylvania, College Placement Council, Spring 1989.
69. "What's Wrong With Universities?" Industry Week, Vol 237, Issue 1, July 1 1988.

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