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CONTENTS OF VOLUME 8, NUMBER 1

LETTER FROM THE EDITORS

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COPING WITH THE IMPENDING LABOR SHORTAGE

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ABSTRACT

Organizations are faced with the real possibility of a coming labor shortage. Today's HR manager will be an integral part of coping with the effects of this shortage and finding solutions through various avenues. Presented are discussions of the impending problems and possible HR solutions generated through productivity improvement and recruitment and retention efforts specifically targeted at women, minorities, retirees and immigrants.

INTRODUCTION

Add this to an HR manager's "to do list": Must attract, screen, and hire an adequate number of employees to compensate for the mass exodus of baby boomers - those born between 1946 and 1964 - from America's workforce. This HR manager has read that "by the year 2008, one in six workers will be 55 or older" ("U.S. Unprepared…", 2001). In addition, this HR manager has heard that 76 million employees will be retiring over the next thirty years with only 46 million Generation Xers - those born between 1964 and 1980 - entering the workforce during this time (Eisenburg, 2002). Apparently, there is a coming massive shortage of employees.

According to U.S. Census Bureau projections, "The U.S. will face dramatic demographic changes over the next 100 years" (Little & Triest, 2002). Changes that will create major adjustments in the U.S. labor markets are: the slowdown in population growth, population aging, and the growing role of immigrants. The slowdown in population growth is reflected in the projected yearly U.S. labor force rate of 0.7% between 2000 and 2025 compared to the 1.1% rate of the 1990s ("U.S. Unprepared…,2001). Population aging is a result of the lower fertility rate of baby boomers, an increase in life expectancy, and the large numbers of baby boomers who are nearing retirement age. Finally, ten percent of the U.S. population growth in the late 1990s was due to foreign-born babies, causing the Census Bureau's population growth projections to swell (Little & Triest, 2002).

For the last three decades, U.S. corporations have been able to shape the abundant labor force to their needs. Labor markets have channeled employees to the most promising industries and companies. As the baby boomers age and the labor crunch hits, employees will wield more power, pressuring organizations to make adjustments in order to appeal to the shrinking labor supply. These

adjustments may well change the attitudes of the American workplace and society. Some experts feel that the aging of the baby boomers will become the "transcendent economic and political issue of the century" (Brown, 2002).

If the U.S. does not successfully cope with the downward change in the labor supply, economic growth may slow, taxing support systems to their limits as millions of baby boomers retire and take advantage of those support systems. For example, almost half of the Federal Government's workers (1.8 million) will be eligible for retirement within the next five years (Eisenberg, 2002). Will all of these federal workers retire, adding to the burden on the support system or will some opt to continue to work until Peter Drucker's predicted retirement age of 75 (Garnitz, 2002)?

As older workers retire, they take with them knowledge, expertise, and a myriad of favorable traits such as reliability, loyalty, and conscientiousness. A U.S. General Accounting Office report warned that if American employers are not prepared for the impending shortage of skilled labor, productivity and growth will be threatened ("U.S. Unprepared…, 2001). Losing trained, knowledgeable workers affects organizational performance. Experienced managers and professionals will retire, leading to a decrease in innovation and efficiency, a rise in costly errors due to an inexperienced workforce, and a loss of knowledge and experience which may affect decision-making and undermine growth strategies. The labor market will be "hungriest" at the high end of the scale. The number of employees with college degrees has more than doubled since 1980 (Bernstein, 2002), but this has barely kept up with demand for employees with college diplomas. America is already lacking in trained workers with skills in computer literacy, leadership, critical thinking, and communication.

If this scenario materializes, how will America's labor force maintain the needs of an escalating number of dependents without some downward adjustment in living standards? Little and Triest (2002) project that the increased dependency ratio (the ratio of those under 15 and over 65 to the working age population) will require a 40% gain in labor productivity just to maintain current living standards. Obviously, labor quality and productivity must grow. I suggest that the solutions to this mandate lie in boosting productivity and increasing retention and recruitment efforts, specifically targeting baby boomers, retirees, women, minorities, and immigrants. Offered are discussions of the issues involved in productivity and recruitment and retention along with recommendations for alleviating the potential problems in each area. Then discussion and recommendations are directed specifically at problem areas regarding baby boomers, retirees, women, minorities and immigrants.

PRODUCTIVITY

Using the average productivity growth rate for the past 30 years, economists conclude that the U.S. could experience a shortage of 10 million workers by 2010 (Bernstein, 2002). Should the current productivity growth rate of 2% hold over the next decade, the labor shortage could drop but

would still be at least 3 million (Bernstein, 2002). Therefore, organizations must be creative and find ways to do more with less. Technological developments targeted at methods and machinery that will reduce labor requirements will be helpful but the HR manager must also contribute. By refining recruiting and retention efforts and considering the capabilities of the workforce, particularly older workers, HR management-generated productivity can rise. For example, Lockheed's Fort Worth location hired an ergonomic engineer to improve workplace design. After making the recommended changes, the company's lost workday rate dropped 25% and they saved $3 million on injury claims within six months time (Van Yoder & Goldberg, 2002).

Today's workforce is composed of a wide range of ages. Understanding the differences that exist among the generations will create a better work atmosphere; one that will allow for smoother operations. The generation into which a person is born defines him/her. Frost (2002) categorizes the current workforce as traditionalists (born before 1945), baby boomers (born 1946 to 1964), Generation X (1965-1980), and Millenial Generation or Generation Y (born post 1980). Traditionalists are true to their namesake. They attach great importance to loyalty and are comfortable with the topdown management approach (Frost, 2002). They are practical and dedicated (Zuber, 2002). Baby boomers are optimistic and idealistic. They challenge authority and want open lines of communication (Frost, 2002). Baby boomers' self-images are often tied to performing their job well (Zuber, 2002). Generation Xers are more skeptical; a result of being latchkey kids or living in broken homes. They prize individualism and distrust institutions (Frost, 2002). Generation X wants fun on the job with direct and straightforward leadership (Zuber, 2002). The Millennial generation or Generation Y is ambitious and collaborative (Zuber, 200). They expect to change employers and careers throughout their lives (Frost, 2002). As generational differences are acknowledged, one realizes why people's needs and preferences in work styles are different. Appropriately, generational differences should be incorporated into organizations' workplace diversity approaches. Companies that recognize these differences and adjust their recruitment and retention plans accordingly will see results in increased productivity. The payoff is a happier, higher performing workforce which is committed to the company, thus providing long term value to all.

RECRUITMENT

The impact of baby boomers, retirees, women, minorities and immigrants will vary by function and geographic location within the different business units. This shifting talent pool causes uncertainty and hinders recruiting. Employers must understand what type workers they want to recruit and the method required for each type. For example, Deloitte and Touche, after realizing the cost of their high rate of staff turnover, began focusing on work-life balance issues to appeal to talented applicants (Letter to the Editor, 2002).

Companies must look for unique and innovative benefits targeted toward the demographics of the work force in order to create an inviting work climate which will retain employees and attract

new ones. According to an Aon Consulting survey, employees are most concerned with four benefit areas (Burzawa, 2002):

1.	medical insurance - will it cover day to day as well as catastrophic amounts?
	2. paid vacation and holidays,
3.	employer-paid pensions, and
4.	retirement savings plans.

Attention to these concerns can go a long way in recruitment improvement.

In order to attract and retain promising employees, U.S. companies have begun the practice of "employer branding." This involves a focus on making sure that recruits and existing employees understand the company's goals and commitment to them and how this applies to the individual employee. In order for branding to be successful, it must be consistently applied company-wide and throughout internal and external markets. Employer brands are linked to what it is like to actually work for the company. Through branding, applicants can get a better feel for the company's goals and whether or not they can relate to and support these goals. After implementing employer branding, Johnson & Johnson's volume of incoming resumes doubled in one year (Buss, 2002). Their recruiting campaign directs applicants to the Johnson & Johnson website where their profiles are entered into a database allowing the company to communicate with them. Other firms successfully utilizing the employer branding concept include UPS, Pfizer, USAA Insurance and J.D. Edwards (Buss, 2002).

RETENTION

A recent study (Mitchell, Holtom, Wee, Sablyskyi & Erez, 2001) introduced a new construct, job embeddedness, to predict outcomes of intent to leave and voluntary turnover of employees. Embeddedness is defined as (Mitchell, et al., 2001):

> the extent to which people have links to other people or activities, the extent to which their jobs and communities are similar to or fit with the other aspects in their life spaces, and the ease with which links can be broken-what they would give up if they left, especially if they had to physically move to other cities or homes.

This study found that in order to increase retention, organizations should be concerned with the total lives (degree of embeddedness) of employees-not just their work life.

An organization's culture is also an important retention tool. A portion of this organizational culture relates to the way the company treats, values, and trusts employees (Messmer, 2001).

Culture should appeal not only to baby boomers, but also to women, minorities and immigrants. In order to retain current employees, companies may consider job enrichment, lateral or vertical moves, or job realignment (Hagevik, 2001).

Another valuable tool is open communication. Creating an environment that solicits input from employees demonstrates to them that their opinions are valued, ergo, they are valued.

BABY BOOMERS

Older employees (baby boomers) set good examples for the younger workforce, make excellent mentors, have fewer accidents, and have lower absenteeism and turnover rates. They are better educated, in better health, and their life expectancies are greater than those of previous generations. Recruitment and training costs, lost productivity costs, plus loss of knowledge and commitment costs can drive replacement costs as high as 150% of a retiring employee's salary (Izzo & Withers, 2002). Also, when companies hire experienced employees who have been socialized within other organizations they can bring undesirable practices with them. They can also be more likely to question procedure and to "abandon ship" if they are not comfortable with the new organization's culture. Recruiting and retaining key mature employees obviously cuts costs and ensures a better knowledge base for organizations. Therefore, as baby boomers contemplate retirement, organizations should be prepared to offer them alternative opportunities to extend their tenure with the company.

A recent survey (Hagevik, 2001) asked over 2200 professionals throughout the U.S., "what kept you?" (in your current position). Over 50% responded that it was exciting work and challenges, and career growth, learning, and development. An AARP/Roper report (Garnitz, 2002) found that the reason baby boomers chose to continue work through retirement age was due to "part ego fulfillment, part economic, part the social support that work provides and part continuing to make a contribution." It seems that for some boomers the incentive to continue to work is financial. For others, the key is a rewarding and fulfilling life.

Money analysts agree that baby boomers will not have sufficient savings to retire at age 55 (Nikiforuk, 1999). A 2001 Met-Life Mature Market Institute survey of 1200 baby boomers found that 46% indicated that their retirement savings levels fell during the last year, but 89% have not changed retirement dates as a result (Timmermann, 2002). Only 18% were concerned with outliving their income. It seems clear that most baby boomers are not as realistic about retirement as they should be. If one retires at 65 and lives until 85 or 90, 20 or more years of steady income will be needed to pay expenses. The survey percentages reinforce the fact that baby boomers will need to work during some of their senior years. For these individuals, company's may offer financial incentives to stay on with the firm or can offer part-time options prior to officially retiring.

Organizations should realize that a portion of baby boomers are not quite "ready for the nursing home" and wish to remain an active part of the workforce. For those not motivated to work

past retirement age by financial concerns, employers can offer a phased retirement option, more flexible work hours, reasonable amounts of business travel, contract positions, tangible incentives, and recognition opportunities. Incentive programs should be geared to baby boomers' likes and dislikes. Many boomers have indicated that they want to experience new and different places and activities (Gardner, 2002). Incentives such as white-water rafting, dance lessons, wardrobe makeovers, or gardening classes stimulate the mind and heart. Meaningful activities such as charity work and wellness afternoons from yoga or exercise recharge energy levels. Employers that can provide these will benefit from employees with an extended worklife.

Any plans that organizations put into place are affected by culture, demographics, and workforce planning policy. When you alter retirement, you alter the culture of the organization (Garnitz, 2002). HR managers should remember that demographics assessment and open communications go hand-in-hand in developing a mature workforce.

RETIREES

An AARP survey reports that 8 in 10 baby boomers plan to work part-time during retirement; 35% due to interest and enjoyment and 23% because they need the money (Temple, 2000). A Del Web Company survey among retirees found that 43% missed friends and colleagues the most. They also found that only one-fourth of retirees planned to retire when they did and only 6% retired due to burnout (Opiela, 2002). Therefore, one ready source is retirees. Utilizing retirees is probably the simplest knowledge retention method to use.

Temporary agencies, adult education centers, retiree fairs, and libraries are excellent places to reach the mature applicant. The Workplace Investment Act of 1998 implemented a program which involves a career center that consolidates all state employment and training agencies (Doverspike, Taylor, Schultz & McKay, 2000). This will be mutually beneficial to both workers and employers.

Training programs teaching such skills as entrepreneurship, computer and software skills, business philosophy, and critical thinking help older workers adjust from primary to secondary careers. For example, the Aerospace Corporation employs retirees to maintain its long-term experience necessary to the space program (Van Yoder & Goldberg, 2002). Also, the Bonnie Bell Company created a packing facility for older workers (the average age is 72) which is very productive and stable. Senior employees work half shifts and enjoy a collegial environment.

In many cases, the older workforce is also responsible for the care of elderly parents. Companies may face work interruptions, absenteeism and tardiness as a result of employees' caregiving responsibilities. In an effort to address these problems, Ford Motor Company offers free services of geriatric case managers who provide assessments of the elderly and care management plans (Van Yoder & Goldberg, 2002). The 1997 Families & Work Institute's Study of the Changing Workforce reported that "the quality of employee jobs and the supportiveness of the workplace are

the most powerful predictors of job satisfaction, employee commitment, and retention" (O'Toole & Ferry, 2002). Therefore, companies that provide elder care benefits to their employees stand to gain a competitive advantage by creating an employee-centered environment.

WOMEN, MINORITIES AND IMMIGRANTS

Even though 77% of U.S. women work, as the labor force shrinks employers will find it necessary to recruit and retain more women as well as more minorities. Many non-working women are well-educated and could be easily incorporated into the workplace. However, it seems that women are graduating from college and entering the workforce at a lower rate. In order to entice today's woman into the labor force, employers may have to offer flexible hours, part-time work, pre-tax savings accounts, day care and sick child backup care (Bernstein, 2002).

Less educated women at the low end of the labor market are a relatively untapped source. Companies are beginning to offer health benefits even to part-time workers in order to entice applicants to fill low skill level jobs such as housekeeping and laundry positions.

The labor shortage could shift workplace and society attitudes. Diversity efforts may become increasingly important as employers find they cannot rely on the shrinking white labor pool (Bernstein, 2002). Little and Triest (2002) state that "over the coming century, new immigrants and the children of those immigrants will contribute well over half the increase in the U.S. population." Minority and immigrant families will produce approximately 85% of the 18-to-24 year olds over the next decade (Bernstein, 2002). The addition of more immigrants to the labor force will help fill job openings. However, while inflows of immigrant workers will help with the labor shortage, their arrival may reduce levels of education and possibly slow U.S. productivity growth.

More than 40% of these individuals will be from low income families and will not be able to attend college even if they want to. These potential future employees will be caught between rising tuition and shrinking financial aid. Even with Federal Pell Grants, 43% of the cost of a college education is left uncovered (Bernstein, 2002). Corporations can entice and retain women and minorities through creation of scholarship funds for the children of employees.

To further increase minority recruitment, companies should make sure that minorities know the selection process is fair and non-discriminatory. Ads should be designed and placed in ways that appeal to the minority applicant.

CONCLUSION

Today's HR manager is faced with a long "to do" list. Somewhere near the top of the list appears projected staffing needs. What the company does through its recruiting and retention practices will alter the effects of these projections and the productivity of the firm. As we move into the future, organizations will be shaping their labor forces in response to dramatic demographic

changes. The firms that strive to manage their workforce by responding to employee needs will enhance their position in the marketplace.

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NEGOTIATOR'S TRUST AND DISTRUST PERCEPTIONS AND MEDIATION STRATEGIES

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ABSTRACT

Though previous research on negotiation has focused the choices of strategies by third parties, not many of them looked at the consequences of those most-preferred strategies on negotiator behavior and attitudes. This study based on theories like procedural justice theory, attribution theory, naïve realism cognitive theory, and previous studies on mediation strategies to form hypotheses for future research. These hypotheses look to find whether concession in mediation with a trusting opponent will occur; whether negotiators make larger concessions when their mediators use various strategies when the opponent is distrustful; and whether trust and mediation strategy affect fairness judgments. In recognition of the broad theories involved in these issues, cross-cultural theories and group-value model are also discussed.

INTRODUCTION

In 1986 Peter Carnevale first offered his Strategic Choice model of mediation (Carnevale, 1986) - a model that has received substantial empirical support (e.g., Carnevale and Henry, 1989; see Carnevale and Pruitt, 1992 and Carnevale, Conlon, Hanisch, and Harris, 1989 for reviews). This model posits that mediators tend to rely upon strategies such as "pressing" the parties to resolve their dispute, "seeking integrative solutions," "inaction," and "compensating" one or both parties. Not intended as a comprehensive model of mediation (Carnevale, 1992), the strategies that are described in the model may be used in conjunction with other strategies that have been advocated by other theorists (e.g., Kressel's 1972 "reflexive" rapport-building strategy). Because this model was designed to predict mediator strategy, it is understandable that most research has been confined to investigating the choice of strategies by third parties; relatively little work has been done looking at the consequences of those most-preferred strategies upon negotiator behavior and attitudes.

Using the Carnevale framework, previous research has also looked at the impact of a variety of situational factors such as time pressure upon mediator strategy (Carnevale, O'Connor, and McCusker, 1993; Carnevale and Conlon, 1988). One important situational factor for a mediator to consider is whether the parties trust each other. Ross and Wieland (1996) have investigated the role

that "trust" plays in the selection of strategies by informal mediators. The researchers report that of the strategies listed above, informal mediators relied heavily upon three: (1) "pressing," (2) "inaction," and (3) "rapport-building" when the negotiators did not trust each other - and "pressing" was particularly common when there was high time pressure. However, their research does not indicate whether these commonly-used strategies are actually effective under these conditions. Nor have researchers examined the reactions of disputants to various mediation strategies when the opposing negotiator is distrusting vs. trusting. The present study seeks to test the effects of "pressing," "inaction," and "rapport-building" mediator strategies upon negotiator behavior and attitudes under trust and distrust conditions.

THE CONSEQUENCE OF TRUST AND DISTRUST

It is important that we define "trust." Although many definitions exist (see Bigley and Pearce, 1998; Deutsch, 1958; Kee and Knox, 1970), and there is some debate as to whether "trust" and "distrust" are polar opposites or qualitatively different (see Lewicki, McAllister, and Bies, 1998), many definitions are similar to that offered by Rousseau, Sitkin, Burt, and Camerer (1998): "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (p. 395). Similarly, Kramer (1999) states that, "trust entails a state of perceived vulnerability or risk that is derived from individuals' uncertainty regarding the motives, intentions, and prospective actions of others on whom they depend". Other researchers, instead of emphasizing what trust is, argue that if the level of trust and the level of interdependence match is the most important (Wicks, et. al., 1999). Many scholars agree that, in a negotiation context, trust involves the interrelated components of (a) goodwill, (b) predictability, and (c) a problem-solving orientation (Shapiro, Sheppard, & Cheraskin, 1992; Friedman, 1993; Kimmel, Pruitt, Magenau, Konar-Goldband, and Carnevale, 1980; Johnson-George and Swap, 1982). One very important consequence of trust in negotiation situations is vulnerability or risk-taking (Rousseau et al., 1998; Pruitt, 1981). In this study we emphasized negotiator risk-taking as a consequence of trust as described by Pruitt (1981). Based on Pruitt's discussion (and consistent with the Ross and Wieland, 1996 study), we expect bargainers who trust the other person to be more willing to (a) make direct statements of trust directed toward the other negotiator, (b) forfeit opportunities to compete with the other and to express faith that the other will not compete either (what Pruitt calls the loss of opportunity for competitive behavior), (c) share accurate information (what Pruitt calls risking information loss), (d) make unilateral concessions and express faith that the other will behave likewise (what Pruitt calls risking position loss), and (e) offer concessions even at the risk of appearing weak (what Pruitt calls image loss). Even if scholars disagree on specific definitions of trust and distrust, most would probably agree that a negotiator who indicates that he or she is willing to risk these various types of loss is more trusting that a negotiator who indicates that he or she is unwilling to take these types of risk.

Understanding the effectiveness of specific mediator strategies (e.g., "pressing," "inaction," and "rapport-building") under specific situational conditions (e.g., one negotiator is either trustful or distrustful) is important for third party training and development. Several authors have noted that there are multiple criteria available for measuring the effectiveness of third-party interventions (e.g., McGrath, 1966; Kochan & Jick, 1978). One set of criteria of interest is whether both the mediator and the mediation procedure are seen as fair (Lind and Tyler, 1988; Wittmer, Carnevale, and Walker, 1991). If the parties feel that the third party is unfair or that the mediation procedure is unjust, then the negotiators are unlikely to rely upon that procedure or third party for future disputes. Therefore, issues pertaining to procedural justice and the fairness of the mediator are of interest in the present study. Another criterion of interest to many professionals and researchers is the level of negotiator concession making; this is because concession making is often predictive of settlement (Rubin and Brown, 1975). The present study will also consider this dimension of effectiveness.

EFFECTS OF MEDIATOR STRATEGY ON PROCEDURAL JUSTICE BELIEFS

The beliefs that disputants have regarding the fairness of a third party procedure and of the third party's actions have significant implications for the future use of any dispute resolution procedure as well as the acceptance of and compliance with any procedural outcomes (Sheppard, Lewicki, & Minton, 1992; Lind and Tyler, 1988). Therefore, it is important to investigate whether the variables of interest have significant effects upon procedural justice beliefs. When negotiators participate in a third-party procedure such as mediation, the enactment of that procedure can influence disputant evaluations of the third party (Ross, Conlon, and Lind, 1990). Other research also suggest that the process and decision control have great impact on evaluations of procedural neutrality, the trustworthiness of authorities and the degree to which people involved in the procedures feel that their status is recognized (Tyler and Blader, 2000). Further, research on third-party bias has demonstrated that a third party will be perceived as fair if he or she acts in an even-handed manner (Conlon & Ross, 1993). As mediators employ different strategies to enact the procedure, they may be perceived differently by the individual negotiators. Let us consider the three widely-used strategies from the Ross and Wieland study.

Putting pressure on the parties ("pressing") was frequently chosen by informal mediators when the parties did not trust each other. How is pressing perceived by the negotiators? A negotiator who faces a distrustful opponent may recognize that the negotiation task is very difficult due to the distrust and that a strong form of third-party intervention is appropriate. This may even be inferred after the fact: a negotiator may say, "my opponent was not very trusting; if my mediator was using this 'heavy-handed' tactic, there must have been a need for it." Such inferences are consistent with attribution theory. Attribution theory suggests that people search for the causes of others' behaviors as they seek to make sense of the world (Kelley, 1971). If negotiators infer that the opposing negotiator is not trusting, or they make other internal attributions about their opponent,

then they may believe that stronger responses, such as "pressing," are warranted. Previous research has found that people endorse the use of "heavier" tactics against an opponent when they make internal attributions about the other person (Pruitt, Rubin, and Kim, 1994; Holmes and Miller, 1976). This leads to our first hypothesis:

Hypothesis 1:	Negotiators whose mediators use a "pressing" strategy will report a greater need for the mediator's assistance when they face a distrusting opponent than when they face a trusting opponent.

However, this strategy may have mixed consequences. While the individual negotiator may feel that the mediator is appropriate in using pressing on an opponent, the negotiator may generally feel that it is unfair for the mediator to use this strategy on him or her. This is consistent with "naïve realism" cognitive theory where people tend to describe themselves in positive terms and believe that they are taking reasonable positions on the issues (Ross and Ward, 1996). Heavy-handed tactics such as "pressing" are not only unwarranted, but may even be seen as unfair when applied to themselves (e.g., "pressing" may signal that the mediator is biased in favor of the other party and is therefore acting unfairly). This may be true regardless of whether the opponent is trusting. By contrast, if a mediator relies upon an "inaction" strategy, or attempts to "build rapport" between the disputants, he or she is probably perceived as acting in an even-handed (if somewhat uninvolved) manner. This suggests a second hypothesis:

Hypothesis #2:	Subjects whose mediators use a "pressing" strategy believe the mediator is less fair than subjects whose mediators use "inaction" and "rapport-building" strategies.

THE EFFECTS OF MEDIATOR STRATEGY ON CONCESSION MAKING

Mediator strategies also can have a significant impact upon negotiator concession making (Wall, 1981). Harris and Carnevale (1990) report that if negotiators learned that their third parties stood ready to significantly lower their payoffs (a very powerful form of "pressing"), then the negotiators generally made greater concessions to their opponents--apparently in an attempt to keep the third party from executing this threat. Lim and Carnevale (1990) also observed that the "pressing" strategy is effective when negotiator hostility is high and trust is low. Finally, Carnevale, Lim, and McLaughlin (1989) determined that mediator strategies aimed at building trust and rapport between the parties were effective for both increasing the likelihood of settlement and for improving

the relationship between the disputants when hostility was high. We discovered no such findings in the published literature for an "inaction" strategy. Together, these findings suggest the following hypothesis:

Hypothesis #3:   Subjects with mediators who follow a "pressing" strategy or a "rapport-building" strategy will make larger concessions to the opponent than subjects whose mediators pursue an " inaction" strategy.

EFFECTS OF TRUST ON PROCEDURAL JUSTICE BELIEFS

In addition to investigating the effects of mediation strategies generally, we wish to compare these strategies under different trust conditions. Will identical mediation interventions be viewed differently when the opponent indicates that he or she trusts the subject relative to when the opponent communicates distrust? The literature suggests that when the opponent distrusts the subject, conflict intensity is heightened; under such conditions subjects may be more receptive to mediation (see Pruitt, Rubin, and Kim, 1994 for a review). Under such conditions, subjects may be more likely to view the mediation procedure as satisfactory and fair. However, if subjects already trust their counterpart, they may believe that mediation is an unnecessary intrusion. Such beliefs may generate resentment toward the procedure. This logic suggests the following hypothesis:

Hypothesis #4:   Subjects who bargain with a trusting opponent will view the mediation procedure as less fair and satisfactory than subjects who face a distrusting opponent.

THE EFFECTS OF TRUST ON NEGOTIATION CONCESSION MAKING

In a mediation setting, one important measure of third-party effectiveness is whether the mediator persuades a disputant to abandon his or her initial bargaining position and makes the concessions necessary to conclude an agreement (Carnevale, Putnam, Conlon, and O'Connor, 1991). Do statements of trust or distrust between negotiators influence concession making? The literature offers two competing hypothesis. On one hand, dyadic bargaining studies suggest that trust may be a facilitating condition for cooperative concession making, and higher joint profits (Kimmel, Pruitt, Magenau, Konar-Goldband, and Carnevale, 1980; Kee, 1970). Pruitt and Rubin (1986) also suggest that negotiation may more effective when the negotiators trust each other because conditions have been created for effective integrative bargaining.   Finally, Carnevale, et al. (1991) surveyed community mediators and found that the dispute characteristics, "One or both did not trust the other

party," and "One or both parties were very hostile to the other party" helped distinguished successful from unsuccessful community mediation.

But are expressions of mutual trust necessary for mediation to be successful? Perhaps not. Consider a situation where one negotiator offers a series of modest, unilateral concessions. According to Osgood (1962; 1966), this series of concessions is a key component in eliciting concessions from the other side (also see Lindskold, 1978 and Lindskold, Bentz, and Walters, 1986). Perhaps it is the series of unilateral concessions - not expressions of trust or distrust in the other - that elicits concessions from the other party. Research investigating "trust" sometimes finds no difference in negotiated outcomes due to trust (Kee, 1970; Butler, 1995). While high levels of distrust may make mediation more difficult, the fact that one side "trusted enough" to make modest concessions may outweigh any accompanying statements. The opponents' past concessions may have a large effect on the negotiator when the negotiator decided how much to concede. If indeed, "actions speak louder than words," then there should be no difference between trust, distrust, and (no-message) control conditions when the opponent makes identical concessions.

Together, these studies suggest two competing hypotheses:

Hypothesis #5a:	Subjects who bargain with a trusting opponent will make larger concessions to that opponent than bargainers who face a distrusting opponent.
Hypothesis #5b:	Subjects who bargain with a trusting opponent will not make larger concessions to that opponent than bargainers who face a distrusting opponent.

To summarize, in this study we seek to determine whether subjects will make larger concessions in mediation with a trusting opponent; we also investigate whether negotiators make larger concessions when their mediators used either "pressing" or "rapport-building" strategies, particularly when the opponent was distrustful of the subject. We also seeks to determine whether trust and mediation strategy affect fairness judgments.

DISCUSSION

This study, based in part on the Control Model of Procedural Justice (Thibaut & Walker, 1975; 1978) and rooted in social exchange theories, presents six hypotheses, including two competing hypotheses. Other literatures rooted in an ongoing relationship with an actual group could be used for future study. For example, theoretical models such as the Group-Value model (Tyler and Lind, 1992), which is based on social identity theory (Tajfel, 1969; 1978) can be explored. That is, people are sometime not perfectly rational in an economic sense; they do not always seek to maximize their own utilities but are affected by their relationship with, and identification with the

group; trust may be a more salient variable in a study that incorporated such variables more extensively than did the present study (Brewer and Kramer, 1986; Messick and Brewer, 1983).

In the future, the proposed six hypotheses can be tested in a cross-cultural setting in the future too. In other words, procedural preferences differ across culture because different cultures foster different beliefs and values. A future study in different cultural contexts can be conducted because 1: the group value model should be able to supplement the control model most successfully in the aspect of cross-cultural differences. 2: culture differences also may impact people's perceived procedural fairness (Brockner et al., 2000).

Finally, the experiment to be conducted to test these effects only under high time pressure conditions.   Although this is the most interesting time pressure condition, based on previously-published results, it nevertheless remains for future research to test whether similar effects would be obtained when time pressure was low; "pressing" may be seen as acceptable to use under high time pressure conditions, but may be unacceptable to negotiators under low time pressure.

In summary, we hypothesize that mediator strategy significantly influences negotiators' perceptions of justice for both the mediation procedure and for the mediator's actions. These effects shall be independent and support other research (e.g., Ross, Conlon, and Lind, 1990) suggesting that the enactment of a dispute resolution procedure is as important as the procedure itself. This is important for mediators to know because disputants' beliefs regarding the fairness of both the procedure and the mediator's actions may influence the extent to which disputants cooperate with their mediator. Future research might look at other forms of cooperation (such as revealing information such as one's "limits" to the mediator; truthfully answering a mediator's queries, etc.).

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ENUMERATION OF THE ORGANIZATIONAL CULTURE PRESCRIBED BY THE DEMING THEORY OF MANAGEMENT

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ABSTRACT

Dr. W. Edwards Deming (1900-1993) is widely credited as the management philosopher most influential in the economic recovery of post-war Japan as well as the 20th Century ascent of quality as a strategic approach toward organizational leadership and culture. His philosophy effected a vast amount of profound influence and recognition, yet there exists little formal academic research on topic in the literature, despite a number of calls to research.

This work contributes a set of numerical values based upon a mature, established survey instrument that models a set of constructs regarding organizational culture. The instrument was completed by a significant number of Deming subject matter experts. The responses form a quantitative profile of the organizational culture prescribed under Demingism.

Analysis finds significant difference between the Deming quantitative profile and the instrument's normative values along all of its constructs. The derived values appear to be in rational agreement with major tenets of Deming's philosophy. Informal evidence suggests that approximately one-third of the Demingism is represented within the instrument's model.

The values found can be used to test Demingism against various organizational outcomes or to compare Demingism with other organizational cultures.

W. EDWARDS DEMING

Dr. W. Edwards Deming (1900-1993) is widely credited as the management philosopher most influential in the economic recovery of post-war Japan as well as the 20th Century ascent of quality as a strategic approach toward organizational leadership and culture (Bean, 1985; Dixon, 1987; Kusumoto, 1987; Lazzareschi, 1993; Milstein, 1992). Deming's management philosophy is typically considered as significant as, and generally contradicts most aspects of, Taylorism (Knouse, Carson, & Carson, 1993; Rossler & Beruvides, 1994; Tipton, 1994; Washbush, 2002). In the words of one Deming expert (Aguayo, 1990), Demingism "destroys every important notion of

management, shows that the important things learned in business school are not only wrong but that they lead to inferior results, poor quality, and customer dissatisfaction." Today, both of Deming's two major management books (Deming, 1986, 1994) enjoy continuing sales in ten languages and well over 100 self-organized Deming study groups exist throughout the world.

The significance of Deming's managerial philosophy was, and continues to be, recognized by the most prominent of leaders and institutions. In recognition of his contributions toward the recovery of the Japanese economy, The Second Order Medal of the Sacred Treasure was bestowed on Deming by Emperor Hirohito. In 1950, Japan's highest national award for quality, named the Deming Prize, was established by JUSE, the Japanese Union of Scientists and Engineers (Union of Japanese Scientists and Engineers, 2003). In 1983, Deming was elected to the National Academy of Engineering. In 1985, he was titled Distinguished Visiting Scholar at Columbia University. In 1986, he was inducted into the Science and Engineering Hall of Fame. Deming received the National Medal of Technology from President Reagan in 1986 "for his advocacy to corporations and nations of a general management philosophy that has resulted in improved product quality with consequent betterment of products available to users as well as more efficient corporate performance." Shortly thereafter, Deming received an award for his "Distinguished Career in Science" from the National Academy of Sciences. Newt Gingrich lectured on the value of Deming methods, finding that they would be "one of the five pillars upon which American civilization would be renewed in the 21st century" (Gingrich, 1995). The cover story of the April 22, 1991 edition of U. S. News and World Report (Boorstin & Parshall, 1991) named its "nine hidden turning points in human history;" its ninth turning point was Deming's fathering of the Japanese quality revolution. In 1994, Deming was inducted into the Junior Achievement National Business Hall of Fame (Junior Achievement, 2003). In 1995, the American Statistical Association established the Deming Lecturer Award in honor of Deming's accomplishments (American Statistical Association, 2003).

More recent recognition has been no less auspicious. Prior to his passing, Deming was honored with advanced degrees by The University of Wyoming, Rivier College, The University of Maryland, Ohio State University, Clarkson College, The University of Miami, George Washington University, The University of Colorado, Fordham University, The University of Alabama, Oregon State University, American University, The University of South Carolina, Yale and Harvard. Fortune stated that "together, Fredrick Taylor, Peter Drucker and W. Edwards Deming have had more influence on the conduct of business and the quality of life in the United States and abroad more than any CEO" (Stewart, Taylor, Petre, & Schlender, 1999). The Los Angeles Times listed Dr. Deming as among the fifty people who most influenced business in the 20th Century (Magnier, 1999). A recent book published by the American Management Association (Crainer, 1999) included in its list of "The 75 Best Management Decisions Ever Made" that of Toyota's acceptance of Deming's advice.

Unfortunately, it must be assumed that the reader is generally familiar with the major facets of Demingism, as the scope of the topic prevents any reasonable synopsis within the confines of this

paper. For such a discussion, the reader is directed to either Deming's two major books (Deming, 1986, 1994) or popularizations by Aguayo (Aguayo, 1990), Neave (Neave, 1990) and/or Walton (Walton, 1986).

REVIEW OF THE LITERATURE AND CALLS TO RESEARCH

Clearly, Deming's management philosophy, having effected such a vast amount of profound influence and recognition, is deserving of academic study under scientific method. Yet there exists little formal academic research on topic in the literature. The recent review of the literature for this study investigated the entries within databases providing full coverage for well over 10,000 journals and trade magazines; that search located approximately 150 articles, forty books, 100 article abstracts, fifteen dissertation abstracts, 100 newspaper articles and 100 newspaper article abstracts regarding Demingism. Among them, only twenty works were identified that could be fairly described as rigorous, quantitative analytical attempts to build knowledge via generally accepted scientific methods. The balance of the literature is best described as trade press cases informally anecdoting successful improvement through employment of Demingism, articles seeking to clarify and or exemplify some portion of Demingism or articles seeking to restate basic Deming principles toward a niche or neophyte audience, functional area or industry.

This lack of formal investigation exists despite a number of calls to research. In fact, one call for research into the Deming prescription found in the literature is explicitly based upon this deficiency. Anderson, Rungtusanatham and Schroeder (Anderson, Rungtusanatham, & Schroeder, 1994) state that "despite the apparent effect that the Deming management method has had on the practice of management around the world, there is little empirical research support for its effectiveness beyond anecdotal evidence. … Academic attention on the Deming management method has, in fact, been surprisingly sparse. … Other researchers are encouraged to critically examine the Deming management method approach to quality management."

A number of other calls are equally unequivocal. Saunders and Saunders (Saunders & Saunders, 1994) state that "there is also general agreement, however, that Deming's approach … lack[s] an emphasis on careful analysis …" Dow, Samson and Ford (Dow, Samson, & Ford, 1999) state "… in parallel to this trend among practitioners [to adopt total quality management practices] … a plethora of prescriptive quality management literature has also emerged … [such as] Deming's Fourteen Points. While these claims are seldom accompanied by rigorous supporting evidence, they do have some degree of face validity. Similar anecdotal evidence and inferential evidence has been put forth by a variety of consultants, quality associations, and governmental agencies. The disappointing aspect of this debate is that after more than two decades of such claims, exceptionally little … rigorous empirical research has been conducted to verify them." Rungtusanatham, Forza, Filippini, and Anderson (Rungtusanatham, Forza, Filippini, & Anderson, 1998) reiterate the point that "despite the paucity of scientific evidence attesting to the effectiveness of W. Edwards Deming's

quality management approach, it has received considerable attention from manufacturing and service organizations around the world."

Accordingly, this study addresses that recognized deficiency with more formal research of Demingism, a management philosophy frequently recognized, through anecdotal case study, inferential evidence and prestigious honors, as being highly effective.

RESEARCH QUESTION AND METHOD

Given the lack of existing research, special consideration was given to the aim of this study, in order to ensure a useful foundation for future work. Ideally, future research would ultimately result in the ability to posit the relationship between Demingism and successful organizational outcomes such as profitability, efficiency and/or worker satisfaction. However, this is not, at this point in time, truly possible since there are no established Demingism operational constructs, or associated numerical values, that could be employed in such comparisons. In fact, there is no valid method for either assuring or falsifying Demingism in practice. A set of such constructs and associated numerical values are, therefore, prerequisite to further formal study of the Deming philosophy. Accordingly, this work contributes a subset of such numerical values, specifically a set of numerical values based upon a mature, established set of constructs regarding organizational culture. Hence the primary research question addressed by this study is "What specific numerical values would result from measuring the organizational culture prescribed by Demingism?" The values that resulted from this study can be cited and employed by future researchers in the testing of the relationship between the organizational culture prescribed under Demingism and various organizational outcomes. The values can also be used to directly compare the organizational culture prescribed by Demingism with other organizational cultures when measured in a similar manner.

The set of aforementioned organizational constructs are sourced from, and embedded within, the primary survey instrument employed in this study, the Work Environment Scale (Moos, 1994b). The Work Environment Scale (WES) was developed in the 1970s by Dr. Rudolf H. Moos of Stanford University as part of his series of Social Climate Scales (Moos, 1994a). Other instruments in that set of scales are targeted and adjusted to measure culture, climate and environment in more specific settings, such as health care and educational organizations. The Work Environment Scale, however, is intended to be applicable for use in measuring and comparing culture, climate and environment over the broadest range of organizations. Literature searches reveal that the Work Environment Scale has been employed as the primary research instrument in hundreds of formal studies, implying that the instrument is generally acceptable for use in research. Further, Vaux (Vaux, 1992) states that "the theoretical underpinnings of the instrument … have worn well" and that the instrument is reliable and valid, having been developed with due concern for psychometrics. Additional evidence of the reliability and validity of the Work Environment Scale instrument is

readily available in the literature (Constable, 1983; Flood, 1987; Moos, 1994a, 1994b; Weyer & Hodapp, 1978; Yarne, 1983).

The development of the Work Environment Scale instrument was based upon the organizational theories of Henry Murray (Moses, 1994). Murray (Murray, 1959) theorized that organizational outcomes are a consequence of the interaction of the needs of the individual and the dictates of the organization's culture and environment. Murray viewed an organization's culture as comprised of three major dimensions: the nature of its interpersonal relationships, its capacity for personal growth and its capacity for change. Within the Work Environment Scale instrument, Moos operationalized these three dimensions into ten specific constructs. The interpersonal relationship dimension is operationalized as the degree of involvement, the degree of coworker cohesion and the degree of supervisor support present in the organization. The personal growth dimension is operationalized as the degree of autonomy, the degree of task orientation and the degree of work pressure present in the organization. The change capacity dimension is operationalized as the degree of clarity, the degree of managerial control, the degree of innovation and the degree of physical comfort present in the organization (More specific definitions of these operationalizations are found within the Data Analysis section of this study.). The instrument yields a numerical value for each construct, within a zero-to-nine scale, where nine represents the highest degree. Moos developed normative sample mean values for each of the ten constructs through the surveying of 8,146 people belonging to 116 work groups.

Most of these ten constructs, as well as Murray's underlying model, initially appeared to generally correspond with a number of central organizational themes that comprise Deming's philosophy, thereby justifying its use toward developing a set of measures of the organizational culture prescribed under Demingism. For example, Deming continually advocated a high degree of worker autonomy to pursue quality and improvement. One better known Deming quotation regarding this point is that he believed "the greatest waste in America is failure to use the abilities of people" (Deming, 1986). His strong position regarding the elimination of production quotas is also an advocacy of higher worker autonomy. Additional evidence collected during this study, in the form of a supplementary discussion question, provided additional support regarding the appropriateness of this instrument.

In this study, the Work Environment Scale instrument was distributed to, and completed by, a number of individuals that can be regarded as Demingism subject matter experts. Prior to this study, there was no generally accepted list of Deming subject matter experts, however fifty three individuals were identified as a population on the basis that they had relatively extensive professional contact with Deming, published extensively on the topic of Demingism, remained centrally active in the Deming community, and/or are credited by name in Deming's major written works. The responses of these participants resulted in mean values for each of the ten constructs that form a quantitative "profile" of the organizational culture prescribed under Demingism.

DATA ANALYSIS AND RESULTS

A satisfactory survey response rate was obtained. Of the fifty-three individuals originally identified in the population, six individuals either declined participation, self-disqualified their expertise during pre-contact or simply could not be located. Surveys were mailed to the remaining forty seven individuals. Twenty-three usable Work Environment Scale responses were returned, representing 48.9% of those individuals surveyed. Twenty-two usable supplementary discussion responses were returned, representing 46.8% of those individuals surveyed. Information was obtained from approximately nearly half of the individuals who did not return any portion of the survey regarding their lack of response; the information suggested low likelihood of non-response bias.

The Work Environment Scales responses returned from the Deming subject matter experts were aggregated to determine the numerical values for each of the ten constructs, then compared to the corresponding normative sample mean values as determined by Moos. It is important to note that Moos' normative sample means do not constitute a set of measures for a "normal" or "typical" organizational culture, but rather are a measure of central tendency. Further, while Moos has provided associated variances, no information is provided regarding their underlying distribution; hence normality cannot be assumed. In fact, the recommended test for significance suggests that the underlying distributions of the normative mean values are more likely uniform than normal in nature. "Work Environment Scale profile elevations typically are interpreted as significant at approximately one standard deviation above the approximate normative mean. … Work Environment Scale users would be well advised to interpret differences on the order of a standard deviation or more as clinically relevant" (Moses, 1994). Hence, significant difference between Demingism values and normative mean values should be interpreted only as clear evidence of deviation from the central tendency of organizational culture values, rather than evidence of deviation from any kind of "normal" or "typical" organizational culture values.

Significance was found for all three constructs within the Nature of Interpersonal Relationships dimension. The degree of involvement, as defined by Moos, is the degree to which employees are concerned about and committed to their jobs. Testing the derived Demingism involvement value of 8.174 against the normative mean involvement value of 5.710 found significance. Hence we conclude that Demingism expects a higher degree of involvement than that which organizations tend toward. Further, testing the involvement construct via a traditional t-test with a pooled variance resulted in a highly significant p-value of 0.004, which we interpret as strong evidence that Demingism expects a higher degree of involvement than the entire population of organizational cultures as represented by the Moos involvement normative mean and variance. The degree of coworker cohesion, as defined by Moos, is the degree to which employees are friendly and supportive of one another. Testing the derived Demingism coworker cohesion value of 7.957 against the normative mean coworker cohesion value of 5.520 found significance. Hence we conclude that

Demingism expects a higher degree of coworker cohesion than that degree toward which organizations tend. The degree of supervisor support, as defined by Moos, is the degree to which management is supportive of its employees and encourages employees to be supportive of one another. Testing the derived Demingism supervisor support value of 7.783 against the normative mean supervisor support value of 5.180 found significance. Hence we conclude that Demingism expects a higher degree of supervisor support than that degree toward which organizations tend.

Significance was also found for all three constructs within the Capacity for Personal Growth dimension. The degree of autonomy, as defined by Moos, is the degree to which employees are encouraged to be self-sufficient and to make their own decisions. Testing the derived Demingism autonomy value of 7.174 against the normative mean autonomy value of 5.470 found significance. Hence we conclude that Demingism expects a higher degree of autonomy than that degree toward which organizations tend. The degree of task orientation, as defined by Moos, is the degree of emphasis on good planning, efficiency, and getting the job done. Testing the derived Demingism task orientation value of 7.739 against the normative mean task orientation value of 5.860 found significance. Hence we conclude that Demingism expects a higher degree of task orientation than that degree toward which organizations tend. The degree of work pressure, as defined by Moos, is the degree to which high work demands and time pressure greatly dominate the job milieu. Testing the derived Demingism work pressure value of 3.652 against the normative mean work pressure value of 5.310 found significance. Hence we conclude that Demingism expects a lower degree of work pressure than that degree toward which organizations tend.

Further, significance was found for all four constructs within the Capacity for Change dimension. The degree of clarity, as defined by Moos, is the degree to which employees know what to expect in their daily routine and how explicitly rules and policies are communicated. Testing the derived Demingism clarity value of 7.565 against the normative mean clarity value of 4.910 found significance. Hence we conclude that Demingism expects a higher degree of clarity than that degree toward which organizations tend. The degree of managerial control, as defined by Moos, is the degree to which management uses rules and procedures to keep employees under control. Testing the derived Demingism managerial control value of 3.217 against the normative mean managerial control value of 5.260 found significance. Hence we conclude that Demingism expects a lower degree of managerial control than that degree toward which organizations tend. The degree of innovation, as defined by Moos, is the degree of emphasis on variety, change, and new approaches. Testing the derived Demingism innovation value of 7.435 against the normative mean innovation value of 4.090 found significance. Hence we conclude that Demingism expects a higher degree of innovation than that degree toward which organizations tend. The degree of physical comfort, as defined by Moos, is the degree to which the physical surroundings contribute to a pleasant work environment. Testing the derived Demingism physical comfort value of 7.130 against the normative mean physical comfort value of 4.240 found significance. Hence we conclude that Demingism expects a higher degree of physical comfort than that degree toward which organizations tend.

Table 1 summarizes the results of the ten aforementioned tests of significance:

Table 1: Results of Significance Tests, Demingism versus WES Normative Values			
Construct	Demingism Mean	WES Normative Mean	Higher/Lower Degree Under Demingism
Involvement	8.174	5.710	Higher
Coworker Cohesion	7.957	5.520	Higher
Supervisor Support	7.783	5.180	Higher
Autonomy	7.174	5.470	Higher
Task Orientation	7.739	5.860	Higher
Work Pressure	3.652	5.310	Lower
Clarity	7.565	4.910	Higher
Managerial Control	3.217	5.260	Lower
Innovation	7.435	4.090	Higher
Physical Comfort	7.130	4.240	Higher

In addition to completion of the Work Environment Scale instrument, the Deming subject matter experts were asked to respond to the following discussion question: "What percentage of the Deming philosophy do you believe is addressed by the preceding survey instrument?" The intent of the question was to seek support for the initial assumption that the Work Environment Scale instrument generally corresponds to a number of central organizational themes that comprise the Deming philosophy.

As previously stated, twenty-two usable supplementary discussion responses were returned by the Deming subject matter experts, representing 46.8% of those surveyed. Table 2 summarizes the basic descriptive statistics derived from the twenty-two responses, while Table 3 summarizes the frequency of the responses using 10% bins.

Table 2: Descriptive Statistics, Percentage of Demingism Content within WES Instrument							
Mean	36.2%	Std. Dev.	24.2%	Minimum	1.0%	Range	87.0%
Median	30.0%	Variance	5.9%	Maximum	88.0%	Mode	50.0% (f=4)

Table 3: Frequency Table, Percentage of Demingism Content within WES Instrument			
10%	4	60%	1
20%	5	70%	1
30%	3	80%	2
40%	1	90%	1
50%	4	100%	0

The dispersions observed in the standard deviation, range, as well as across the frequency bins, evidence that there was no clear consensus among the Deming subject matter experts regarding the actual percentage of content. However, the mean, median and mode do all provide strong informal evidence that the Work Environment Scale content does, beyond a trivial extent, correspond to a number of central organizational themes that comprise the Deming philosophy.

Based upon the dispersion across the frequency bins, that correspondence can reasonably be said to be less than, or equal to, 50% of the total Deming philosophy. Some insight into the nature of the unaddressed percentage of Demingism can be drawn from the discussions included with the percentage responses. Several of the discussions noted that the Work Environment Scale instrument did not address Demingism's systematic perspective, emphasis on the importance of statistical variation, supplier/customer philosophies or epistemological theory. These discussions suggest that the unaddressed percentage of Demingism does not pertain to facets of organizational culture climate or environment, further strengthening the argument that the instrument is highly explanatory with regard to the organizational culture prescribed by Demingism.

DISCUSSION OF RESULTS

Most of the Demingism WES values derived from the appear to be in general agreement with major tenets of Deming's philosophy. The following discussion provides the reader with information, quotations and rationalizations regarding Deming's philosophy that support the found Demingism values. The Tayloristic managerial perspective is also discussed in contrast.

A significantly higher degree of worker involvement under Demingism was found. Demingism does expect workers to be far more "involved," concerned and committed regarding their jobs. He repeatedly focuses upon the important effect that pride and intrinsic motivation can have upon the quality of work. Taylorism, in contrast, strives to disengage the worker from the task decisions that involvement and concern would provoke, since workers are viewed as unqualified to make task decisions. Rather, Taylorism expects workers to view their job as little more than the following of managerial edict. Taylor makes this posture clear, for example, in his classic pig iron

example, where he finds the "work to be so crude and elementary in its nature that ... it would be possible to train an intelligent gorilla so as to become a more efficient pig-iron handler than any man ..." (Taylor, 1911). Again, the degree of involvement found for Demingism is higher than that of the entire population of organizational cultures upon which the normative values are based.

A significantly higher degree of coworker cohesion under Demingism was found. Deming argues for benefits to be gained by workers being mutually supportive and cooperative. Deming's argument is that the greatest effect on outcomes is often caused by the interaction of system entities, rather than the entities themselves; he states that "the greater the interdependence between components, the greater the need for communication and cooperation between them" (Deming, 1986). He argues that the bulk of the capability of a company comes, not from individual abilities, but from the interactions of those individuals, "helping or hurting each other in pairs, triplets, etc., in teams, platforms, chimneys, divisions, departments" (Deming, 1994). Taylorism, on the other hand, advocates a division-of-labor perspective and delegates the coordination of system interactions to management.

A significantly higher degree of supervisor support under Demingism was found. Demingism expects supervisors, managers and leaders to adopt a highly supportive role toward labor's effort to do good work, as opposed to merely managing "by ordinal numerics and percentages" (Deming, 1986). Deming states that the aim of leadership "should be to help people ... to do a better job" (Deming, 1986) and that he views a manager as "coach and council, not a judge" (Deming, 1994), "a colleague, counseling and leading his people on a day-to-day basis"(Deming, 1986). The managerial focus upon numerical performance measurement and quantitative analysis of work standards that Deming decries is more generally associated with Taylorism.

A significantly higher degree of autonomy under Demingism was found. Deming clearly advocates the self-sufficiency and decision-making ability of labor in a variety of ways. His oft repeated posture against quotas but is one example: "one way to move away from quotas is to introduce ... a self-directed work force-anybody does anything that needs to be done" (Deming, 1994). Deming states that improvement "includes [giving] everyone, including production workers, a chance to ... contribute the best of their talents" (Deming, 1986). Demingism expects labor to be granted the autonomy to initiative improvement and quality efforts, rather than being first beholden to Tayloristic work rules, standards and quotas. According to Deming, lack of autonomy creates frustration and fear that prevents production workers from making "the contribution that they are eager to make" (Deming, 1986).

A significantly higher degree of task orientation under Demingism was found. Since workers within a Demingistic organization are given more autonomy and responsibility for continual improvement, they must also be more work-oriented and efficiency-oriented than "traditional" Tayloristic production line workers. Further, Deming often claims his approach will remove much of the inefficiency he observed under traditional management techniques, for example, he states that "the present style of management is the biggest producer of waste, causing huge losses ..." (Deming,

1994). In his books, Deming extensively notes examples of inefficiencies due to low quality, rework efforts, numerical distortions effected by quotas as well as inadequate managerial coordination and planning in general. The responses of the subject matter experts reflect their expectation that a Demingistic organization will be highly oriented toward the reduction of the types of inefficiencies to which Deming often referred.

A significantly lower degree of work pressure under Demingism was found. This finding is also in agreement with the Demingistic perspective. Demingism. Deming does not believe high work demands or time pressure should dominate the organizational culture. Rather, improvement of processes toward higher quality of product is a higher priority than meeting production quotas (as discussed above) or improvement of numerical measures of worker efficiency. Deming explains, for example, that pressure to meet quotas creates an "inability to serve the best interests of the company" (Deming, 1986) and that "the push for production robs [designers] of the chance to go into the production area to learn the problems created by the designs they construct" (Deming, 1986). Taylorism, on the other hand, is first concerned with outcome measures such as production rates and worker efficiency.

A significantly higher degree of innovation under Demingism was found. Deming's philosophy is centered upon continuous improvement of processes. Two of Deming's Fourteen Points for Management directly recommend a great amount of change and new approaches; specifically to "improve constantly and forever the system of production and service" and to "create constancy of purpose toward improvement of product and service" (Deming, 1986). Deming makes the relationship more explicit between constancy of purpose and innovation when he states that "establishment of constancy of purpose means acceptance of obligations [to] ... innovate ... new service and new product ... new materials ... method of production; possible changes in equipment for production ... new skills required ... training and retraining of personnel ..." (Deming, 1986). Traditional mass production and Tayloristic work design approaches tend to emphasize repetition before innovation.

CONCLUSION

The results of this study open a number of areas to future research. The values found can be used to identify organizations possessing a Demingistic organizational culture, and so compare that culture with various organizational outcomes such as profitability, efficiency and/or worker satisfaction. The values can also be used to falsify a claim that a particular organization is Demingistic in nature, to lend support to such a claim or to identify gaps between the organizational culture prescribed by Demingism and the actual organizational culture found. Further, the values can be used to compare organizations deemed successful by any particular criteria, in order to determine if successful companies are (or are not) Demingistic in nature. They may also be used to

compare Demingistic organizational culture with the organizational culture prescribed by other managerial philosophies.

The results also identify areas requiring further research. The extremely significant value determined for involvement calls for further examination and explanation. Given Deming's focus upon the pivotal role of leadership, higher significance could have been expected for the supervisor support construct. Other instruments should be located and employed to increment explanatory power with regard to Demingism's systematic perspective, emphasis on the importance of statistical variation, supplier/customer philosophies and epistemological theory.

In conclusion, this study contributes a degree of quantitative texture to Deming's ethereal philosophy, thereby facilitating numerous opportunities for further research employing traditional scientific methods. In addition, this study suggests a methodology for doing so with other managerial philosophies that influence organizational culture as well.

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JOB SATISFACTION IN OLDER WORKERS: THE CASE OF A GARMENT MANUFACTURING COMPANY IN NORTHWEST ARKANSAS

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ABSTRACT

Previous research in the area of age and job satisfaction has shown a positive relationship between employee age and reported levels of job satisfaction. Several models have been proposed to explain this relationship, including both a life cycle model and various situational models. In this study, results of an employee survey conducted among factory workers in rural Arkansas were analyzed. There was a decrease in overall job satisfaction after age 45. Perceptions of management fairness and problem resolution also decreased with age. The results indicate that the relationship between job satisfaction and age can best be explained by determining the effect of age and associated factors on employees' expectations and the probability that those expectations can be met in the specific work setting.

INTRODUCTION

The topic of work motivation, and one of its subcategories, job satisfaction, has received a level of attention from researchers in psychology and management that might well be characterized as "intense interest" (Steers & Porter, p. xi). The level of research activity in this area should not be surprising, though, as conclusions or results from this area of research are applicable to a wide range of human activities and can often be useful in a business setting, both to increase individuals' satisfaction with their work and to increase the effectiveness of organizations.

Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, p. 1300). As a human emotion, then, job satisfaction will certainly be affected by a great number of individual difference characteristics and environmental variables. One individual difference characteristic that has received a good deal of attention is the relationship of employee age to level of job satisfaction.

The topic of job satisfaction and the research in this area may be classified or broken down into two areas. The first area is a theoretical area: the definition of job satisfaction and its

dimensions. The second area is an applied area: determining which worker characteristics, outside factors, and management interventions affect job satisfaction. It is this area, and particularly worker characteristics, that will be the focus of this study.

AGE AND JOB SATISFACTION

The role of age in job satisfaction has been explained in several ways. Four alternative models are the career stage model (Hall & Mansfield, 1975), Rhodes' taxonomy (1983), Zeitz's situational model (1990), and the job change hypothesis suggested by White and Spector (1987).

The first model, the career stage model, looks at individuals as passing through various stages in their lives and careers. Hall and Mansfield (1975) use the career stage model to account for age differences in job satisfaction. In their research, they suggested three career stages. In the early stage (age 20 to 34), the individual is in a trial phase and the highest needs are for self fulfillment. Individuals in the second or middle stage (ages 35 to 50) are in a "stabilization substage" (p. 208), in which the need for self fulfillment is strong and in which the individual is looking for professional achievement. During the third and final stage (age 50+), the individual is in a "maintenance" (p. 208) stage. The individuals in this stage are most strongly motivated by the need for security, yet they also show a higher level of intrinsic motivation (as defined by Herzberg, Mausner, Peterson & Capwell, 1957).

In the taxonomy proposed by Rhodes (1983), age effects on work attitudes and behaviors are divided into four categories: Chronological Age, Cohort Effects, Period Effects, and Sources of Systematic Error.

The first category, Chronological Age, includes the effects of both psychosocial aging and biological aging. Psychosocial aging includes, but is not limited to, the individual's passage through life cycles. Biological aging is simply the individual's physical changes, such as physical strength or visual acuity.

Cohort Effects might also be referred to as generational effects. A cohort "consists of persons born at the same time and who age together" (Rhodes, p. 330). Thus, members of a generation have common experiences, such as the Depression or the civil rights movement, which affect their attitudes in similar ways.

Period Effects are the effects arising from the passage of time, including changes in the organization and in the outside environment.

Systematic Error Effects include the effects of selective sampling, selective survival, selective dropout, and testing effects. An example of selective dropout would be those individuals who dropped out of the labor force due to lack of job satisfaction.

The situational model proposed by Zeitz (1990) suggests that job satisfaction varies by situation and that age may contribute to or detract from individuals' job satisfaction, depending on other personal, organizational, and occupational influences.

White and Spector (1987) propose a model in which employee age is, itself, not a factor in job satisfaction, but is rather an indirect measure of such variables as tenure, salary, and job congruence, or the match between employee expectations and what the job actually provides. In support of this hypothesis are the results of a longitudinal study of job satisfaction (Hoppock, 1960), where several individuals reported greater job satisfaction when in jobs that matched their expectations and needs.

Age may affect job satisfaction and work attitudes in several different ways. Early research in this area found a U shaped relationship between age and job satisfaction. Herzberg, et al. (1957) found that individuals' level of job satisfaction declined through their career, then rose later in the individual's life. Saleh and Otis (1964) also found a curvilinear relationship, with individuals' level of satisfaction increasing until the pre retirement years, then decreasing. Other researchers have concluded that there is a positive, linear relationship between employee age and expressed job satisfaction (Gibson & Klein, 1970; Hulin & Smith, 1964). This interpretation is now generally agreed to be the most appropriate way to explain the observed relationship between employee age and job satisfaction (Rhodes, 1983).

AGE AND OTHER COMPONENTS OF JOB SATISFACTION

The research in this area indicates that there are a number of other subject variables and environmental factors which interact with age to affect job satisfaction.

There is some indication that gender may be a factor. In several studies cited by Rhodes (1983), there is evidence of a positive relationship between age and job satisfaction, but this relationship may not always be found among women. Hulin and Smith (1965) found age and job tenure to be predictive of job satisfaction for men, but could not use age or tenure to consistently predict levels of job satisfaction for women. However, Near, Rice and Hunt (1978) did not find that gender was related to job satisfaction. It should be noted, though, that research on women's job attitudes conducted in the 1960s or 1970s may have little or no applicability to women's attitudes in the 1990s.

Length of service or tenure is a variable closely associated with employee age. While individuals do change jobs, older employees will tend to have longer tenure than younger employees. In their study of rural Southern blue collar employees, Gibson and Klein (1970) found that tenure was negatively associated and employee age was positively associated with overall job satisfaction. However, Near, et al. (1978) found that job tenure was positively associated with job satisfaction.

The type of occupation or organization characteristics may also affect job satisfaction. In a study of three occupational groups in a government agency, Zeitz (1990) found that the relationship between age and job satisfaction differed between clerical workers, low achievement

professional workers, and high achievement professional workers. Near, et al. (1978) found that individuals' job satisfaction was positively associated with a measure of occupational prestige.

In this study, the effect of employee age on the level of job satisfaction will be examined. Also included in the analysis will be tenure and gender, to determine if there is any interaction between these variables and employee age on job satisfaction.

METHODOLOGY

The data used in this study were obtained as part of an employee attitude survey conducted in a garment manufacturing company located in northwest Arkansas. Questionnaires were completed by approximately 1,800 employees. A sample of 600 questionnaires (100 from each plant) were randomly chosen at the time of the survey for further analysis and are available for this study.

The employee attitude survey used was an 81-item questionnaire developed for the company. The questions were designed to cover the standard job satisfaction dimensions and to address concerns specific to the company, such as work schedules and product quality. The questions were in the form of a stem with five possible responses. The questionnaire also included a question in which employees were asked to rate the company benefit plans and five open ended questions. The responses from the open-ended questions are available, but not identified by individual.

The first step in the data analysis was to determine whether or not the sample adequately represented the entire company population.

The second step was to perform a factor analysis of the questionnaire responses to determine if job satisfaction subscales could be computed. Next, an overall job satisfaction rating for each respondent and factor scores were computed.

Then, the responses from the six plants were analyzed, to determine if there are any significant difference in levels of job satisfaction between the plants which would prevent considering the results across all six plants.

Then, using an ANOVA design, the effect of the demographic variables (gender, age, tenure) on the job satisfaction ratings for all plants were analyzed.

The final step in the analysis was to examine the responses to the open ended questions to isolate any areas of concern to guide the interpretation of the results. Because the responses were not keyed by employees, it was not possible to analyze the responses to the open ended questions by any of the demographic variables.

RESULTS

The sample of questionnaires available for analysis represented 34 percent of the total company employment. These questionnaires were a stratified random sample from the total group

of questionnaires. The sample was composed of 100 questionnaires chosen at random from each of the six plants, for a total sample of 600.

The first step in the data analysis was to determine whether or not the sample questionnaires adequately represented the entire population. A second data file was available, for the entire population, which contained the demographic variables and rankings of the six-company benefit plans.

First, the distribution of the demographic variables (gender, tenure, and age) for the sample were compared to the distribution for the entire population, using the ?2 test. For all three variables, there was no significant difference between the sample distribution and the distribution expected from the entire population. For gender, x^2 (1, N = 597) = .091, p < .01; for tenure, x^2 (1, N = 590) = .240, p < .01; and for age, x^2 (1, N = 595) = 1.034, p < .01. The distributions for the three demographic variables are shown in Table 1.

Table 1: Sample and Population Demographics				
	Sample		Population	
Category	N	%	N	%
Gender				
Male	121	20.3	368	20.8
Female	476	79.7	1404	79.2
Tenure				
0 - 1 years	141	23.9	429	24.4
1 - 5 years	187	31.7	558	31.7
5 - 10 years	99	16.8	283	16.1
10 + years	163	27.6	489	27.8
Age				
16 - 25 years	183	30.8	573	32.4
26 - 35 years	164	27.6	476	26.9
36 - 45 years	127	21.3	381	21.6
45 + years	121	20.3	338	19.1
Note: Cases with missing data excluded.				

The average rankings on the employee benefit plans for the sample and the population were compared, using a t-test. There were no significant differences between the average rankings for the sample and the entire population.

The responses to the 81 survey questions were factor analyzed, using the principal components method, with a varimax rotation. The initial results indicated 18 factors with Eigen values greater than 1. An examination of the Eigen value plot indicated that a 10-factor solution was the most parsimonious solution. The factor titles and the percent of total variance explained by each factor are listed in Table 2.

Table 2: Survey Dimensions and Percent of Total Variance		
Dimension	Title	% of Variance
1.	Management Fairness	11.9%
2.	Supervision	6.3%
3.	Job and Company	5.9%
4.	Pay	3.7%
5.	Co Workers	4.4%
6.	Human Resources	2.8%
7.	Amount of Work	2.7%
8.	Problem Resolution	3.4%
9.	Management Planning	5.4%
10.	Working Conditions	2.5%

Scale values for the 10 scales were then created by computing the average rating for each question in each of the scales. An overall rating, representing general morale or job satisfaction was computed by averaging all responses. The correlations between the scales are shown below.

The scale values for the six plants were then analyzed to determine whether or not there were any differences between the six plants included in the survey. Factor 5, Co Workers, was the only factor showing any significant differences in average rating between plants [F (5, 593) = 3.70, p = .003]. However, a stringent post hoc test, the Scheffé test of differences, between plant averages on Factor 5 showed no significant differences at the .01 level. It did not appear that there were any differences between plants, and thus there was no reason to analyze the results for the plants separately.

Possible differences in the factor and overall ratings associated with gender, tenure, and age were examined using a 2 x 3 x 4 analysis of variance. To avoid empty cells in the analysis of variance matrix, the original tenure categories 3 and 4 (5 to 10 years and 10 or more years) were merged to one category.

The results of the ANOVA analysis showed significant main effects for age, tenure, gender at the .01 significance level. There were no significant two way or three way interaction effects. A matrix of the factors and significant main effects is found in Table 4.

Table 3: Correlation Matrix for Factor Scores						
Factor	1	2	3	4	5	Overall
1.		.11*	.69**	(.19)**	(18)*	
2.			.05	.14*	.13*	
3.				(.16)**	(.10)	
4.					.18**	
Factor	6	7	8	9	10	Overall
1.	(.34)**	.21**	(.53)**	.19**	.73**	
2.	.14**	.15**	.06	.07	.12*	.40**
3.	.(36)**	.15**	.43**	(.45)**	14**	.66**
4.	.22**	.01	(.17)**	.38**	(.07)	.17**
5.	.26**	.02	(.08)	.32**	(.02)	.22**
6.		.04	(.27)**	.38**	(.08)	.02
7.			.13	(.02)	.01	.34
8.				(.40)**	.16**	.51**
9.					(.15)**	(.09)
10.						.27**
Note:						
* denotes p < .01						
** denotes p <.001						

Table 4: Significant Effects by Factor		Gender	Tenure	Age
1.	Management Fairness		X	X
2.	Supervision		X	
3.	Job and Company			X
4.	Pay		X	
5.	Co Workers	X		X
6.	Human Resources			
7.	Amount of Work			X
8.	Problem Resolution			X
9.	Management Planning		X	
10.	Working Conditions			
	Overall			X

The next step in the analysis was to perform post hoc tests on the factors with significant differences in any of the three factors to determine which, if any, inter group means were significant. The test chosen for this purpose was the Scheffé post hoc test, at the .01 level of significance. Finally, for those factors where age, tenure, or gender differences were present, representative responses to the open ended questions were listed, in order to guide the interpretation of the results.

The only one of the three demographic variables to have a significant effect on the overall rating was age [$F (3, 588) = 17.60$, $p = .000$]. The Scheffé test showed a significant decrease from age groups 1, 2, and 3 to group 4.

On the first survey factor, Management Fairness, there were significant effects for both tenure [$F (2, 588) = 15.47$, $p = .000$] and age [$F (3, 588) = 15.54$, $p = .000$]. The post hoc tests of differences showed a significant decrease in the average rating in this category after the first year of employment and after age 45.

The open ended questions indicated that a major area of employee concern was fair treatment by management and supervisors. There was a perception that management and individual supervisors did not always treat all employees fairly and equally. In the responses to the open ended questions, there were comments such as: "Our supervisor grants favors to the people she goes to church with every one sees it and it make it bad on all the rest."

A major area of concern was the perceived uneven enforcement of the company's attendance policy: "I don't understand the absentee policy. In the order dept. upstairs a man was fired because he missed too much work. But in the same dept., a lady who misses twice as much just gets petted and babied because she's the boss's friend."

Another area where employees perceived inequity was in the distribution of work: 1. "The way the supervisor has picked certain people who gets the easy work while the ones she doesn't like has it the hardest. A different supervisor could help alot." 2. "Right now I wish they would supervise the night shift better. They are just kids we are told when we come into a mess every morning. Plus they get all the easy shirts which we could make more money on." 3. "Older employees getting their choice of the stylework they sew since a lot of the work is a lot easier to sew and you can make a lot more money on some styles of work."

The fairness of pay policies was also a source of dissatisfaction: "When a production is set and the girl exceeds it then they say she is making too much money and raise that production after they have already set it."

The only demographic variable having any significant effect on employees' satisfaction with their supervision was tenure [F (2, 588) = 4.82, p = .008]. However, the Scheffé test did not show any significant differences between any of the three tenure groups.

Ratings on this factor were affected by employee age [F (3, 588) = 12.60, p = .000]. However, the post hoc test showed no significant differences between any of the four age groups.

Employees' satisfaction with their pay was affected by tenure [F (2, 588) = 6.19, p = .002]. The significant decrease was between group 1 and group 2; that is, after one year of employment.

The analysis of variance showed effects of both gender [F (1, 588) = 13.72, p = .000] and tenure [F (2, 588) = 1.30, p = .001] for this factor. The mean ratings on this factor by gender are shown in Figure 8. The Scheffé test showed significant differences between tenure group 1 and groups 2 and 3.

There were no significant main effects from any of the three demographic variables on this survey factor.

The only demographic variable affecting employees' attitudes towards the amount of work they are expected to perform was employee age [F (3, 588) = 4.76, p = .003]. However, the Scheffé test did not show any significant differences between any of the four groups.

Age was, again, the only demographic variable affecting mean ratings on this factor. The post hoc test showed a significant decrease between group 1 and group 4. In the responses to the open-ended questions, employees indicated their concern that management and supervisors were not willing to take the time to assist employees: 1. "Our supervisor should try to be honest with us at all times which is not done. He should be more understanding to problems we have instead of his own. And most definitely be more aware of what is going on. The floor people under him need to help more. There is to many idle people standing around." 2. "When you have a complaint or problem my supervisor is afraid for me to tell the higher up people." 3. "A couple of years ago I had a back problem. The Dr. stated that it was from the way I had to set at my machine. He told me that he had mentioned it to management about the chairs some of us has to use--But it doesn't do any good. I also mentioned it--but I've still got the same chair I has 2 years ago." 4. "The

unfairness of the way you are treated. You are made to fell like dirt when you complain about thing just like they really do not care and if they don't care why should you care."

Employees' attitudes towards management planning were affected only by tenure [F (2, 588) = 10.94, p = .000]. However, the post hoc test did not show any significant differences between the tenure groups. There were no significant main effects from any of the three demographic variables on this survey factor.

DISCUSSION

The results of this survey do not support the research hypothesis that employee satisfaction increases with age. The results support a hypothesis that overall job satisfaction can actually decrease with employee age, under certain circumstances. One factor which may cause older employees to be less satisfied with their work is the labor market in the small towns where these plants are located.

The research on employee turnover (Landy, 1985; Mobley, 1979) indicates that turnover depends both on satisfaction and perceived options. That is, an employee may be unhappy with his or her job, but is likely to leave only if there is an acceptable alternative available. In the area in which this company's plants are located, there are not many alternatives. As several employees commented: 1. "It is the only job in the county so I have to like it some." and 2. "People in this area need these plants. We have to have somewhere to work."

A second point arising from the responses to the open ended questions is that working at this company has advantages that may not be available elsewhere: 1. "Steady work not many layoffs. Cool in summer warm in winter. Close to home. I have 5 family members working here out of 7 so we must like it here." 2. "I like the insurance, holidays, vacations and other benefits we have working here. Also the schedule is right for people who have children in school."

An individual's desire to leave an organization may well be affected by such factors as steady work and insurance. This suggests that job satisfaction, in this organization, will not increase with either tenure or age. First, dissatisfied employees as a whole will have few alternative employment options. Where alternatives do exist, they may not be as attractive--there may be no benefits, the pay may not be as good, or the work may not be steady.

However, younger employees, who are not tied to the company by accumulated benefits or tied to the geographic area by family responsibilities, may perceive that there are other options available to them and, thus, may be more likely to leave the organization. The remaining employees in the younger age group will, then, tend to be those who are happy with or who are not dissatisfied with the job. The older and longer tenure employees not only perceive that they have fewer options, but in most cases actually do have fewer options. The community offers few alternatives and older employees have more of an investment in the company, including pension, seniority and insurance. Their response to job dissatisfaction is less likely to be turnover.

The responses to the open ended questions also indicated that the individuals surveyed believe that more emphasis should be placed on an employee's seniority: 1. "The policy where there is a layoff they go by how much you make or production instead of how long you been there. Like a layoff comes and a girl worked there 6 months and a girl been years, and the girl work there 6 months got to stay cause she put out more production! That isn't right!" 2. "Management attitude toward long term employees. They don't think any more of them than they do new employees."

Older and longer tenure employees, then, will have reason to be dissatisfied if they believe that their experience should be, but is not, taken into account when work is allocated and policies enforced. The responses to the open-ended questions listed under the Management Fairness would tend to confirm this. It is more difficult to fit in the decrease on the Problem Resolution factor, except to suggest that older individuals may be more accustomed than younger individuals to be in a leadership role and, thus, may be more dissatisfied when their advice or opinions are seemingly ignored.

The results of this survey tend to confirm Zeitz's hypothesis (1990) that employee age has different effects under different circumstances. For example, the pattern of results seen here would less likely be found in an organization where personnel decisions are made primarily on seniority. The results also support the hypothesis (White & Spector, 1987) that employee age is an indirect measure of other variables. For example, many of the age related effects cited in this study are also associated with longer tenure.

CONCLUSION

From this study, it can be safely concluded that employee age is an influence on job satisfaction, in that an employee's age will affect his or her satisfaction with a particular job, in a particular set of circumstances. A generalized view that job satisfaction increases with age leaves out a number of other variables that have an equal or greater effect on job satisfaction, especially individuals' perception of how the job meets their needs and expectations.

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JOB ATTRIBUTE PREFERENCES:
ARE THERE GENDER DIFFERENCES?

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ABSTRACT

This study examines job attribute preferences of women and men through the use of a study including 120 college students in a four-year university in a suburban northeast area. Results are compared to those of a similar study conducted in the early 1980s. While some differences remain, most sex differences have decreased since the previous study. Women in the current study rated mental aspects of work such as the use of knowledge and skills and intellectual stimulation higher than did men. They also gave higher ratings to social factors including social contribution and meeting and speaking with others. Both men and women in the current study rated ample leisure time as being more important than did those in the previous study.

INTRODUCTION

Sex differences in work values, have been an important area of research since the Hawthorne studies of the 1930's (Roethlisberger & Dickson, 1939/1975). An ever-growing literature on the subject (cf., Abu-Saad & Isralowitz, 1997; Bartol & Manhardt, 1979; Betz & O'Connell, 1989; Beutell & Brenner, 1986; Konrad, Ritchie, Lieb, & Corrigall, 2000; Powell, 1988; Rowe & Snizek, 1995; Schuler, 1975; Tolbert & Moen, 1998) has yielded contradictory results as some studies have found significant sex differences while others have not.

Work values, those qualities people seek from their jobs, have recently been given the term work or job attribute preferences (e.g., Konrad et al. 2000a) to distinguish them from higher moral values (Pryor, 1979) such as those described by Rokeach (1973; 1968). These job characteristics are more fundamental than interests (Super, 1970) and are associated with job satisfaction or dissatisfaction (Brief & Nord, 1990; Katzell, 1964, Knoop, 1994; Lofquist & Dawis, 1975; Wanous, 1980) as they reflect a correspondence between needs and satisfaction (Drummond & Stoddart, 1991; Zytowski, 1970). It is therefore important to understand the values or attribute preferences brought to the workplace by the men and women in today's labor force.

This study examines the current literature on gender differences in job attribute preferences, particularly the effects of socialization, organizational structure, and changes that seem to have

occurred over time. It then presents the results of a survey replicating the study by Beutell and Brenner (1986) which compared women and men's ratings of the importance of 25 job attributes identified by Manhardt (1972). The findings from this study are analyzed and then compared to the earlier study.

ORGANIZATIONAL STRUCTURE

One explanation for sex differences in work values points to organizational structure in that work opportunities, or the lack thereof, influence an individual's possibilities and preferences (Gregory, 1990; Gutek, 1993; Kaufman & Fetters, 1980, Spitz & Waite, 1980; Walker, Tausky & Oliver, 1982). Because of family obligations or discrimination, women are often confined to lower level jobs with lower earnings and less authority (Jacobs, 1992; Jencks, Perman, & Rainwater, 1988, Reskin &Ross, 1995) Rather than become frustrated at the inability to obtain better jobs, people make themselves content with job characteristics they can obtain. (Borg, 1991; Mottaz, 1986). Studies examining differences in job attribute preferences by gender and organizational position/occupation show the latter to have more influence (Brief, Rose, and Aldag,1977; Gomez-Mejia, 1990).

Workers at lower levels of the organization, both men and women, tend to place more emphasis on extrinsic outcomes such as pay, working conditions, and social relationships with co-workers derived from the job context, while those in the higher ranks value intrinsic outcomes such as stimulating work, achievement, and autonomy based on job content (Kaufman & Fetters, 1980; Moore & Ollenberger, 1986, Spitz & Waite, 1980). Some believe that women do not advance into high level of the organization because they place high value on rewards other than income and advancement (Huckle, 1983).

In addition, some researchers (Costa, McCrae, & Holland, 1984; Gottfredson, 1981) have taken Holland's (1973) vocational choice theory positing that occupational choices are consistent with personality and categorized enterprising, investigative, and realistic careers as masculine and social, artistic, and conventional jobs as feminine. Kaufman and Fetters (1980) found that in the accounting field, an enterprising occupation, men and women both valued extrinsic and intrinsic work characteristics. Bigoness (1988) found that women aspiring to managerial careers placed more importance on the opportunity for challenging work and the opportunity to utilize their education than did their male counterparts. Likewise, Hofstede (1980) determined that women in higher occupations were even more concerned with job content than were men.

These findings suggest that organizational factors may act as moderating variables that influence the results of studies comparing the job attribute preferences of men and women. On the other hand, socialization theory contends that men and women enter the work place with different desires and behaviors based on their socialization as males and females in a culture that has separate expectations for people based on their sex.

EFFECTS OF SOCIALIZATION

The socialization theory is based on the concept that men are women are socialized to conform to societal norms for male and female behavior (Burn, 1996). Men are taught to value traditional masculine traits such as aggressiveness, competition, and achievement while women are taught to value relationships with others (O'Leary, 1974; Williams & Best, 1990). Following this model, women and men bring different work values with them to the work place and therefore desire different job attributes.

One aspect of this theory is the importance women place on working and social conditions, which are considered extrinsic job factors. Many researchers (Manhardt, 1972; Schuler,1975; Bartol,1976; Brenner & Tomkiewicz,1982; Betz & O'Connell,1989) have concluded that women place more importance on social conditions than do men. Studying Israeli university students, Abu-Saad and Isralowitz (1997) reported higher ratings by women on social factors including social contributions, congenial associates, cultural/aesthetic interests, and interactions with other people as well as intrinsic work factors including development of knowledge and skills, and intellectual stimulation. In contrast, men scored higher on risk taking and supervision of others, and ample leisure time.

Over time, a variety of studies (e.g. Centers & Burgental, 1966; Herzberg, Mausner, Peterson, & Capwell, 1957) have concluded that men value intrinsic work aspects more than women do. As long ago as the Hawthorne studies, Roethlisberger and Dickson (1939/1975) determined that men value pay because of their roles as primary providers. Women, in contrast, have been secondary earners as well as homemakers, leading them to be less concerned with income and more concerned with work conditions. The traditional division of labor within the home leads to women's desire for flexible or short hours in order to better balance work and family (Menaghan, 1991; Moen, 1992). In a meta-analysis of the literature on gender differences in job attribute preferences, Konrad and associates (2000a) found men to attach greater importance to earnings and responsibility, consistent with their roles as providers, while women valued factors related to homemaking and nurturing such as good hours and good coworkers. This theory has its critics as other studies (Burke, 1966; Bigoness, 1988) have concluded that both women and men place greater importance on intrinsic than extrinsic attributes.

Bartol and Manhardt (1979) found that, over time, women in a longitudinal study of graduates pursuing management careers showed less concern for social job aspects. Similarly, Gottfredson (1980) asserted that men desire high incomes and career success because they have traditionally been the primary earner in the family, but predicted that as women took more of a provider role, they would become more committed to their careers. This study compares the current results with those of a similar study by Beutell and Brenner (1986) conducted in the mid 1980s to determine if sex-related differences in job attribute preferences have changed in the last two decades.

EFFECTS OF TIME

Discrepancies between the findings of different studies may be attributable to women's and society's changing attitudes toward women's roles (Erez, Borochov, & Mannheim, 1989; Morgan & Carney, 1985). Brenner and Tomkiewicz (1979) concluded from their replication of Manhardt's (1972) study that sex differences are decreasing. Similarly, Fiorentine (1988) found that between 1969 and 1984, values and career expectations of men and women were converging as women's values became more like men's. Likewise, in the early 1970s, Miner (1974) reported that women had less motivation to manage, but later (Miner & Smith, 1982) reported women possessed, in some ways, even more motivation to manage. Bigoness (1988) compared his findings to that of Bartol and Manhardt (1979) and Brenner and Tomkiewicz (1982) to conclude that "a pronounced shift in job attributes preferences is taking place" (p. 144).

Drawing from the General Social Survey for 1973 to 1994, Tolbert and Moen (1998) examined full-time employed married men's and women's ratings of 5 work attributes: job security/no danger of being fired, short working hours/lots of free time, high income, chances for advancement, and work that provides a sense of accomplishment. They found that married men had become more concerned with income over the years included in the study. In 1990-1994, married women, too, had become more interested in high income as the most important job attribute. High income was especially important to men 18 to 35. However, they found that among those over age 51, sex differences were small and nonsystematic across the years. In all age groups, women were more concerned than men with the need to feel a sense of accomplishment, and men were more likely to value security. They concluded that in the past decade, sex differences between young workers had increased primarily as a result of changes in men's preferences rather than those of women.

Despite a number of studies examining this issue, there seem to be few, if any, undebatable and conclusive findings. This study contributes to the literature by adding additional findings and examining the effects of time by re-visiting a study from the mid-1980s and using the same instrument. The results of the current study are compared to those of the previous study by Beutell and Brenner (1986).

METHODOLOGY

In addition to factors such as socialization and the passing of time, another possible contributor to the contradictory findings in research on sex differences in work values is the instrument used in a given study. For example, researchers (e.g. Tolbert & Moen, 1988) who use the General Social Survey are restricted to the forced ranking of five work characteristics. Important attributes about which there may be significant differences may not be included among these. Likewise, some studies only compare extrinsic and intrinsic factors. Manhardt (1972) expanded the

study of work values by identifying 25 different job attributes. Respondents rated the importance of each value on a 5-point scale (1 = not important, 5 = very important).

Beutell and Brenner (1986) also used this scale, finding that women rated congenial associates, independence, accomplishment, use of knowledge and skills, use of education, social contributions, and intellectual stimulation higher than did the men in the study. Men, in contrast, gave significantly higher scores to high income, advancement, working on central organizational problems, ample leisure time, security, and responsibility. Ratings were used to rank the job attribute preferences according to importance, which provided increased insight into the respective importance of the rated preferences.

This study examined sex differences in job attribute preferences through the use of Manhardt's 25-value instrument, providing a basis for comparison with the previous study by Beutell and Brenner (1986) to determine if the importance of work values by women and men has changed. Relative rankings of values by men and women in the current study with those in the previous study are also examined.

Participants in the study were 120 (56 female and 64 male) students at a 4 year university in a suburban setting in a northeastern state. The sample included respondents of many ages, but no significant difference in job attribute preferences between respondents of different ages were found. Student research assistants distributed the survey in 2002 to students who voluntarily completed the surveys during classes, including both business and non-business classes. Questionnaires were returned anonymously to the research assistants during the class period when the research was conducted.

RESULTS AND ANALYSIS

Table 1 shows the mean rating of each value by women and men, along with the ranking of the values based on overall means and t-test significance. Analysis of two-tailed t-tests shows significant rating differences between only five job attributes: continued development of knowledge and skills, intellectual stimulation, social contribution, meeting and speaking with people, and satisfies cultural and aesthetic interests. On each of these, women rated the values as more important than did men.

Table 1: Comparison of men's and women's work value ratings rankings						
	Men		Women		Rating T-test	Difference in rankings
Work value	Mean	Rank	Mean	Rank		
job security	4.25	1	4.14	5	ns	- 4.0
feeling of accomplishment	4.23	2	4.29	1.5	ns	0.5
comfortable working conditions	4.06	3	4.16	4	ns	- 1.0
advance to high administrative responsibility	4.02	4	3.96	9	ns	- 5.0
high income	4.00	5	4.04	6	ns	- 1.0
ample leisure time off the job	3.95	6	3.80	12.5	ns	- 6.5
recognition	3.91	7	4.00	7	ns	0.0
respect by other people	3.88	8	4.23	3	ns	5.0
continued development of knowledge and skill	3.84	9	4.29	1.5	.04	7.0
work independently	3.77	10.5	3.82	11	ns	- 0.5
develop own methods of work	3.77	10.5	3.88	10	ns	0.5
Change and variety of duties	3.73	12	3.80	12.5	ns	-0.5
makes use of specific education	3.69	13	3.63	18	ns	- 5.0
intellectual stimulation	3.52	14	3.98	8	.04	6.0
work on problems of central importance to org.	3.48	15	3.55	20	ns	- 5.0
congenial associates	3.41	16	3.71	15	ns	1.0
originality and creativeness	3.31	17	3.64	17	ns	0.0
regular routine in time and place	3.27	18	3.29	23	ns	- 5.0
superiors you admire and respect	3.25	19	3.57	19	ns	0.0
taking risks	3.22	20	3.48	21	ns	- 1.0
social contribution	3.17	21	3.75	14	.003	7.0
clear cut rules	3.02	22	3.07	25	ns	- 3.0
supervising others	2.95	23.5	3.14	24	ns	- 0.5
meeting and speaking with others	2.95	23.5	3.70	16	.007	7.5
satisfies cultural and aesthetic interests	2.89	25	3.39	22	.04	3.0
ns = not significant at p>.05 in determining differences in ranks, women's ranks were subtracted from men's ranks						

The largest sex differences were found between the social factors, "meeting and speaking with other people" and "social contribution", which varied significantly in means and showed a large

spread in rankings. In most cases, differences in these value ratings were also accompanied by differences in rankings. Ample leisure time is an exception. Although men gave leisure time an average rating of 3.95, and women rated it similarly at 3.80, leisure was ranked 6th for men but tied for 12th for women.

Table 2 shows a comparison of the results of this study and the previous one by Beutell and Brenner (1986). Ample leisure time rose in relative importance for both men and women in the current study. Job security dropped from 2nd to 5th among women while it increased for men from 2.5 to 1st in the present sample. Having a regular routine rose from 25th for both sexes to 18th for men and 23rd for women, indicating a sex difference that had not existed previously.

Development of knowledge and skills rose from a tie for 6th to 2nd for women, but actually dropped from 8th to 9th for men, creating a greater difference in rankings than in the previous study.

Table 2: Comparison of results in the current and Beutell and Brenner (1986) study						
Work value	2002 men rank	1986 men rank	2002 women rank	1986 women rank	sex differences in rankings	
					2002	1986
job security	1	2.5	5	2	- 4	0.5
feeling of accomplishment	2	1	2	1	0	0
comfortable working conditions	3	7	4	4	- 1	3
advance to high admin. responsibility	4	4	9	6.5	- 5	- 2.5
high income	5	2.5	6	5	- 1	0.5
ample leisure time off the job	6	10	12.5	16	- 6.5	- 6
recognition	7	5.5	7	8.5	0	- 3
respect by other people	8	5.5	3	3	5	2.5
cont'd development of knowledge and skill	9	8	2	6.5	7	1.5
work independently	10.5	13	11	13	- 0.5	0
develop own methods of work	10.5	12	10	14	0.5	- 2
Change and variety of duties	12	11	12.5	12	- 0.5	- 1
make use of specific education	13	17	18	10.5	- 5	6.5
intellectual stimulation	14	9	8	8.5	6	0.5
work on problems of central importance	15	14	20	19	- 5	- 5
congenial associates	16	18	15	10.5	1	7.5
originality and creativeness	17	15	17	17	0	- 2

Table 2: Comparison of results in the current and Beutell and Brenner (1986) study						
Work value	2002 men rank	1986 men rank	2002 women rank	1986 women rank	sex differences in rankings	
					2002	1986
regular routine in time and place	18	25	23	25	- 5	0
superiors you admire and respect	19	22	19	20	0	2
taking risks	20	19	21	23	- 1	- 4
social contribution	21	21	14	18	7	3
clear cut rules	22	24	25	24	- 3	0
supervising others	23.5	16	24	21	- 0.5	- 5
meeting and speaking with others	23.5	20	16	15	7.5	5
satisfies cultural and aesthetic interests	25	23	22	22	3	1
in determining differences in ranks, women's ranks were subtracted from men's ranks						

Intellectual stimulation dropped for men from 9th to 14th, while not changing for women.

Making use of educational background rose to 13th from 17th for men, but dropped to 18th from a tie for 10th among women, creating opposing sex difference in relative rankings between the two studies.

Supervising others dropped for both sexes. Women's relative ranking for this value fell to 24th from 21st, while men's decreased from 16th to a tie for 23rd, almost eliminating a previous gender difference in rankings.

Making a social contribution rose to 14th from 18th for women, while remaining the same for men, increasing the gender gap in relative rankings.

Having congenial associates dropped in relative importance from a tie for 10th to 15th for women, so that they were more similar to men who rose from 18th to 16th.

Meeting people dropped for men from 20th to a tie for 23rd, but only dropped from 15th to 16th for women, increasing the previous gender gap in rankings.

DISCUSSION

The results of this study support the notion of complex and changing sex differences in work values as measured by job attribute preferences. While there was evidence of significant sex differences, there are fewer differences than those found by Beutell and Brenner (1986; 12 versus 5 in the present study), roughly two decades ago based on data collection rather than publication dates. Women do rate social contribution and meeting and speaking with others significantly more

highly than men, and in keeping with stereotypical value notions for women, but they also rate development of knowledge and skills and intellectual stimulation as more important suggesting a departure from "traditionally female" value patterns. Interestingly, both men and women attached similar importance (by ranking) to many of the attributes including recognition, originality and creativity, and superiors that you admire. Additionally, earning a high income was ranked 5th by men and 6th by women, a value that is presumed to be more important to men.

It may be premature to conclude that sex differences are declining however. What might be of greater interest are the shifts in attribute preferences over the period of two decades.

Beutell and Brenner (1986) argued that there appeared to be increased stability in the pattern of value preferences over time in relation to previous research (Brenner & Tompkiewicz, 1979; Manhardt, 1972). The present findings offer some support for this concept but found some notable exceptions as well. For example, supporting evidence comes from a drop in supervising others where women and men had nearly identical rankings. Similarly, congenial associates increased in importance for women while decreasing in importance for men giving a convergence in rankings. On the other hand, making use of educational background increased in importance for men but decreased in importance for women, a finding at odds with the pattern stability of preferences. Further, leisure time rose in importance for men and women. This array of findings suggests that pattern stability is not a unique explanation of differences and shifts in studies dating back to Manhardt (1972).

Recent meta-analytic studies (Konrad et al., 2000a; Konrad et al., 2000b) indicate that sex differences exist on 33 of 40 job attribute preferences although the average effect size was quite small. Other studies have concluded that there is no consistent evidence of general sex differences in work values (Rowe & Snizek, 1995). Although each of these research efforts used very large sample sizes there are many other variables such as age, occupation, date that the study was conducted, research instruments, etc. that could account for these apparently divergent findings. Although difficult, some understanding of the development of value preferences using longitudinal models would add significantly to the understanding of the processes of vocational selection based on individual preferences (e.g., Loquist & Dawis, 1979; Meglino & Ravlin, 1998). Future studies might try to control some of these variables to get a better indication of sources of variance. Beutell and Brenner (1986) attempted to control career salience as one such factor but differences still emerged.

Nevertheless, the present results, undertaken after the studies just referenced, do suggest that other variables are at work. For example, how did the events of September 11, 2001 affect the security needs of students making a transition to the job market? In a more general sense, how do shifts is societal attitudes, expectations, and behaviors affect values? To what extent are values affected by maturation and experience? It might be expected that, since values and by extension value preferences, are basic aspects of personality that more stability might be expected than reported in this study and other recent efforts.

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COMPARING APPLES TO APPLES:
INSURING CONSISTENCY OF MEASUREMENT
WITH THE BALANCED SCORECARD

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ABSTRACT

Performance evaluation is one of the most complex measurement issues in management accounting. Despite the assertion that measurement of the performance of the individual be divorced from measurement of performance of the business unit, complex interrelations make such a measure extremely difficult. The task of evaluation is further complicated by various questions and concerns about who should do the evaluating and questions regarding what should be evaluated-outcomes, behaviors, or competency levels. The combination results in an overwhelmingly complex set of measurement criteria. Balanced Scorecard (Kaplan & Norton, 1992) has introduced a systematic approach to the measure of qualitative dimensions for business performance, but actually producing an internally consistent quantified score that is suitable for comparisons between periods and between subjects continues to be extremely difficult. This paper illustrates the use of the Analytic Hierarchy Process (Saaty, 1994) as a mechanism for dealing with this highly complex scoring problem.

INTRODUCTION

Performance evaluation is perhaps the most complex measurement issue in management accounting. Despite the assertion that measurement of the performance of the individual be divorced from measurement of performance of the business unit, complex interrelations make such a measure extremely difficult. Add to this, an environment in which teams are increasingly common. Personnel performance evaluations should focus on individual contributions sufficiently to prevent social loafing, but not to an extent that ignores the synergistic properties that make groups work.

The task of evaluation is further complicated by various questions and concerns about who should do the evaluating-supervisors, peers, customers, or subordinates. Add to this questions regarding what should be evaluated-outcomes, behaviors, or competency levels. All these dimensions result in an amazingly complex performance evaluation milieu. Although the Balanced Scorecard, or BSC (Kaplan & Norton, 1992) has introduced a systematic approach to the measure of qualitative dimensions for performance, actually producing an internally consistent quantified

score that is suitable for comparisons between periods and between subjects continues to be extremely difficult.

Fortunately, a mechanism for dealing with this type of highly complex scoring problem already exists in a decision science technique known as the Analytic Hierarchy Process or AHP (Saaty, 1994). AHP is a widely acclaimed multicriteria decision-making technique that allows analysts not only to grasp a problem of this magnitude but, by using a mathematically rigorous process, can also offer a measure of internal consistency (Saaty, 1996). The AHP has become one of the most popular aids to decision-making and has been popularized and made widely available through "Expert Choice" software (Expert Choice, Inc., 2000; Forman et al., 1983). This paper presents a format for using a Balanced Scorecard approach and AHP to produce an internally consistent, comprehensive measure of personnel performance.

The first question that must be addressed in development of an effective performance evaluation system is the question of its purpose. Evaluation systems are used to give employees useful feedback, coaching, and guidance to help them improve their performance and develop job related skills (Peiperl, 2001). Evaluations can be used as part of a formal goal setting system (Scott & Einstein, 2001). They can also be used for making staffing decisions such as which employees will receive raises, or conversely, they may provide legal documentation protecting an organization from suit in the event that an employee must be dismissed. Depending on how the evaluation system is designed, it will work better for some of these purposes than for others (Goldstein, 1998).

Increasingly, companies are using the Balanced Scorecard (BSC) as a mechanism to link the performance of individuals in the company to accomplishment of the strategic goals of the company (Kaplan & Norton, 1992). The BSC is developed to provide an integrated set of performance criteria that provides a successful measure of how well each individual and sub-unit within an organization supports all the goals associated with the Critical Success Factors (CSF) of the company. The strength of the BSC is the use of a variety of measures to link the performance of all the elements of the organization to the strategic performance of the organization. The BSC incorporates both financial and non-financial measures that may be either qualitative or quantitative and provide both outcome (or lagging indicators) and performance drivers (or leading indicators) (Kaplan & Norton, 1992).

Some version of the Balanced Scorecard is now in use in approximately half the Fortune 1,000 companies in the United States and about forty percent of the European counterparts (Gambus & Lyons, 2002). According to Gambus and Lyons (2002) Philips Electronics has committed to the BSC as a tool that is both effective and enduring. Philips has involved its 250,000 employees in more than 150 countries around the world in developing a BSC with three levels. The current levels, the strategy review card, operations review card, and the business unit card, are expected to be enhanced by a fourth level, the individual employee card, right away. At Phillips, the corporate quality department provided comprehensive guidelines for metric linkage between these different levels to assure coordination. They address the robustness of the measurement system by addressing

the fact that goals set at a lower level must support the goals of higher level to assure that it is possible to meet or exceed all Critical Success Factor goals (Gambus & Lyons, 2002).

Add to this emphasis on a variety of strategic measures that are applied consistently through different levels of the organization, the difficulty of accurately measuring the performance of individuals in an environment that is turning increasingly to group activities and the problem becomes almost intractable. For the BSC to assume its place as an effective measure of the strategic performance of all elements of the organization it must be practical to administer and the results must be accepted and relied upon by decision makers. Research shows that managers often have difficulty incorporating the results of subjective measures into the strategic decision-making process because they perceive such measures to be unreliable (Liberatore & Miller, 1998). Some adopters of the BSC have already abandoned its use because managers could not deal with the complexity and ambiguity inherent in the measures (Gambus & Lyons, 2002). Despite the adoption of BSC by increasing numbers of companies, little has been published about how managers deal with the issues of complexity and ambiguity in the measures.

To develop a Balanced Scorecard that effectively links the performance of all levels of the organization to the organizational strategy a number of evaluation problems must be addressed. The organization must develop an evaluation that consistently measures the contribution of subjects who work in a variety of situations involving various teams and individual efforts. In addition, this evaluation must consider the degree to which the evaluator is able to judge the performance of the subject or the weight which should be given different evaluators opinions of the subject's performance. Whether the subject of evaluation is an individual, a team or an entire business unit, the mechanics of the evaluation process may be the same, however the choice of evaluators and the weights given the contributions of individuals would differ. When evaluating teams, such as work or service teams, whose members all perform the same or similar tasks, the contributions of each individual would receive roughly the same weight. In network teams where each individual is an expert in a different field, the contributions of the expert in that area would be given a higher weight for the criteria that fall into their expertise. For example, individuals who participate in multiple teams, or work alone and in teams, first would have their evaluators grouped into various "evaluation groups" based on their connection to the evaluation subject. For example, three separate evaluations groups would assess an individual evaluation subject who belonged to Team A, Team B, and who also performed as an individual. One group would consist of constituents of each team and the third group would be made of constituents of the individual. These evaluation groups would then be subdivided into "evaluator classifications" based on their relationship to the subject, such as manager, team leader, team member, and coworker and the relative importance of the opinion of each classification determined. Finally, each individual evaluator would complete an evaluation, and these evaluations will be combined using weighting factors that recognized the relative importance of the individual evaluator's input. For example, perhaps the team leader's opinion is more important

than the opinion of a coworker. Incorporation of these complex relationships results in a single evaluation that can be looked at in terms of individuals or groups.

The same outcome, behavior, and competency level measures can be used to evaluate various subjects whether individuals or teams. However, it should be pointed out that although what is good for two subjects may be the same, what is important for the same two subjects might be very different. For example, creative problem solving skills would probably be considered a good thing for any person or team to possess without regard to the type of team or individual job function. However, creative problem solving is probably much more important to research and development teams than it is to work or service teams that deal with repetitive, routine tasks. Obviously, the use of a generic one-size-fits-all performance-evaluation that ignores important differences between various individuals and teams is inappropriate, but that does not mean that the same format cannot be used for all of the evaluation systems (Scott & Einstein, 2001).

Use of a formal multiattribute decision analysis process makes it possible to incorporate the myriad elements of a multi-level Balanced Scorecard into a decision process that is capable of handling the complexity of the interaction between the elements and provides the degree if internal validity requisite to assure that performance measures are consistent from one evaluation period to the next and from one subject to the next. One such multiattribute decision analysis process is the Analytic Hierarchy Process, or AHP (Saaty, 1994; Saaty, 1996).

AHP is a widely used method for analyzing complex decision-making problems. It breaks the decision problem down into small easily understandable parts, organizes these component parts into a hierarchy of levels, and provides a mechanism for evaluating the interrelationships among the components of the hierarchy (Saaty, 1994). The AHP is a process designed to facilitate the formalization of multicriteria decision-making. It allows the decision maker to incorporate both "hard data" and less quantifiable elements such as judgments, feelings, and experiences. AHP has been widely used in a variety of decision-making applications (Saaty, 1996).

Using AHP the decision problem is structured hierarchically from criteria to lower level subcriteria. The resulting model is called a value tree or a hierarchy of criteria and objectives. Users of AHP make a series of pair-wise comparisons of these criteria. If the criteria being compared are objective, the numeric values for the criteria are compared. If, however, the criteria are wholly or partially subjective, then the comparisons are made on the basis of relative preference between the two on a scale of one to ten where one indicates no preference and ten indicates an overwhelming preference. Once these comparisons have been established for each criterion an n x n matrix of comparisons, where n equals the number of criteria, is constructed. In this matrix, the elements are arrayed where the Aij element is always the reciprocal of the Aji element. That is, if the first criterion is preferred over the second criterion by a factor of four then the A12 element of the matrix is three and the A21 element is 0.25. The principle eigenvector of the matrix is then calculated and normalized. This eigenvector represents the complete set of the relative importance of the criteria. This results in a dependable, mathematically rigorous, quantitative approach that overcomes the

complexities and difficulties inherent in measuring unlike elements and delivers a system that can be trusted and relied upon by managers (Saaty, 1996). For a more complete discussion of the process of AHP see Saaty (1994). Harker and Vargas (1987) provide a discussion of the inherent theoretical strengths and weaknesses of AHP.

METHODS

Using the AHP to structure the Balanced Scorecard system into a single measure requires the decision maker first structure the problem as a hierarchy. The elements of that hierarchy are then prioritized by responses to questions about the dominance, or importance, of one element over another (Liberatore & Miller, 1998). The first, and perhaps most creative, step in the AHP process is structuring the problem as a hierarchy. A useful approach is to start with the goal and decompose it into the most general and easily controlled factors at the simplest or most basic level possible. The decision maker then works back up through the hierarchy starting with the simplest sub-criteria that must be met and combining the sub-criteria into generic higher level criteria until the various measurements are linked in such a way that comparisons between unlike elements are possible (Liberatore & Miller, 1998).

Many possible criteria can be measured or subjectively judged in association with any position. Abernathy (2001) suggests the measurement design process start with ideal criteria and then compromise from this ideal to develop criteria that can be defined and rated. An example of the types of criteria that may be used is provided in Table 1; it has been divided according to outcomes, behaviors, and competencies.

Although the number of possibilities that may be easily considered dramatically increases with use of an AHP software package, it is suggested that the number of performance measures be limited for other reasons. When the number of measures expands beyond those few essential to measure the most important criteria, the added complexity tends to cause the focus of the process to be misdirected from the importance of the criteria being measured to the measurement process itself. The number of measures is best left to fewer than twenty-five (Horngren, Foster & Datar, 2000, p. 446-453). The criteria used should mirror the real world as closely as possible, and should measure "as though the participants are franchised or in business for themselves." (Abernathy, 2001) Also, care should be taken only to measure controllable outputs. This means that broad measures that are affected by events out of the control of the subject should be avoided (Abernathy, 2001). Many of the measurements listed above can relate to inter-group interaction, but perhaps this is not enough. Care must be taken so that subjects do not optimize their own output at the cost of the organization as a whole. The addition of specific "linked" measures may help aid cooperation. If the performances of two subjects affect each other greatly, cooperation can be increased by including one or more of one group's criteria as a measurement of the other group. For instance, if Group A

supplies parts to Group B, one of Group A's criteria could be the percentage of the time Group B has enough available stock on hand (Abernathy, 2001).

Table 1: Types of Criteria		
OUTCOMES	BEHAVIORS	COMPETENCIES
Accurate	Accepts criticism	Adaptable
Continuous learning	Adaptable	Appraisal
Customer service	Altruistic	Collaboration
Job skill development	"Big picture" oriented	Communication
Neatness	Conscientious	Conflict resolution
Process improvement	Cooperative	Coordination
Professional appearance	Courteous	Delegation
Punctuality	Cynical	Goal setting
Rework required	Dependable	Identify needs of others
Work quality	Detail oriented	Knows when to seek help
Work quantity	Good sport	Leadership
Work timeliness	Helpful	Long range planning
	Listens	Organizational
	Team player	Planning
		Problem solving
		Time management

Not all subjects should be rated in every way by every one who could rate them. For instance, the outcome criteria of a work or service team can be measured, but due to the "tight interdependencies among team tasks" the individual members should only be measured according to their behaviors and competencies (Scott & Einstein, 2001). In addition, undue focus on the individual can undermine the performance of the group by encouraging finger pointing and discouraging cooperation (Abernathy, 2001).

Although every subject could be measured for the same criteria, the weight assigned to these criteria will be different between the individuals and groups participating. If it is determined that the

weight of a particular criteria for a given subject is near zero, that criteria should be left off the evaluation. A group of key stakeholders, including managers, members of the personnel department, financial and operational experts, information technology professionals, and employee representatives must be involved in the design of the evaluation system. Their expertise is needed to refine the hierarchy to match the job requirement for each subject (Olveira, 2001). Although an agreement must be reached as to the exact weights for each subject's criteria, some general guidelines are available in the existing literature. Subjective or qualitative and objective or quantitative criteria must be present and weighted to be balanced appropriately. In other words, one should not concentrate entirely on outcomes or behaviors; both quantitative and qualitative criteria should be used where appropriate (Abernathy, 2001). Remember that not all effects are under the control of the subject. The weaker the link between effort and performance, the more weight should be placed on qualitative criteria. Qualitative criteria should also be more heavily weighted when there is a great need for organizational citizenship and teamwork. If a team works primarily independently of the rest of the organization, quantitative criteria that are more results oriented would be weighted heavier (Peiperl, 2001).

The balance of this paper provides an example of the performance evaluation of one hypothetical individual who functions as a member of two teams, and works independently. The performance evaluation is developed using AHP. What follows is a detailed example of use of AHP to link the performance evaluation based on the Balanced Scorecard to the overall mission and objectives of the organization. A panel brought together for this purpose and consisting of various key stakeholders in the organization would make almost all of the decisions made in this section. Throughout the example, these decisions were made concerning one specific hypothetical subject and made by the authors for illustrative purposes only. The reader should keep in mind that although one particular software program was used in this example, the same process might be accomplished using other software, and that the illustration would be equally valid.

At this point, several words of caution are in order. As the number of objects to be compared increase, the number of pair-wise comparisons necessary to rank them rapidly becomes unwieldy. In addition, it is not just necessary that the comparisons rate one of each pair of choices as more important than the other, a determination must be made as to what degree one is more important. This may be accomplished a number of ways, including calculation with a hand-held calculator, spreadsheet software, or math software. However, AHP software is available to facilitate the comparison and ranking operations of the AHP as well as providing the numeric solution. Calculations for this example were done using Web-HIPRE, a publicly available Web based software package provided by the Systems Analysis Laboratory of Helsinki University of Technology (Web-HIPRE, 1998). Other software packages are available that do the same calculations. One such package is Expert Choice. Expert Choice is a commercially available package that it is used by a large group of major companies (Expert Choice, Inc., 2000). These software packages makes it possible to easily manipulate a large number of variables, keeping track of

comparisons, rankings, and weights. They also provide measures of the consistency of the judgments and allow complete sensitivity analysis.

Figure 1: Hierarchical Levels					
Hierarchical Level 1: Goal of the AHP					
Determine the relative importance of various measures of the Critical Success Factors in following the strategy of this organization.					
Hierarchical Level 2: Subject Functions					
Team A		Team B		Individual	
Hierarchical Level 3: Evaluator Class-Groups					
Manager	Team Leader	Team Leader	Other Team	Co-worker	Customer
Hierarchical Level 4: Individual Evaluator					
Appraiser 1		Appraiser 2		Appraiser 3	Et cetera
Hierarchical Level 5: Classifications of Measurement Criteria					
Outcomes		Behaviors		Competencies	
Hierarchical Level 6: Performance Measurement Criteria					
Customer Orientation		Professional Development		Planning and Goal Setting	
Work Quality		Conscientiousness		Conflict Resolution	
Work Quantity		Flexibility		Collaboration	
Job Skill Development				Conflict Resolution	

Using Web-HIPRE is relatively simple, and help is available for most topics of concern. First, the various elements of the hierarchy are placed in the working area with the leftmost column

corresponding to the first level of the hierarchy (Goal of the AHP) and the next column consisting of the elements from the second level of the hierarchy (Subject Functions), and the third consisting of the classifications of evaluator and so on (Figure 2: Hierarchical Relationships). Once the elements are located in the correct columns, they must be connected to depict their relationships. All of the elements in the second column representing functional areas for which the subject is being evaluated should be connected to the element in the first column. Then the elements in the third column representing the various evaluator classifications should be connected to the appropriate elements in the second column. For the individual subject in this example, the evaluation by customers is only applicable to the subject's function in Team A. In fact all the evaluator groups in the third column are deemed important in varying degrees to the individuals responsibilities as a member of Team A. Management's evaluation of the subject is considered important in all three of the subject's functional areas, but the evaluation provided by team leaders is applicable to the subject's function in Team A and Team B, not the subject's function as an individual. The process continues for each classification of evaluator. Next, the various elements in column four that represent the individual evaluations will be attached to the appropriate element in column three. Note that this might represent individuals that will fill out evaluations for the subject or it might represent the score on an examination or a survey. In this example there are two individual customer scores by which the subject will be rated. These could represent actual evaluations performed by individual customers, or they could represent the results of data collected by observing the subjects interaction with customers. One manager score will provide the evaluation for management. Again, this could represent a single evaluation by the subject's supervisor, or it could be a composite score derived from several sources. Leaders of each team provide input into the team leader evaluation of the subject. Thus, all the individual evaluations are linked to a class of evaluator. When this process is complete, the three elements in column five representing outcomes, behaviors, and competencies, will all be attached to the elements in column four to which they are considered important. Not every individual evaluator will evaluate the subject on outcomes, behaviors, and competencies all three. For instance, in this example, the subject is evaluated by two co-worker evaluations; however, the co-worker evaluations evaluate only behaviors and competencies, not outcomes. Similarly, the leader of the dependent team does not evaluate the individual on behaviors or competencies, only on outcomes. This recognizes that all three types of criteria are not important to all evaluators. Next, the elements in column six representing each performance measure will be attached to the appropriate element in column five.

Figure 2: Hierarchical Relationships

Once these relationships are established, the weighting procedure is performed to compare the importance of each of the element in its relationship to the other elements to which it is attached. Beginning, in the first column, the user is prompted by the menu to answer a series of questions as to "how many times more important" one element is as compared to another. This individual subject is being evaluated as a member of two teams and as an individual. This subject's function as a

member of each of the teams and as an individual was compared in a pair-wise comparison of the type, "Team A is how much more or less important that Team B?" By using a mechanical indicator and weighing the relative importance of each of the functions against the other the software program leads the user through the process to compare the three functions. The user is prompted to complete this comparison process for each set of elements or criteria. When this process is complete, the program automatically generates the matrices and eigenvector needed to accomplish AHP. The weighting factors for each of the sets of elements or criteria as generated by WebHIPRE are displayed with the element or criterion in Figure 2. In this example, note that the weight for the subject's function as a member of the two teams and as an individual are 0.55, 0.24, and 0.21 respectively. This means the 55% of the evaluation of the subject is related to being a member of Team A, 24% is related to being a member of Team B, and 21% is related to functioning as an individual. Users of the program may choose to enter these percentages directly instead of going through the pair-wise comparison process, if they so desire. Continuing the illustration, the 55% of the subject's evaluation that is related to Team A is composed of evaluation material from all the evaluator classes in column 2, but only select evaluator classes provide information for the portion of the evaluation that is related to Team B and to the subject's work as an individual. At this level, the user could not simply enter percentages because the importance of each class of evaluator is weighed in its relationship to each function.

The software program leads the user to compare individual elements representing evaluator classes in relationship to the other evaluator classes that provide input for each function. For instance, note that each of the six classes of evaluator provides input to the performance evaluation of the subject's function as a member of Team A. The user is led to determine the importance of each evaluator class's contribution to every other. The program automatically offers each pair-wise comparison for consideration. The user might begin by indicating that the importance of the opinion of the customer and the manager are equal and that the opinion of the customer's input should be considered to be twice as important as that of the team leader and so on until comparisons are made between each possible pair of the six elements or criteria. The program will then calculate and assign weights to each of the six as they relate to only Team A. These six weights total to one and represent the percentage of weight given to each evaluator class in the evaluation of the subjects performance as a member of Team A. The user then moves on to the next element or criterion, in this case Team B, and is led through the process of comparing the importance of each of the four evaluator classes that provide input into the evaluation of the subjects performance as a member of Team B. Again, the user may eschew this comparison process and enter the percentages directly if so desired. Using the matrix algebra process described above, the software program considers that each evaluator class provides different levels of input to multiple elements at the proceeding level and assigns the relative weight that should be given the opinion of that evaluator class. The resulting score such as .096 for Team Member means that 9.6% of the weight of all the evaluator classes should be assigned to the evaluation of team members. This determination is made considering the

relative importance of team member evaluation to the subject's function as a member of Team A and Team B and the relative importance of the subject's function in each team to the subject's overall performance evaluation. This process is repeated for each level down to the lowest level to which the evaluation is being decomposed. In this case, the lowest level consists of the eleven criteria in the final column of Figure 2. When the process is complete, the software package provides the user with the weights for this lowest level, which will then be used in scoring of the individual subject's performance.

This process is, admittedly, time consuming. However, many parts of the hierarchy will be similar for classes of individuals and could be duplicated. Once this process is complete a performance evaluation template can be constructed for each individual and the process would not need to be repeated unless there were substantive changes in the subjects job description.

Table 2: Individual Subject Performance Score						
		Goal	Actual	Raw Score	Index	Weighted Score
Customer	Rating on Customer Survey	100%	94%	94.00	0.073	6.86
Work Quality	Percentage of Good Output	99%	97%	97.98	0.105	10.29
Work Quantity	Percent of On-time Completion	95%	92%	96.84	0.186	18.01
Job Skill	Hours of training	50	50	100.00	0.151	15.10
Professional	Rating (1 to 10)	9	8	88.89	0.032	2.84
Conscientiousness	Rating (1 to 10)	10	8.5	85.00	0.120	10.20
Flexibility	Rating (1 to 10)	9	7	77.78	0.069	5.37
Consideration of Others	Rating (1 to 10)	9	9	100.00	0.053	5.30
Planning and Goal Setting	Rating (1 to 10)	9	9	100.00	0.067	6.70
Conflict Resolution	Rating (1 to 10)	9	8	88.89	0.081	7.20
Collaboration	Rating (1 to 10)	10	9.5	95.00	0.065	6.18
					Total Score 94.05	

The weights as generated for each of the individual job performance criteria (Figure 1 and Figure 2) have been incorporated into the weight column in Table 2. After the weights have been determined, goal values must be entered as a standard of measure. For instance if the individual evaluator is rating the subject on a scale of 1 to 10 where 10 is the highest evaluation for this criterion, then the goal value would be 10. On the other hand, for another criterion that has a quantitative observable outcome, such as a defect rate or success rate, the goal value might be 0 (number of defects) or 100 (percentage of good parts). This goal would be compared with the actual results for that criterion. In order to determine the index for each criterion, the difference between the achieved value and the goal value is determined. This is then divided by the goal value and one is added. This number times 100 is the Weighted Score. The formula to accomplish this calculation is:

$$\text{Index} = 100 * \left(\frac{(\text{actual} - \text{goal})}{\text{goal}} + 1 \right)$$

In situations where the object is a low goal number rather than a high goal number the following alteration is necessary:

$$\text{Index} = 100 * \left(\frac{(100 - \text{actual}) - (100 - \text{goal})}{100 - \text{goal}} + 1 \right)$$

The Weighted Score for each criterion is then summed to provide the total score for the subject. If the subject accomplishes 100% of all set goals, the score is 100.

The labor-intensive task of constructing this goal template must be done only one time for each subject. A spreadsheet program was used to construct the template reproduced in Table 2 and subsequent evaluations would require only changing the numbers that represent the actual results.

In this example, the subject performed at a level slightly lower than the goal, but perhaps more important than the overall ranking are the individual indices. A glance at the various indices shows which areas need work, and which areas are being performed at or below goal levels. However, using the calculations described here, note that if scores above the goal level were entered it would result in a score that represented over 100% on those criteria. Users who wished to limit the performance rating to 100% would limit the score to the goal level for any criterion on which the subject performed at a level above goal.

RESULTS AND DISCUSSION

Although this example illustrated the performance evaluation for an individual the same process can easily provide performance ratings for groups or even the business unit as a whole. Use of AHP in the evaluation process provides the requisite level of theoretical rigor and internal consistency to assure reliability of the measure. In addition, even though the process is somewhat involved, it is doubtful that it would require more time or consideration than using a less meaningful calculation.

Although this example was performed using the publicly available Web-HIPRE, this particular software package would be appropriate for testing the process only. An organization that implemented this type of evaluation system would be better served purchasing AHP software. Because of the way Web-HIPRE is administered, all calculations are performed and the resulting data is stored on computers maintained by the Systems Analysis Laboratory of Helsinki University of Technology. Much of the information that is measured during the evaluation system is sensitive should not be transmitted outside of the organization.

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USING THE KANO MODEL OF CUSTOMER SATISFACTION TO DEFINE AND COMMUNICATE SUPERVISOR EXPECTATIONS

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ABSTRACT

The primary principle of Total Quality Management suggests that providers achieve success by understanding and satisfying customers' needs. This study uses a paradigm of the "supervisors are the customers" and the Kano Model of customer satisfaction to clarify and quantify supervisor expectations. Supervisor expectations are examined in terms of "basic needs", "satisfiers", and "delighters" as well as a variety of demographic variables (e.g., gender, age, experience, industry, supervisory level) from 257 supervisors and 30 manufacturing and service organizations. The findings indicate consistent and quantifiable differences in the levels of supervisor expectations. Recommendations are offered to improve the communication of expectations between supervisor and subordinate.

INTRODUCTION

A supervisor's primary responsibility is to influence his or her employees to accomplish organizational goals. The clear communication of expectations is central to this process of influencing or motivating the employees. While most supervisors understand their responsibility to communicate expectations, the employees may not understand how critical it is that they understand the supervisor's expectations. In a sense, the employee must view "the supervisor as the customer." As such, subordinate employees are the providers and it is their responsibility to determine and satisfy their supervisor's (customer's) expectations. However, it is not enough for the subordinates to merely understand customer needs or expectations; they must be able to quantify them. All needs or expectations are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction or in this case, the employee's acceptance by the supervisor and performance rating or promotion.

Research in higher education indicates that students who better understand the vagaries of professor expectations get higher grades in that particular course and maintain higher grade point averages (Emery, 2002). As such, it is reasonable to believe that employees, who better understand their supervisor's expectations, will perform better. The purpose of this study is to help supervisors

(customers) qualify and quantify their expectations for their employees. Additionally, the relationships between various supervisor expectations will be examined across a variety of variables (e.g., gender, age, experience, industry, supervisory level) to offer recommendations for improving the communication of expectations between supervisor and subordinate.

LITERATURE REVIEW

The setting and evaluation/control of expectations, as well as the degree of employee awareness, are important parts of any performance model. Surprisingly, the supervisor's role in communicating performance expectations to subordinates has been relatively neglected in leadership research. Bass's (1990) revised and expanded edition of Stogdill's Handbook of Leadership exhausts the topic of "Leaders as Molders of Expectations" in one short paragraph including only three references. Early researchers stressed the communication of expectations as a key responsibility of a leader and critical to influencing employee performance. For example, Likert (1961) stressed the communication of clear and high expectations by supervisor to subordinates as an important component of leadership behavior. Similarly, Edwards (1973) showed that the most effective supervisors are those who create high performance expectations for subordinates. House (1977) included the communication of high expectations for follower performance as an important feature of charismatic leadership. In addition to these declarations by noted researchers of leadership, the setting and communication of expectations is solidly grounded in the Expectancy Theory, Goal Theory, Leader-Member Exchange Theory and the Theory of Self-fulfilling Prophecy. Further, the notion of the "supervisor as the customer" suggests that customer satisfaction theories and literature are relevant to the supervisor-subordinate dyad. A discussion of the Kano Model for determining and classifying customer requirements is used to illustrate that all customer expectations are not created equal. As such, one might infer that under the "supervisor as the customer" paradigm, the achievement of supervisor expectations provide varying levels of reward and recognition.

Goal Theory

The Goal Theory proposes that goals and the process of setting goals are the primary determinants of behavior. Goal setting has four motivational mechanisms: (1) directing one's attention, (2) regulating one's effort, (3) increasing one's persistence, (4) encouraging the development of goal-attainment strategies or action plans (Locke & Latham, 1990). Goal specificity and the communication thereof are essential to the goal setting process. A supervisor's expectations are nothing more than his/her behavior goals. As such, it is critical that the supervisor clearly communicate his/her expectations.

Expectancy Theory

The Expectancy Theory holds that people are motivated to behave in ways that produce desired combinations of expected outcomes. Critical to the magnitude of motivation is the concept of instrumentality. Instrumentality represents a person's belief that a particular outcome is contingent on accomplishing a specific level of performance or expectation. As such, it is essential that the employee understands the supervisor's expectations and that employee believes that his or her goals can be achieved by meeting or exceeding the supervisor's expectations (Vroom, 1964).

Leader-Member Exchange Theory

The Leader-Member Exchange Theory suggests a leader classifies subordinates into in-group members and out-group members based on how well they match the leader's values and expectations (Sparrowe & Liden, 1997). Research indicates that in-group members are likely to receive more challenging assignments and more meaningful rewards. In-group members, in turn, are more positive about the organization culture and have higher job performance and satisfaction than employees in the out-group. An out-group member isn't considered to be the type of person the leader prefers to work with, and this attitude is likely to become a self-fulfilling prophecy. Out-group members receive less challenging assignments, receive little positive reinforcement, become bored with their jobs, and may ultimately quit (Engle & Lord, 1997).

Self-Fulfilling Prophecy Theory

Important variations of the theory of Self-Fulfilling Prophecy (Merton, 1948) are the Pygmalion (Rosenthal & Jacobson, 1968) and Galatea (Eden, 1984) effects. Basically, these two effects suggest that a leader's (teacher or supervisor) expectancies affect a subordinate's performance and a subordinate's expectations affect his or her performance. While not much research on these effects has been done in a work situation, evidence from classroom experimentation indicates that expectations have a profound affect on raising productivity.

Kano Model

The Kano model (Kano et al., 1984) was developed within the Japanese manufacturing industry to determine and prioritize/weight customer requirements or expectations. It illustrates that all needs are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction or a performance report. Referring to Figure 1, the horizontal axis shows the extent to which customers' expectations are achieved. The vertical axis shows the customer

satisfaction associated with this achievement. Three types of needs are identified in this model: *BASIC NEEDS, SATISFIERS, and DELIGHTERS.*

The first type expectation is the "basic need" or assumptions that customers have about a service (e.g., the availability of a restroom in a restaurant or clean silverware). In a management setting, the manager may have a basic need of employee punctuality. While achievement of these needs do not satisfy the customer (supervisor), their absence quickly causes dissatisfaction. The second type of expectation is the "satisfier" or the list of items that customers (supervisors) would normally mention as keys to their satisfaction, i.e. a responsive server in a restaurant or employees who meet deadlines in a management setting. Achievement of the satisfiers increases customer satisfaction, but only at a linear rate. The third type of expectation is the "delighter". These are needs that a customer does not have conscious knowledge of or fall into the category of "wouldn't it be great if someday an employee provided….". For example, a fine restaurant that provides baby-sitting facilities or an employee that synthesizes material into new way of looking at things. A provider that does not provide delighters will still have satisfied customers (supervisors), but those that provide delighters will experience a nonlinear increase in customer satisfaction. The dotted lines graphically depicted that all needs are not created equal, and the resolution of all needs does not have the same impact on customer satisfaction. For example, the additive effect of failing to fulfill basic needs or expectations is a geometric increase in dissatisfaction. The additive effect of providing "delighters" is a geometric increase in satisfaction. Lastly, the additive effect of providing "satisfiers" is tantamount to a linear increase in the customer's satisfaction.

This model suggests four important points to the employees wishing to successfully market their product. First, all basic needs must be fulfilled. Failure to satisfy a basic need has a dramatic affect on customer satisfaction. In other words, one "ah shucks" outweighs ten "atta boys". Second, the provider must determine and provide as many linear satisfiers as possible. Each satisfier has an additive effect toward total customer satisfaction or customer loyalty. The customer will enter a zone of moderate satisfaction if the provider fulfills all of the customer's "basic needs" and a few of the satisfiers. Third, the provider needs to create "delighters," since it is through their production that real service differentiation can be created. Each time a provider produces a "delighter" it is a memorable event for the customer and his or her satisfaction is geometrically increased. As such, one might say that one "delighter" outweighs a number of "satisfiers". Fourth, any advantage gained by delighting customers only holds temporarily until the competition catches up. Continuous innovation is necessary in order to maintain an edge. Lastly, this model suggests to supervisors the notion that all employees should clearly understand their expectations. Employees that don't understand the subtleties of expectations have a low "pattern sense" and as such, will have poor performance.

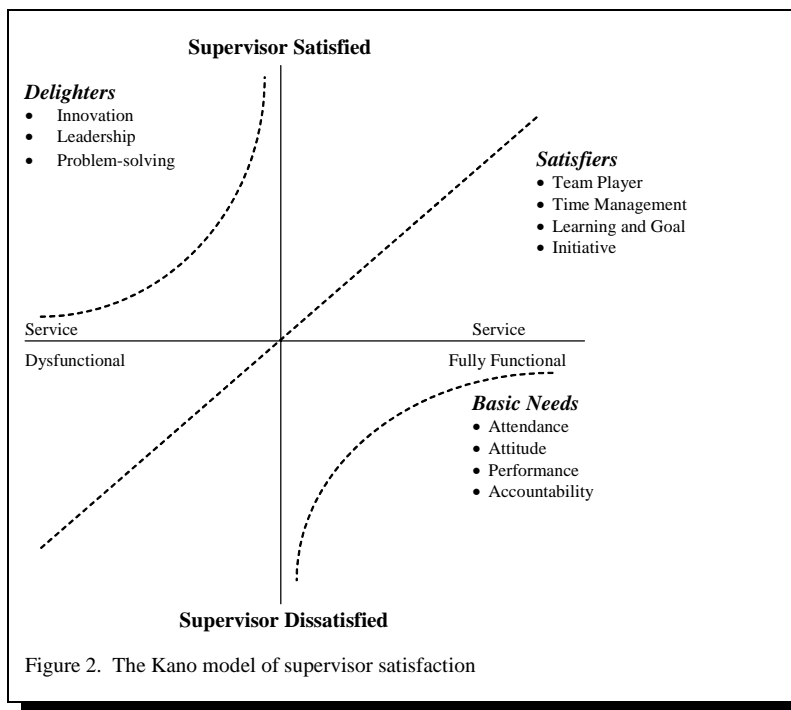Figure 1. The Kano model of customer satisfaction

METHOD

An expectation survey instrument was developed and pilot tested on 35 supervisors attending local area Rotary and Chamber of Commerce meetings. As a result of the pilot test, several modifications were made to the survey instrument (appendix 1) and a letter of introduction was added to improve the respondents' understanding of their role and the classification of expectations. Subsequently, a random sample of 270 supervisors was selected from 30, for-profit and not-for-profit, local area business organizations (12 manufacturing and 18 service).

The research concept and a request for participation were presented to each of the organizations' Human Resource managers. Rather than have us administer the instrument, each Human Resource manager preferred to administer the survey using our set of instructions and the assurance of internal and external confidentiality. In addition to the supervisors' top two to three expectations in each category, information was requested on several variables (e.g., organizational discipline, supervisory level, the type of business and industry, number of direct and indirect subordinates, gender, experience, and age) to explore variances in supervisory expectations. The expectations and the relationships between the expectations and demographic variables were examined for variances ($p > .05$) using SPSS cross-tabulation and chi-square analysis and PHstat chi-square analysis of proportions

RESULTS

Usable questionnaires were obtained from 257 supervisors across 30 business organizations (12 manufacturing and 18 service). The following number of comments were obtained by demographic variable: (1) Gender-male 1275, female 450; (2) Age-under 40, 942, 40 and over 766; (3) Supervision level-first line and middle level, 1124, upper level, 552, (4) Total Experience-10 years or less 792, greater than 10 years 916; (5) Industry-manufacturing 903, service 814; and (6) Level of Expectations-basic needs 646, satisfiers 585, and delighters 498. As anticipated, the supervisory expectations varied across a wide range terminology. As such, a list of the expectations (1,729) was given to a Delphi panel of six supervisors (three from manufacturing and three from service) for consolidation to a workable number. After three iterations, the following consolidated list of 32 expectations was developed: Accountability, Appearance, Attendance, Attitude, Behavior, Commitment, Competitiveness, Continued Learning and Goal Setting, Customer-Oriented, Decision-Making, Entrepreneurial Spirit, Improvement-Oriented, Initiative, Innovativeness, Integrity, Interpersonal skills, KSAs (knowledge, skills and abilities), Leadership, Multitasking, Oral Communication, Performance, Personality, Planning, Problem-Solver, Resource Management, Safety, Social Responsibility, Stress Management, Team Player, Time Management, Written Communication, and Willingness to Change. Following data entry, the list of 32 expectations was reduced to the 12 expectations that were mentioned by more than five percent of the respondents. The consolidation at five percent and above was based on what appeared to be a natural breakpoint in the data and to have sufficient cell sizes for chi-square testing.

Overall, the chi-square testing indicated only two differences within the variables. First, there was a significant different between the levels (basic needs, satisfiers, delighters) of the 12 expectations presented by the supervisors ($p<.001$). Specifically, the supervisor indicated four "basic needs" (attendance, attitude, performance, and accountability), four "satisfiers" (initiative, team player, time management, and continued learning and goal setting, and three "delighters" (innovativeness, leadership, and problem-solving ability) (Figure 2). The expectation of KSAs was equally distributed across all three levels of expectation. Second, there was a significant difference in expectations between the two age groups (i.e., 40 and under and over 40) ($p<.011$). There were no significant differences within gender ($p<.103$), industry ($p<.123$), supervisory experience ($p<.084$), and supervisory level ($p<.151$). It is particularly interesting that supervisory experience and supervisor level were not significantly different despite the significant differences in expectations noted between the age groups. This is no doubt the result of a relatively even distribution of age and experience across the management levels. For example, many of the first line supervisors in manufacturing may have been older employees who were promoted to supervisory positions after years functioning in non-supervisory capacities.

Figure 2. The Kano model of supervisor satisfaction

The results, however, indicated several significant relationships between the demographic variables and the 12 supervisor expectations (Table 1). For example, the expectation of "attendance" was significantly different between the age groups, supervisory levels, and expectation levels. Specifically, the "40 and under" supervisors, lower to mid-level supervisors, and "basic need" level of expectations significantly emphasized "attendance".   The expectation of "attitude" was significantly different between the age groups, industries, and expectation levels. Specifically, the "40 and under" supervisors, "manufacturing" supervisors, and "basic need" level of expectations significantly emphasized "attitude". The expectation of "leadership" was significantly different between the expectations levels. Specifically, it was significantly reported as a "delighter". The expectation of "continued learning and goal setting" was significantly different by gender, age, industry, and experience level. Specifically, it was significantly emphasized by the following supervisory demographics: females, "over 40", service sector, and "10 years or more experience". The expectation of being a "team player" was significantly different across the age groups and experience levels. Specifically, being a "team player" was significantly reported by the "40 and under" group and the supervisors with "10 years or more experience". Lastly, the expectation of "time management" was significantly different between the expectations levels. Specifically, it was significantly reported as a "satisfier".

Variable/ Attribute	1	2	3	4	5	6	7	8	9	10	11	12
Table 1. Significant Relationships between Supervisor Expectations and Demographic Variables											
Gender								.037				
Age		.029	.028					.002			.016	
Industry			.019					.004				
Supv Experience								.012			.001	
Supv Level		.001										
Expect Levels		.001	.001				.001					.001
Gender* Exp 1	.015		.022							.015		
Gender* Exp 2						.012		.039		.013	.012	
Gender* Exp 3												
Attribute Code: (1) accountability, (2) attendance, (3) attitude, (4) initiative, (5) innovativeness, (6) KSAs, (7) leadership, (8) continued learning & goals setting, (9) performance, (10) problem-solving, (11) team player, (12) time management											
Note: Cells indicate those relationships with significant differences (p<.05) using chi-square proportional testing.											

Although there was not a significant difference by gender across all expectations, there were some interesting and significant differences between the expectation levels by gender (Table 1). For example, males significantly more often reported the expectations of accountability and having the proper "attitude" as a "basic need". Females significantly more often indicated the ability for problem-solving as a "basic need"; males more often reported an expectation for problem-solving as a "satisfier". Females significantly more often reported the expectations of having KSAs and continued learning and goal setting as a "satisfier". Males significantly more often indicated that being a "team player" was an expected "satisfier". There weren't any significant differences between the genders for "delighters".

The following tables (2-7) indicate cross-tabulations of the demographic variables against supervisor expectations. The supervisor expectations are ordered within each variable by reported frequency (%). In general, these tables illustrate how similar each variable group reported the expectations. In other words, one group might state "performance" as their third most popular expectation, while the other group might have it as their second most popular expectation.

Table 2. Supervisory Expectations by Age Group			
Under 40		40 and Over	
Initiative	9.6%	Initiative	10.1%
Attendance	8.7%	Performance	6.4%
Performance	7.5%	Attendance	6.0%
Team Player	7.5%	Team Player	7.2%
Attitude	7.3%	Learning and Goals	5.9%

Table 3. Supervisory Expectations by Gender			
Male		Female	
Initiative	9.3%	Initiative	11.3%
Team Player	7.9%	Attendance	8.2%
Attendance	7.3%	KSAs	6.2%
Performance	7.2%	Performance	6.0%
Attitude	6.8%	Learning and Goals	6.0%

Table 4. Supervisory Expectations by Supervision Level			
Lower and Middle Level		Upper Level	
Initiative	10.0%	Initiative	9.4%
Attendance	8.7%	Team Player	7.6%
Performance	7.7%	Attitude	6.0%
Team Player	7.2%	Time Management	6.0%
Attitude	6.5%	Innovation	5.8%

Table 5. Supervisory Expectations by Experience Level			
Less than 10 years of supervision		10 years or more of supervision	
Initiative	9.6%	Initiative	9.9%
Attendance	8.5%	Team Player	7.3%
Performance	7.6%	Attendance	6.7%
Team Player	7.4%	Performance	6.6%
Attitude	7.2%	KSAs	5.7%

Table 6. Supervisory Expectations by Industry			
Manufacturing		Service	
Initiative	9.7%	Initiative	10.1%
Attendance	8.6%	Attendance	7.1%
Performance	7.9%	Performance	6.9%
Attitude	7.5%	Innovation	5.9%
Performance	7.0%	KSAs	5.9%

Table 7. Supervisor Expectations Frequencies by Expectation Levels	
Basic Needs	
Attendance	17.3%
Attitude	12.5%
Performance	8.7%
Accountability	5.6%
Satisfiers	
Initiative	13.8%
Team Player	9.2%

Table 7. Supervisor Expectations Frequencies by Expectation Levels	
Time Management	9.1%
Learning & Goals	6.0%
Delighters	
Innovative	16.9%
Leadership	9.0%
Problem-Solving	5.8%
Note: The expectation for KSAs was evenly distributed across all three levels	

DISCUSSION

Overall, the results indicate a surprising uniformity across the various demographic variables. One might have expected remarkable differences between gender, level of management, type of industry and experience level, but few were found. This is good news, from a subordinate's perspective. The findings indicate there is a core of expectations that cut across these demographic variables. As such, a subordinate can consider these expectations as instrumental to success in most organizational environments. Further, it is important to note that the core expectations were differentiated within the Kano model. In other words, all expectations were not considered equal. The lowest level or "basic needs" expectations were the everyday behaviors that one expects of an employee, i.e. attendance, attitude, accountability, and performance. An employee must meet all of these expectations or the supervisor is dissatisfied. It's interesting to note that attendance was the most frequently mentioned expectation at this level.

Once the "basic needs" are met, an employee can raise his or herself linearly in the eyes of the supervisor by performing the "satisfiers". Although only four expectations (i.e., initiative, team player, time management, and continuous learning and goal setting) were most frequently identified as "satisfiers", this level of expectation had the widest range of comments. As one might suspect, "satisfiers" are very job specific. However, it is interesting to note that "initiative" was the most frequently mentioned expectation at this level. This would suggest that an employee's initiative is an important factor in a supervisor's mental assessment of performance. Lastly, the "delighters" (i.e., leadership, innovation, and a problem-solving ability) offer the employee an opportunity to geometrically raise his or herself in the supervisor's eyes. These are unexpected actions and when exhibited, they readily grab a supervisor's attention. It is not surprising that these expectations are more cerebral in nature and often mentioned as sure tickets for promotion.

These findings on supervisory expectations appear to have a strong correlation with the research conducted by Parasuraman, et al. (1988) on how customers judge service quality. They indicated that the expectation of "reliability" (e.g., dependable and accurate performance as promised) was the key "deal breaker", not "deal maker". In other words, one expects "reliability" and therefore you are not rewarded for meeting the expectation. This thought process is analogous to Kano's level of "basic needs". One is not rewarded for meeting the "basic needs". In order to receive rewards, one needs to concentrate in areas where the expectations are lowest. This is the realm of the "delighters". Meeting or exceeding expectations in this area geometrically increase the customer's (supervisor's) satisfaction.

CONCLUSION

Determining the customers' needs and measuring the gap between expected service and perceived service is a routine customer feedback process that is practiced by leading service companies. Employees provide service to their supervisors and therefore, should be subject to the theories and strategies governing service quality and customer satisfaction. As such, a key to developing improvement strategies within the supervisor-subordinate dyad lies in examining the discrepancy between customer (supervisor) expectations and the provider's (subordinate's) perceptions of those expectations. Strategies for closing this gap or discrepancy should be approached from several aspects (i.e., the supervisor, employee and organization).

The first step is to ask the supervisors to determine, and perhaps even chart, their expectations (i.e., "basic needs", "satisfiers", and "delighters"). Supervisors could reference these expectations during the orientation of new employees and during employee performance reviews. Further, the supervisors could put their expectations as additional items on the company's employee appraisal form. Also, the supervisor needs to ask his or herself the question: "How well do my employees understand my expectations?" If the answer to this question is anything other than "perfectly", the supervisor needs to ask: "Why not?" This type of mental exercise may highlight areas to improve communication.

A second step would be to train the employees to recognize the levels of various expectations using a Kano seminar. Once the training is accomplished, employees should be asked to write down their perception of the supervisor's expectations (i.e., "basic needs", "satisfiers", and "delighters). The differences or gaps between the expectations and perceptions can be the basis for a unit or departmental discussion. An additional objective of subordinate expectancy training would be to make subordinates aware of the effects of expectations-their supervisors' and their own-on their performance. Subordinates could be taught how to behave in a manner that would evoke more effective leadership from their supervisors. This would be harnessing Pygmalion in reverse, subordinates "treating" their supervisors in such a way that they mold their supervisory leadership behavior in accordance with subordinate desires (Eden, 1984).

The third step might be to have the president or CEO publish his or her expectations. In general, organizational culture is spawned from top management's values, beliefs, and norms. As such, one might consider developing a Kano model for the organization's culture. Subsequently, all the supervisors could self-assess their differences from the organizational culture and modify their expectations. This continuous cycle of recognition and modification would continuously improve the strength of the organizational culture. Additionally, it may be worthwhile for the Human Resources organization to ask the employees to rate their understanding of their supervisor's expectations. This rating would provide the organization with a valuable indication of climate and supervisor-subordinate communication.

In closing, communication is the glue that holds organizations together. The communication of expectations affects organizational performance (e.g., behavior, productivity, change, coordination, etc.) and culture. While it is important for subordinates to understand the expectations on their performance evaluation instrument, it is equally, if not more import to understand the expectations in the supervisor's mind. As noted in the Leader-Member Exchange Theory, it is the supervisor's mental software that determines whether the employee is in the "in group" or the "out group", not the formal performance ratings. Understanding what's on the supervisor's mind requires listening, pattern analysis and asking questions. In other words, the transmission, translation and performance of expectations require all the functions of a successful communication model.

Lastly, this study used "open-ended" questioning techniques that required respondents to identify their expectations of workers with little aid or prompting. The 12 key expectations were derived from the open-ended responses. The results of this study could be further refined by a follow-up study that specifically used these 12 expectations and a ranking scale or paired comparisons. This would permit the respondents to focus more clearly on their views on these expectations rather than needing to identify them. This follow-up study could also tease out any more subtle differences between the independent variables. A more in depth examination of the gender differences with regard to supervisory levels would be an excellent candidate for this type of analysis.

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QUALITY OF WORK-LIFE ISSUES, THE NEEDS OF THE DUAL-CAREER COUPLE EMPLOYEE PERCEPTIONS OF PERSONNEL PRACTICES: A STUDY OF RURAL AMERICA BAROMETER FOR HUMAN RESOURCE MANAGERS

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ABSTRACT

America's work force has undergone a transformation over the past forty years. The Census Bureau reported that in 1997 only 17% of all families conformed to the 1950s model of a wage-earning dad, a stay-at-home mom, and one or more children. Since the late 1950s, growing attention has focused on families in which both partners work; these relationships are called dual-earner marriages. Societal changes such as the number of women entering the workforce and the economic need for two incomes to support a family have impacted the American labor force. Married coupled families in which husband and wife both work accounted for 53.2% of the workforce in 2000. These workers face problems in balancing work responsibilities with home commitment. Literature supports that work-life conflict poses problems to both employees and business. Organizations look to their employees for productivity and efficiency, which is compromised by work-life conflict in the form of absenteeism, decreased employee satisfaction, and poor job performance. Employees look to their employers for personnel practices to help alleviate the stress they experience in balancing home and work responsibilities. Fourteen organizations in northern-lower Michigan participated in this study with employees representative of healthcare, education, banking, insurance, tourism, and the manufacturing industries. A Likert-type scale was used to assess the perception of 278 members of dual-career families on how helpful eighteen personnel practices were in alleviating work-life conflict. The rankings of the personnel practices were examined and implications to business and industry made.

The results of this study will be useful to those academics and human resource practitioners who are interested in evaluating quality of work-life personnel practices to better meet the needs of dual-career families who face conflict in managing work responsibilities and family commitments. It serves as a tool for business and industry to accurately assess the needs of their own workforce. From the findings, business strategies can be developed to more effectively allocate financial resources to provide personnel practices that are perceived as most supportive by their employees.

The underlying result for the organization is the potential for increased employee morale, productivity, and job satisfaction.

INTRODUCTION

America's work force has undergone immense change over the past forty years bringing with it societal changes impacting the way people value their quality of life and their willingness to compromise career over family. The 2003 workforce is much different than the workforce of the 1980s and early 1990s, which evolved from stereotypical norms of work in the 1960s.

The Census Bureau reported that in 1997 only 17% of all families conformed to the 1950s model of a wage-earning dad, a stay-at-home mom, and one or more children. Since the late 1950s, growing attention has focused on families in which both partners work; these relationships are called dual-earner marriages (Jordan, Cobb & McCully, 1989). Married couples with children in which husband and wife both work accounted for 53.2% of the workforce in 2000 (U.S. Bureau of Labor Statistics, 2001).

The number of women entering the workforce and the incidence of dual-earner families has steadily increased; a trend that seems unlikely to change in the near future (Facts about the demographics of working families, Careers Institute, Winter, 1999). The most significant increase has been in married-couple families with children under the age of six. The percentage of such families increased almost 10% between 1986 and 1998, from 52.6 to more than 62% (Source: U.S. Bureau of the Census).

Research on employee values reflects a new trend with employees often placing family interests above career and increasingly expecting employers to help them balance home and work demands. These changes have made it imperative for organizations to consider how their policies and procedures affect family life.

Sekaran (1986) illustrates a number of critical issues in dual-career families: (a) their need for flexible work patterns, enabling them to balance the demands of family and career; (b) the need for revised benefits plans that will allow couples to start families without jeopardizing their career prospects; and (c) their need to be freed from anxieties about child care when they are at work.

Work responsibilities and family obligations compete for time and attention in most working adults. The more time individuals allocate to one arena, the less they have to allocate to the other (Moen, Waismel-Manor & Sweet, 2002). When individuals feel that too many demands of one domain are unmet, they experience work- family conflict, which is consistent with a conflict approach (also referred to as depletion or resource drain) to the relationship between work and family roles (Edwards & Rothbard, 2000; Greenhaus & Beutell, 1985; Lambert, 1990). However, when individuals are able to allocate their time and energy to meet the demands of each domain, they feel successful in balancing work and family. This is consistent with past literature that has defined work-family balance in terms of satisfactorily resolving competing demands emanating from

the work and family domains (Bohen & Viveros-Long, 1981; Clark, 2000; Greenhaus & Beutell, 1985; Higgins, Duxbury & Johnson, 2000; Kossek, Noe & DeMarr, 1999).

If members of dual-career families face problems in simultaneously meeting the demands of work and family, what would be their perceived attitude toward work if quality of work-life concepts and benefits were supported by the organization? The research supports that many managers in organizations cite issues with lost time at work, lack of motivated workers, and loss of worker productivity resulting from work-family conflicts. Absenteeism, employee turnover, and job satisfaction attributable to the existence or non-existence of quality of work-life concepts in the workplace are also concerns of managers as cited in the research.

In addition to the importance to individual employees of organizational support of family roles, there also appears to be a growing concern on the part of organizations regarding employee-organizational linkages, or the connection an employee feels toward an organization. Mowday, Porter, and Steers (1982) stress that the extent and quality of employee-organizational linkages provide important consequences for individuals, organizations, and society and are greatly affected by the social changes taking place.

One of the major changes Mowday, et al. (1982) note with respect to impacts on employee-organizational linkages related to the changing composition of the characteristics of the work force. In particular, they suggest that the percentage of women entering the work force, an increase in dual-career households, and a new value system will create difficulties for organizations that ignore the problem. The widened ties of individuals to the organization may have negative implications for both individuals and organizations. More specifically, Mowday et al (1982) suggest that reduced linkages may lead to lowered organizational commitment.

The workforce has undergone a transformation leading to an increase in dual-career families. These dual-career couples face many stressors in balancing career, family, social obligations and work expectations. Changing societal trends such as an increase in the number of women entering the work force combined with an economy that requires dual incomes to support an average standard of living contribute to work-family conflicts. As a result, society and American business have recognized the conflicts unique to dual-career families and have responded.

With the increase of dual-career couples in the workforce, many organizations have begun to take a role in developing quality of work-life programs. The goal of the organization is to relieve the stressors of employees in an attempt to retain employees, cultivate good employee morale, and develop organizational commitment while also enhancing productivity and efficiency of work performance. Society has responded with innovative solutions such as job sharing, flexible work schedules, and day care solutions. Dual-career families continue to look to employers and society for assistance in managing quality of work-life conflicts.

Absenteeism, employee turnover, employee morale, and job satisfaction may be directly related to the firm's ability to offer quality of work-life programs which the employee perceives as important in coping with quality of work-life issues. If employees face problems in simultaneously

meeting the demands of work and family, the organization usually suffers in terms of lost time at work and turnover of personnel due to an inability to cope with concurrent family and work demands or to relocate when required by the organization. The conflicts employees have between work and family hinder overall corporate productivity (Fernandez, 1986). The literature review and supporting empirical research further support a correlation of quality of work-life programs with employee productivity, morale, job satisfaction, and loyalty.

American work-force statistics show an increasing percentage (53.2%) of dual-career couples in the work-force. This particular segment of the population appears to be increasingly requesting business to issue policies, form programs, and offer benefits that will assist them in managing both career and family in a society that places increasing demands in both sectors. With the security of dual-incomes, this population segment, which comprises the majority of the American workforce, seeks quality of work-life benefits from organizations in which they wish to be employed.

Business is interested in retaining good employees, decreasing employee turnover, increasing overall corporate productivity, and seeks to cultivate a good corporate culture inclusive of good employee morale, employee loyalty to the organization, and job satisfaction. In addition, organizations are concerned with meeting the demands of their employees to enhance employee commitment to the organization. With a slow economy placing demands on companies to downsize and re-evaluate budgets, there is a growing need for human resource managers to review personnel practices in an effort to maximize the benefit to employees using limited organizational financial resources.

Organizations can implement or redesign practices to reflect consideration of the issues facing dual-career couples. As a result, they may avoid the costs resulting from home stress spilling over to work. Creative practices designed to accommodate the needs of working couples are emerging in companies across the United States (Hall & Hall, 1978; Koplemann, Rosenweigh & Lally, 1982).

Unfortunately, despite expressed interest in supporting families, the actual practices of most companies lag behind expressed attitudes of workers (Catalyst Career and Family Center, 1987). Employers may be reluctant to adopt new quality of work-life practices partly because they lack clear evidence of their effects, both for employees and the company. Although an array of new options exists, confusion surrounds the election of practices to best meet the needs of an organization's specific employee population.

Employee perception of the support their company provides them in balancing career with family roles affect critical employee attitudes such as employee commitment, job satisfaction, and employee morale (Chusmir, 1986; Magid, 1983). Other studies have identified a causal relationship between employee perceptions of the support of their company with employee productivity and have established a correlation of worker's attitude of QWL concepts with employee morale, employee loyalty to the organization, and overall job satisfaction.

Practices such as flextime and childcare are typically assumed to be helpful to dual-career couple employees with families. However, the actual beliefs of employees are rarely assessed. Employee's perceptions may be a crucial barometer of the usefulness of family support practices in diminishing home-career conflicts and may assist companies in selecting and implementing new benefits while also enhancing corporate productivity. Companies that minimally support and consider employee's family responsibilities in terms of personnel practices may experience decreased acceptance of the organization's values. This may lead to diminished loyalty to the company, decreased willingness to exert effort of work (decreasing worker productivity), and the employee may elect to leave the company in favor of organizations who support quality of work-life programs and practices which employees deem important.

An organizational climate or quality of work-life (QWL) exists in all companies (Balch & Blanck, 1989). In the journal article entitled Measuring the Quality of Work-life, (1989) Balch and Blanck state:

> Evidence of high QWL can be increased productivity and loyalty, increased levels of morale, frequent participation in cost savings suggestions, and employees who feel they do not need union representation to achieve their goal of having a good place to work (p. 44).

Balch and Blanck suggest that an organizational survey can help reveal how employees feel about their work situation and that measuring quality of work-life perception can reveal to management what employees feel are the most beneficial benefits and programs provided by their employer that curtail work-life conflict. Management can then address new practices and procedures that assist dual-career families to manage work-life conflicts (Balch & Blanck, 1989).

EVALUATING SOLUTIONS TO THE PROBLEM

The difficulty of managing work and family demands has increased for many working adults, and many employers have developed quality of work-life policies as an important attraction and retention strategy. Formal work/family practices encompass a wide range of programs including job sharing, flextime, childcare facilities, telecommuting and family leave. Employer's use of work/family policies has grown significantly in recent years. This represents a continuation in the expansion of average benefit packages, which grew from 25% of total compensation in 1959 to over 42% in 1996 (Milkovich & Newman, 1999). These programs can be evaluated to assess their role in reducing work-family conflict.

Family Medical Leave Act

The increase of women in the work force combined with the increase in dual-career families throughout the 1990s has forced some employers including the federal government to recognize the link between work and family life. In 1993, the United States legislated its only parental-leave policy, The Family and Medical Leave Act (FMLA), which allows twelve weeks of unpaid leave for workers with care giving responsibilities who are employed in workplaces with at least fifty employees for each working day during each of 20 or more calendar workweeks in the current or preceding calendar year (Polatnick, 2000).

Although the FMLA is an important first step, a major criticism of the policy is that it is unpaid leave and the majority of employees are not eligible due to the size of the firms in which they work (less than fifty employees). In the late 1990s, legislators began proposing revisions to the FMLA to expand benefits to cover thirteen million workers by including employees in firms of twenty-five or more employees. An additional measure proposes to allow workers to take up to twenty-four hours intermittent leave to attend to children's school activities or to accompany elderly relatives to medical appointments (Papa et al., 1998). These proposed measures have not been passed legislative approval.

At this point in time, the Family Leave and Medical Act is the first attempt to legislate that employers recognize workers' family responsibilities. While some groups do not favor expanded government intervention into work and family life, in order to sufficiently resolve the work-family dilemma, it appears that government intervention is necessary. The implementation of the FMLA combined with growing statistics of women in the workforce and dual-earner families have lead many businesses to re-examine their quality of work-life benefits (Polatnick, 2000).

Day Care Dilemma

Managing childcare becomes a complex and stressful juggling act, which involves balancing each parent's schedule together with the children's. Sandra Hofferth, a senior research scientist at the University of Michigan's Institute for Social Research, (as cited by Wasserman, 1999) states that kids twelve and under are spending much more time in structured activities today than they were just sixteen years ago. The feeling of not giving enough time to their children is a major source of stress for working parents who want to play an active role in shaping their children's lives. Many worry about the impact of their hectic work schedules on their children (Wasserman, 1999).

More than 6,000 companies now provide day-care services and financial assistance or referral services for child-care (Ribaric, 1987). An estimated 3,000 companies offer subsidized day-care center, financial assistance for childcare or childcare referral services with an increase of 50% since 1984 (Chapman, 1987). According to the *1997 National Study of the Changing Workforce*, 12% of working parents with young children receive direct financial assistance with

child care fees from their employers in the form of vouchers, cash or scholarships. According to the *1998 Business Work-Life Study*, 12% of companies report that they are considering providing worksite child care in the future (Bond & Galinski, 1998).

American Savings and Loan Association established the Little Mavericks School of Learning in 1983 for 150 children of employees on a site within walking distance of several of its satellite branch locations. The center's services include regular day care, holiday care, sick-child care, Boy Scout and Girl Scout programs, a kindergarten program, and after-school classes. Fees range from $135 to $235 a month. Company officials report that the center has substantially reduced absenteeism and increased productivity (Ribaric, 1987).

IBM contracted in 1983 with the Boston-based Work/Family Directions, a for-profit childcare consulting group. IBM has paid the firm to establish 16,000 home-based family centers and open 3,000 group day-care centers for IBM employees (Chapman, 1987). Other companies provide partial reimbursement for child-care services. Zayre Corporation pays up to $20 a week for day-care services for employees who work at corporate headquarters (Toufexis, 1987). A growing number of benefit programs enable employees to allocate a portion of their fringe benefits to pay for day-care services. Another company, Chemical Bank, pays these benefits quarterly in pre-tax dollars (Toufexis, 1987).

Facilities have been established to assist parents in caring for children when they are too sick to go to school or day care centers. About 80 employers (up from 50% from 1986-87) have made this provision for working parents (LeFleur & Newsom, 1988). Chicken Soup is a sick-child day-care operation in Minneapolis. Susan Wolfe, Chicken Soup's executive director, figures First Bank loses $154 a day if a $40,000-a-year middle manager misses work to take care of a sick child. She says, "Chicken Soup saves the company 87%, or almost $135 a day" (LeFleur & Newsom, 1988, p. 148).

Research shows that the use of resources such as on-site childcare relates to greater job satisfaction and perceived work-family balance (Ezra & Deckman, 1996), as well as employee time saved, increased motivation and productivity, better employee retention, decreased healthcare costs and stress-related illnesses, and lower absenteeism (Landaur, 1997).

Flex-Time Opportunities

Job flexibility refers to workers' actual control over their work schedules. Both women and men workers report that lack of control over their work schedules is their main source of work-family stress (Barnett & Rivers, 1996; Levine & Pittinski, 1997). Parasuraman, Purohit, Godshalk, and Beutell (1996) found that work schedule inflexibility was positively related to time committed to work, which in turn predicted work-to-family conflict. This relationship held for both men and women. Other research has shown that significant numbers of employees value having flexibility in scheduling the time and/or place of work (Glass & Estes, 1997). In a nationally

representative sample 38% of parents and 27% of non-parents reported that they might or would change jobs to gain access to flextime (Galinski, Bond & Friedman, 1996).

Parents seek to reduce their time stress through increased flexibility at work or by reducing their hours. In 1997, about 25 million full-time wage and salary workers had flexible schedules that allowed them to vary the time that they began or ended work, according to the Bureau of Labor Statistics (as cited by Wasserman, 1999, p. 11). This represented over one-quarter of all workers, a very sharp increase from the 15% with flexible schedules in 1991 (Wasserman, 1999, p. 11).

Thomas and Ganster (1995) found that employees with access to flexible scheduling had more control over managing work and family, which in turn increased job satisfaction and lowered work-family conflict. Baltes and colleagues (1999) conducted a meta-analysis of 31 studies of flexible scheduling policies. They reported a significant relationship between flexible scheduling and employee outcomes of job satisfaction in 18 studies of flextime and 8 studies of compressed workweeks.

According to one study, the majority of parents report that their main policy priority would be a set of policies that addresses their lack of parental time with children (Hewlett & West, 1998, p. 217). Flexible work schedule is rated highly among benefits to dual-career couples with 90% of mothers and fathers reporting that they want access to compressed work weeks, flextime, job-sharing, and part-time work benefits (Hewlett & West, 1998, p. 217.) Recent research suggests that employees are beginning to recognize the need for flexible work schedules and that more workers are taking advantage of this option (Beers, 2000). The proportion of wage and salary workers with flexible job schedules grew from 13% in 1985 to about 25% in 1997 (Beers, 2000, p. 40).

A number of companies allow employees to combine vacation and sick leave to increase the amount of time off for family life. At Hewlett Packard, employees receive their regular vacation days plus five additional days of unused sick time to use for family events (Schmidt & Scott, 1987). A 1996 study by the Ford Foundation--based on years of observing many industries--found that the number of companies offering parental leave, child-care subsidies and flexible hours is growing. About 20% of the federal employers and 13% of the private sector employers allow flextime (Kleiman, 1997).

According to the *1997 National Study of the Changing Workforces*, only 18% of companies offering one or more flexible work arrangements perceive the costs of their investments in these policies as outweighing the benefits, while 36% perceive these programs as cost-neutral and 46% perceive a positive return on their investment (Bond, Galinski & Swanberg, 1997, p. 2).

Grover and Crooker (1995) studied multiple family-responsive policies together and found that employees with access to more of these benefits showed greater organizational commitment and lower intentions to leave. Their study supported the idea that flexible work hours offered by organizations influenced organizational commitment by employees. The literature suggests that flexible work hours allow parents to modify their work schedule to meet family obligations without

feeling guilty or requesting more time away from the job leading to increased commitment to the organization and greater job satisfaction.

Flexible Career Paths

According to a 1997 study by Catalyst entitled *Two Careers, One Marriage: Making it Work in the Workplace*, dual-career couples are also requesting flexible career paths. In interviews with twenty-five such couples (with and without children) two-thirds of the men and three-fourths of the women want to customize the career path as needed to make allowances for family priorities. According to Sheila Wellington, president of Catalyst, (as Cited in "Work/ Life," 1998, p. S6) it is a need companies can't afford. Employee respondents cite the two-income cushion as a call to be more selective in job choice. Two-thirds of the couples interviewed by Catalyst state they are more likely to leave the company if they aren't satisfied since they feel increased freedom to take such a risk with more financial security ("Work/Life,"1998, p. S6).

Job Sharing

Job sharing enables two people to share a job on a part-time basis and is a major boon to spouses who want to continue their careers while raising children. The program was first established by Steelcase, Inc., in Grand Rapids, Michigan, where company officials say that the program has reduced turnover and absenteeism, boosted morale, and helped achieve affirmative action objectives (Kleiman, 1997).

Since the late 1970s, there has been a growing trend in the number of alternative work schedules being implemented in United States Organizations (Olmsted & Smith, 1989, as cited by Hammer & Barber, 1997). The percentage of flexible work schedules rose from 12.3 in 1985 to 15.1 in 1991, and the number of part-time workers increased from almost 17 million in 1980 to 21 million in 1993 (U.S. Bureau of Labor Statistics, 1994, as cited by Hammer & Barber, 1997). A greater emphasis on leisure time and changes in the composition of the workforce to include a proportionately larger representative of women contribute to this increase (Hammer & Barber, 1997).

Delaware-based Dupont Corporation has been a pioneer in flexible work arrangements. Dupont has empirical evidence gathered over a ten-year period that shows its extensive flexible work program has resulted in a more committed and flexible work force (Sheley, 1996).

Sullivan and Lussier (1995) postulate that understanding a work force that is changing and recognizing that supporting the changing needs of the workforce relates directly to supporting the needs of the organization will fast forward the flexibility process. Sullivan and Lussier (1995) state:

> Implementing flexibility and allowing employees to work during their most productive times can add to productivity and create more loyalty in employees. Understanding flexible work arrangements, as a management tool is the first step in effectively using new ways of working to increase productivity and boost morale in the work force (p.15).

According to the Catalyst study entitled *Two Careers, One Family,* respondents in the study rated flexible hours as the most important program they would look for when switching companies at 85%. Formal flexible work programs rated at 63% in the survey (Catalyst study, *Two Careers, One Marriage*, p. 14). This indicates that job sharing and flexible work programs continue to be valued by dual-career couples in the workplace.

Elder Care Assistance

Data from the *1997 National Study of the Changing Workforce* reveal that 23% of wage and salaried workers, employed by companies with 100 or more employees, had elder care responsibilities during the preceding year, spending an average of 11 hours per week providing assistance of various types. Of workers who provided elder care, 39% lost time from work to do so. As the U.S. population ages, growing elder care responsibilities promise to have an even greater impact on the workforce. Fully 42% of employees surveyed for the *1997 National Study of the Changing Workforce* study expect to have elder care responsibilities over the next five years (*The 1998 Business Work-Life Survey*, p. 48). In addition, elder care assistance was ranked ninth in importance by dual-career workers in the Catalyst, *Two Career, One Marriage* research.

Relocation Issues

Many employees are refusing relocation assignments if their spouses cannot find acceptable job (Pave, 1985). In response, many companies have recently begun to offer services for spouses. These services include arranging interviews with prospective employers, providing resume writing workshops, and paying plane fares for job-hunting trips. General Mills, 3M, and American Express use outside placement services to find jobs for trailing spouses (Pave, 1985). More than 150 companies in northern New Jersey created and use a job bank that provides leads for job-hunting spouses. Chase Manhattan Bank and O'Melveny & Myers (one of the nation's largest law firms) are among those who hire two-career couples. Martin Marietta maintains an affirmative hire-a-couple policy and hires about 100 couples a year at its Denver division (Pave, 1985).

As part of Dow Chemical's diversity initiative, the organization recognizes that many of its employees are in dual-career situations and that it needed to address the issue of relocating employees to new geographic locations within North America. Dow provides dual-career support

by assisting the employed spouse by providing them with the tools needed to assist in their job search through the services of one of Dow's career transition service providers. Financial support is available to provide reimbursement for professional exams, fees for certifications and interview trips. When a situation exists where there is a reasonable commute distance, Dow will provide a commute allowance for a period of three years to replace the relocation package. Dow has found that adding this type of flexibility to their relocation package helps in removing some of the barriers that dual-career couples face when making a geographic move (Catalyst Study, *Two Careers, One Marriage*, p. 14).

The need for qualified international managers has become a critical issue for many multinational corporations worldwide (Harvey, 1996). The high failure rate of expatriates has been a concern for international managers for a decade. The impact of family and, in particular, the spouse of the transferred international manager has become of increased interest to human resource managers. The 1999 Global Relocation Trends Survey conducted by Windham International GMAC GRS, the National Foreign Trade Council (NFTC) and the International of Human Resources, reveals that 69% of expatriates are married, with spouses accompanying 77% of the time. Of those spouses, 49% were employed before an assignment and only 11% were employed during an assignment. The most common reason listed for assignment failure is lack of partner satisfaction (27%), which was directly tied to work (Solomon, 2000, p. 36). As dual-career couples become more the norm than the exception, they are having an increased impact on the mobility of the professional labor force (Bradbury, 1994).

A large portion of expatriate failures are attributed to non-work related family issues (Harvey, 1995). The resulting family stress compounds the adjustment associated with the expatriate's new position and organizational expectations. The family has both a direct and indirect impact on the adjustments of the expatriate. The direct impact can be illustrated by the potential loss of the trailing spouse's income and potential future earnings, i.e., career disruption when returning to the domestic market (Harvey, 1995). Indirectly, the spouse and children influence the level of tension, stress and satisfaction when expatriating to a foreign country by creating a dysfunctional family environment that creates stress that can spillover into the work environment (Vannoy & Philliber, 1992; Wiggins-Frame & Shehan, 1994, Solomon, 1994). Marriott Corporation, Mobil Corporation, Square D Company, and Ameritech survey their dual-career couples directly. The United States Air Force, AT&T, Ford Motor Company, and Allstate Insurance Company conduct focus group interviews and collect feedback from ongoing management and employee groups. This information is used to customize expatriation compensation and support packages.

Firms such as Organization Resources Counselors Inc., Windham International, and the National Foreign Trade Council have undertaken many studies on the challenges of moving dual-career couples internationally. "A resounding number of companies report increased concern over the expatriate spouse career issue, but a person can count on one hand the number that have actively developed assistance policies with perceived benefit by the transferee or spouse" (Carter,

1997, p. 23). Solomon (2000) states that companies are not doing enough. About 37% provide education assistance to spouses; 36% establish spouse networks, 21% reimburse educational expenses, 20% assist with career planning; and 20% help to find jobs when possible. Yet 30% provide no spouse assistance at all.

The Catalyst Study, *Two Careers, One Marriage: Making it work in the Workplace* (1997) found that companies that do not address the needs of dual-career couples risk losing valuable employees and at a considerable expense. Dual-career couples in this study indicate a high level of mobility when it came to their careers. Because they have the financial cushion of a second income, they feel more able to make dramatic changes in their employment, such as leaving a company if they are not satisfied, starting their own business or moving to another company in their industries. Studies have shown that turnover costs to replace one exempt employee can range from 100 to 200% of their annual salary and benefit cost (1995 Human Resource Financial Report, Saratoga Institute, California, as cited in the Catalyst Study, p. 5).

SUMMARY AND DISCUSSION OF RESULTS

The advent of the dual-career couple has evolved over the past 100 years stemming from the work/family enterprise of the industrial revolution when all members of the family regardless of age and gender worked. The middle of the twentieth century gave way to the breadwinner/homemaker economy where the husband worked and the wife and children stayed home. The entrance of women of all ages into the work force during the second half of the twentieth century fueled by female independence and an economy where dual-incomes were needed to support the family, gave way to a working family economy (Moen & Yu, 2000). Along with this transformation, the workforce evolved with legislation dictating working conditions and the reliance of employees upon their employers to offer personnel practices and benefits. As changes in the work roles of husband and wife evolved, along with it came the conflict of balancing work obligations with home commitments leading to work-life conflict.

Members of dual-career families face work-life conflicts in balancing work and home commitments. This population segment comprises the majority (53.2%) of the nation's labor pool (U.S Bureau of Labor Statistics, 2001). Work responsibilities and family obligations compete for time and attention for most working adults. Research on employee values reflects a new trend of families placing more importance on home than careers. The research supports that work-life personnel practices are growing in importance to members of dual-career families who in turn, are requesting these benefits from their employers. This is evident in the Catalyst Career and Families studies, the Families and Work Institute research, and the Cornell Couples and Career studies.

Organizations are also facing problems when employees face work-life conflicts. The research supports that many managers in organizations cite issues with lost time from work, lack of motivated workers, and loss of productivity resulting from work-family conflicts. Absenteeism,
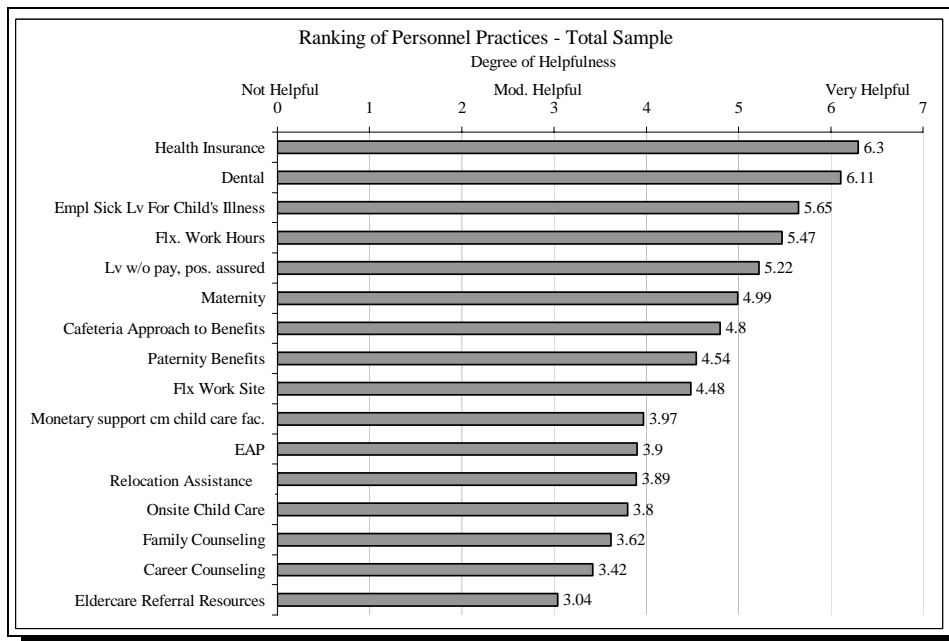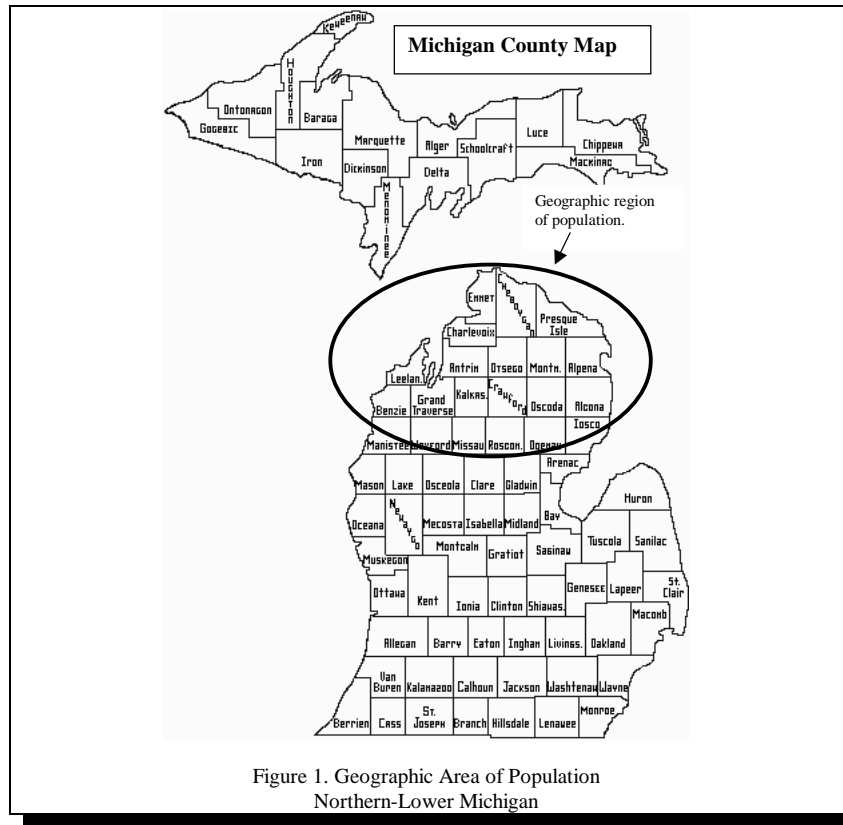
employee turnover, and job satisfaction are among the problems cited by organizations as growing concerns attributable to work-life conflict of employees. Many businesses suffer when policies and programs are not in place to address these issues. The cost of absenteeism is on the rise. In 1994, absenteeism rose 3.46 percent in the U.S. workplace, according to the 1995 Unscheduled Absence Survey by Commerce Clearing House, Inc. The survey also indicated that from 1992 to 1994, absenteeism has increased 14.1%.

In addition to the importance to individual employees of organizational support of family roles, there also appears to be a growing concern on the part of organizations regarding employee-organizational linkages, or the connection an employee feels toward the organization. The research suggests that the percentage of women entering the work force, an increase in dual-career households, and a new value system may create difficulty for organizations that do not examine the employee-organizational linkage related to the changing composition of the characteristics of the work force. United States Bureau of a Labor Statistics reports that women constituted 46%-48% of the work force in the year 2000. Because changes in the number of female workers, the number of dual-career couples, and changing values have been linked to both employee organizational linkages and work-life conflicts, it is plausible that work-life conflict and commitment may be related.

The purpose of this research is to examine how supportive members of dual-career families perceive eighteen personnel practices in alleviating work-life conflict. Face validity of personnel practices was established by an expert panel of Human Resources practitioners in the northern-lower Michigan area.

Data collection consisted of distributing 2,530 surveys through organizations voluntarily participating in the study. Eighty-three organizations were contacted throughout northern-lower Michigan with fourteen participating. The industries representative of health care, education, banking, insurance, manufacturing, and tourism are included in the study.

The study's findings support that members of dual-career families in northern-lower Michigan perceive health insurance followed by dental insurance as most supportive in alleviating work-life conflict. Employee sick leave for child's illness ranked third at a mean of 5.65 followed by flexible work hours with a mean of 5.47, and leave without pay, position assured, with a mean of 5.22. The researcher speculates that the ranking of health and dental as most supportive may be attributable to the emergence of health benefits stemming from the Family Medical Leave Act in 1993 and the growing value of health and dental benefits to the employee as organizations seek to curb expenses in these areas placing more financial responsibility of health and dental insurance on the employee.

Figure 1. Geographic Area of Population
Northern-Lower Michigan

Ranking of Personnel Practices - Total Sample
Degree of Helpfulness

	Not Helpful			Mod. Helpful			Very Helpful	
	0	1	2	3	4	5	6	7

Practice	Value
Health Insurance	6.3
Dental	6.11
Empl Sick Lv For Child's Illness	5.65
Flx. Work Hours	5.47
Lv w/o pay, pos. assured	5.22
Maternity	4.99
Cafeteria Approach to Benefits	4.8
Paternity Benefits	4.54
Flx Work Site	4.48
Monetary support cm child care fac.	3.97
EAP	3.9
Relocation Assistance	3.89
Onsite Child Care	3.8
Family Counseling	3.62
Career Counseling	3.42
Eldercare Referral Resources	3.04

It is interesting to note that employee sick leave for child's illness, flexible work hours and leave without pay-position assured, ranked above maternity benefits, which had a mean of 4.99. The data suggests that dual-career families perceive time off to attend to their children's illness, flexible working hours, and leave without pay as more supportive than more traditional benefits such as maternity benefits. It is speculated that perhaps employees may expect maternity benefits to be in place as an employee benefit since it has been a personnel practice that has been in place in many organizations throughout the past three decades and is supported by legislation of the Family Medical Leave Act for organizations with more than 50 employees.

Time off to attend to child's illness ranked third in importance among all eighteen personnel practices. Dual-career families find this personnel practice (based on the ranking) quite important. This concurs with the growing trend of organizations offering assistance to employees in tending to their child's illness. These findings are supported with a growth in facilities established to assist parents in caring for children when they are too sick to go to school or day care centers. About 80 employers (up from 50% from 1986-87) have made this provision for working parents (LeFleur & Newsom, 1988). Chicken Soup is a sick-child day-care operation in Minneapolis that provides time off for child's illness and cites a savings to the company of 87% in comparison to lost wages to employees (LeFleur & Newsom, 1988, p. 148). In addition, company officials at American Savings and Loan Association reports that their Little Mavericks School of Learning center established for employees' need for child-care facilities in addition to sick-child care has substantially reduced absenteeism and increased productivity among their workers (Ribaric, 1987).

The research indicates that flexible work hours ranked fourth in importance in alleviating work-life conflict experienced by members of dual-career families in northern-lower Michigan. Flexible work hours ranked 85% (number one) in a national study by Catalyst: *Two Careers One Family*. The Catalyst study evaluated nine personnel practices when asking the respondent what they would like offered by new employers. This was followed by cafeteria-style benefits at 79% and family leave provisions at 74%. Healthcare, dental, and employee time off to attend to child's illness were not personnel practices included in the Catalyst study. The study supports the desire for flexible hours among dual-career employees. Thomas and Ganster (1995) found that employees with access to flexible scheduling had more control over managing work and family, which in turn increased job satisfaction and lowered work-family conflict.

Eldercare support care ranked last in this study and also ranked ninth in the Catalyst Study *Two Careers, One Family*. It is speculated by the researcher that eldercare support will grow in importance as the U.S. population experiences the aging of the Baby Boomer generation. Fully, 42% of employees surveyed for the *1997 National Study of the Changing Workforce* study expect to have elder care responsibilities over the next five years (*The 1998 Business Work-Life Survey*, p. 48).

CONCLUSION

The study supports that America's work force has undergone an evolution over the past 50 years as social values change and the composition of the work-force transitions. The trend of more and more women entering the work force, and the emergence of members of dual-career families as the majority of the workforce have caused corporate America to examine work-life conflict and to design personnel practices accordingly. As more demands are placed on the dual-career worker in both the home and employment sectors, the more they request assistance in the form of quality of work-life personnel practices from their employers.

The findings of this study identify eighteen personnel practices that members of dual-career families specifically in northern-lower Michigan find supportive in alleviating work-life conflict. The findings identify the overall rankings of these personnel practices. These are personnel practices that respondents find supportive in the 2003 workplace. The challenge for business and industry (in which the findings of this study will be useful) is to determine what types of quality of work-life practices are perceived by members of dual-career families as most supportive in alleviating work-life conflicts.

The implications for business and industry in northern-lower Michigan which can be generalized for other organizations in rural geographic areas of America, is the findings suggest members of dual-career families perceive health insurance and dental insurance as most supportive in alleviating work-life conflict. Organizations may wish to evaluate their personnel practices to ensure that they include healthcare and dental insurance. In addition, non-traditional benefits such as employee sick leave for child's illness, flexible work hours, and leave without pay-position assured, are perceived as more supportive than traditional benefits such as maternity benefits and cafeteria approach to benefits. Human resource managers may want to re-evaluate their existing personnel practices to incorporate practices relating to flexible hours and time off to attend to a child's illness as part of their practices and examine the possibility of flexible work hours.

The findings also suggest that members of dual-career families indicate that monetary support of community child-care facilities is perceived as more supportive at a mean of 3.97 than on-site childcare at a mean of 3.8. Organizations may want to evaluate the expense of creating an on-site childcare facility versus monetary support of community child-care facilities since the subjects indicate that they find monetary support of child-care facilities more supportive.

The literature and research addressed in this study support that increased satisfaction of workers due to implementation of quality of work life programs that help them balance the stress of work-life conflict may increase productivity, employee morale, and overall corporate productivity. The *1997 National Study of the Changing Workforce (NSCW)* found that employees with more supportive work places as well as better quality jobs are more likely to have: (a) higher levels of job satisfaction; (b) more commitment to their company's success; (c) greater loyalty to their companies; and (d) a strong intention to remain with the company. The NSCW also found that

employees with more demanding jobs and less supportive workplaces experience more stress, poor coping, and less energy off the job.

The results of this study will be useful to those academics and human resource practitioners who are interested in evaluating quality of work-life personnel practices to better meet the needs of dual-career families who face conflict in managing work responsibilities and family commitments. It serves as a tool for business and industry to accurately assess the needs of their own workforce. From the findings, business strategies can be developed to more effectively allocate financial resources to provide personnel practices that are perceived as most supportive by their employees. The underlying result for the organization is the potential for increased employee morale,

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RESOLVING A PARADOX BETWEEN MENTORING, LMX AND CHARISMA: A PROCESS APPROACH TO LEADERSHIP DEVELOPMENT

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ABSTRACT

Charismatic leaders reject the status quo and have goals, methods and behavior outside the accepted norms for the organization (Conger & Kanungo, 1987; Yukl, 1993), indicating that they would be members of the 'out' group in leader-member exchange (LMX) theory (Schriesheim, Castro & Cogliser, 1999; Dienesch & Liden, 1986), yet they are the product of mentor/protégé relationships (Sosik & Godshalk, 2000; Zaleznik, 1977) which would place them in the 'in' group. A charismatic leadership development process which parallels the four phase mentor/protégé relationship process (Kram, 1983) is proposed to address the contradictory 'in' and 'out' group memberships of charismatic leaders. In the proposed model the recognition of crisis or transformational opportunity occurs during the separation phase of the mentoring relationship. The emergence as a charismatic leader occurs during the redefinition phase. This research contributes to our understanding of the development of much needed charismatic leadership by exploring the role of mentoring relationships in the development of charismatic leaders.

INTRODUCTION

Charismatic leadership and the leader-member exchange (LMX) model are two vibrant current areas of leadership research. The LMX model has employees divided into an 'in-group' and an 'out-group' (Schriesheim, Castro & Cogliser, 1999; Dienesch & Liden, 1986). LMX keys on social exchange,. The 'in-group' is made up of a small number of trusted employees who serve as advisors, assistants and confidants (Dansereau, Graen, & Haga, 1975). Mentors provide career development functions (Sosik & Godshalk, 2000; Kram, 1983) which can greatly facilitate acceptance into the 'in-group'. An important distinguishing characteristic of charismatic leaders is that they have mentors, therefore are likely to be members of the 'in-group'. However, charismatic leaders create a vision and facilitate change, hardly the behavior of 'in-group' advisors, assistants and confidants. The characteristics of charismatic leaders seem to warrant their placement in the 'out-group' while having a mentor/protégé relationship indicates that protégés be placed in the 'in-group'. This paradox is what is addressed in this paper.

The first section of the paper provides some theoretical background. The relevant characteristics of charismatic leadership, mentoring and the LMX model are each explained. Also included in this section is an exploration of the relationships between charismatic leadership and mentoring, and LMX and mentoring.

The paradox is explained next, followed by a proposed resolution, which integrates the charismatic leadership, mentoring and the LMX models. As part of the resolution, a model of the charismatic leadership development process is presented. This process is then linked with the phases of the mentoring process. A division of individuals into those with and without mentors, those who are members of the 'in' and the 'out-group' and an exploration of their leadership potential form the basis for a set of propositions. The paper continues with a discussion of areas for further research the implications of these ideas for practitioners and concludes with a brief summary.

CHARISMATIC LEADERSHIP, MENTORING AND THE LEADER-MEMBER EXCHANGE MODEL

Leadership

Many researchers have proposed that there are two fundamentally different types of leadership and/or management. Some have drawn a distinction between leadership and management (Zaleznik, 1977) or leadership and supervision (Dansereau, Graen & Haga, 1975). Others have placed the bifurcation within leadership. Two common ways that leadership has been divided are into transformational and transactional leadership (Tichy & DeVanna, 1986) or into charismatic and non-charismatic leadership (Conger & Kanungo, 1987). The various splits are conceptually similar; therefore in this paper we refer to one type as transformational (or charismatic) leadership and the other as transactional (or traditional) leadership.

Traditional Leadership

Traditional or transactional leaders are managers who "changed little; they managed what they found and left things pretty much as they found them...." (Tichy & DeVanna, 1986) They attempt to maintain the status quo and encourage their followers to incrementally improve their effectiveness and efficiency. The methods employed by followers to reach their goals are similar to past methods, but perhaps with minor methodological improvement and incremental increases in effectiveness or efficiency goals. Encouragement is in the form of contingent rewards, such as, the exchange of "money, jobs and security for compliance to organizational goals." (Bass, 1985) Contingent reward behavior by managers has been found to be positively related to employee performance (Podsakoff, Todor, & Skov, 1982).

Transactional leaders often have an impersonal, passive attitude toward goals (Zaleznik, 1977). This is because the goal setting process may be firmly established with a long history in the company. They need not be sensitive to their environment, but need to be experts in achieving goals within the existing framework within the organization. They behave within existing norms, seek consensus and low risk, win-win, and compromise solutions (Conger & Kanungo, 1987: Zaleznik, 1977).

Charismatic Leadership

"Strategic vision, unconventional or countercultural management practices and tactics involving personal risk, articulation, and impression management skills, and inspirational management practices" characterize charismatic or transformational leaders. (Conger, 1988) They engage in unconventional ideological behavior (Yukl, 1993), and use unconventional methods to achieve idealized goals, with both goals and methods often outside the accepted norms for the organization (Conger & Kanungo, 1987).

Transformational leaders try to "enhance follower self-esteem, self-worth, and self efficacy." (Yukl, 1993) They transform followers to support their views by encouraging followers to embrace new values or by linking existing follower values to new objectives (Yukl, 1993). Research has found charisma to be widely distributed and existing at all levels of the organization. (Waldman & Yammarino, 1999; Bass, 1985) Charismatic leadership exists from the distant top level of a large organization to the close low level immediate supervisory level. The traits and behaviors attributed to charismatic leaders, however, are found to be affected by social distance. (Shamir, 1995)

Some researchers have found a crisis to be important to the transformational leadership process (Roberts, 1985), others have found a crisis to be "neither necessary nor a sufficient cause" (Willner, 1984), others have proposed that what is needed is the recognition of the need for revitalization (Tichy & DeVanna, 1986), and still others believe that charismatic leaders can create the need for change in their followers (Conger & Kanungo, 1987). Common to all of the research is the recognition by the leader of the possibility of change and the subsequent gathering of support for efforts to achieve change.

It has been proposed that transformational leadership is a three phase process. In each there are different dynamics for both the leader and the organization. The first phase involves recognizing the need for revitalization, the second is creating a new vision and the third is institutionalizing change (Tichy & DeVanna, 1986). Others have suggested that the dynamics of charismatic leadership differ with the organizational proximity of the leader and follower (Waldman & Yammarino, 1999).

Transformational and transactional leadership are not mutually exclusive. An individual leader can exhibit characteristics of both types of leadership. Combining the two types of leadership

may be beneficial in as the use of charisma augments the use of contingent reward (Waldman, Bass & Yammarino, 1990).

Mentoring

In ancient Greece it was a common practice for wise men to counsel younger men; in fact Mentor was the friend that Odysseus entrusted with the education of his son Telemachus (Hamilton, 1948). He became the "counselor, guide, tutor, coach, sponsor, and mentor for his protégé" (Hunt & Michael, 1983). Throughout history those with wisdom and experience have offered counsel as a training and development tool. Master-apprentice, professional-intern, teacher-student, and coach-athlete are relationships that generally follow this pattern. Mentors provide support, visibility, resources and direction (Ragins, 1989).

Functions of Mentoring

Research indicates that mentors serve two basic types of functions, career and psychosocial (Sosik & Godshalk, 2000; Kram, 1983). The career functions include sponsorship, exposure and visibility, coaching, protection, and challenging assignments. Generally mentors enhance the possibility of career advancement. Sponsorship involves nominating the protégé for assignments and transfers/promotions. The exposure and visibility function involves giving the protégé assignments that were highly visible to corporate decision makers. Coaching includes advice and feedback relevant to achieving work objectives. Reducing risks that might damage the reputation of the protégé falls under the protection function as the mentors assume the risk themselves (Zaleznik, 1977). Mentors also provide challenging assignments that allow protégés to develop job related skills (Noe, 1988) and can affect the degree of job related stress experienced by the protégé (Sosik & Godshalk, 2000).

The psychosocial functions of mentors consist of role modeling, acceptance and confirmation, counseling, and friendship. Generally, they serve to enhance the protégé's self-image. In role modeling, the mentor provides examples of appropriate behavior and attitudes. Mentors perform the acceptance and confirmation function by exhibiting unconditional positive regard. Counseling involves allowing and actively encouraging the protégé to talk about his/her fears and anxieties. The friendship function manifests itself through informal contact at work.

When mentors provide career functions but not psychosocial functions they are sometimes referred to as sponsors instead of mentors. In research using this terminology, mentors provide both the psychosocial and career functions (Thomas, 1993). The difference is only in the terminology, the conceptual basis is the same. The specific career function of role modeling has received individual attention by some researchers.

Phases of the Mentor/Protégé Relationship

The mentor/protégé relationship undergoes four distinct phases, initiation, cultivation, separation, and redefinition (Kram, 1983). These phases are sequential and research has identified the "turning points" that mark the transition from one phase to another (Kram, 1983). In the first phase, initiation, mentors provide challenging work, visibility and coaching. The protégé must show respect and desire for the relationship. This phase, which lasts between one half and one year can only happen if there are opportunities for work related interaction between the mentor and protégé. Cultivation, the second phase, is the two to five year period in which the mentoring functions are maximized. Both parties continue to benefit and emotional bonds increase.

A significant change in the relationship is marked by the third phase, separation. Separation can take place over a 1/2 to 2 year period. Among the reasons for separation are a desire by the protégé for more autonomy, events that cause hostility between the mentor and protégé or promotion/transfers that limits interaction or otherwise prevents functions from being provided. The separation phase is crucial to the development of a leader. It allows the protégé to demonstrate his/her skills and abilities independent of the mentor which also shows the mentor's ability to develop talent (Kram, 1983). The relationship is either ended or becomes peer-like in redefinition, the final phase of the mentoring relationship. This phase is of indefinite duration.

Charismatic Leadership and Mentoring

One clear distinguishing characteristic between those who emerge as charismatic leaders and those who do not is the existence of a mentoring relationship at some time in the leader's career. A mentor serves to accelerate and intensify the development of those who would otherwise be destined to mediocrity (Zaleznik, 1977). The preparation of leaders is one of the reasons for mentoring relationships (Burke, 1984). Advancement to powerful positions is associated with successful mentoring relationships (Ragins, 1989). The mentoring relationship facilitates the development of capabilities that are needed for successful emergence as a charismatic leader. These capabilities involve skills and abilities, knowledge, access to resources and a power base.

Leader-Member Exchange Model

"Organizational members accomplish their work through roles." (Graen, 1976) The roles in an organization are initially incomplete and ambiguous and are further defined to some degree by the organization's members (Graen, Orris & Johnson, 1973). Much of this role defining is between members and their supervisors. This results in differentiated roles and various leader member exchanges (Dienesch & Liden, 1986). The leadership member exchange (LMX) model recognizes the heterogeneity of groups and that leaders do not exhibit uniform behavior towards all

members of their group. It also recognizes that the role-making process results in the forming of an 'in-group' and an 'out-group'. The in-group is given the most negotiating latitude and involves high trust, high interaction, high support and high rewards, both informal and formal. The out-group is low in trust, interaction, support and rewards (Dienesch & Liden, 1986). In the LMX model, 'leadership' is the sharing of authority to gain commitment and 'supervision' is the use of authority to force compliance to a prescribed role. Leadership and supervision are considered dichotomous techniques employed by the leader with the in-group and out-group respectively (Burns & Otte, 1999; Dansereau, Graen & Haga, 1975). This approach has been expanded to include task characteristics (Seers & Graen, 1984).

LMX and Mentoring

The relationship between mentors and protégés is much like the relationship between supervisors and in-group members in the LMX model. In the LMX model supervisors link the worker with the organization (Seers & Graen, 1984). The supervisor provides the in-group worker with knowledge, resources and opportunities. These are some of the same things provided to protégés by mentors fulfilling their career functions. Supervisors in the LMX model provide support to in-group members (Burns & Otte, 1999; Dansereau, Graen & Haga, 1975). Mentors provide the same support to protégés, as part of mentoring's psychosocial functions.

When an individual's mentor is also his/her immediate superior the individual is clearly a member of the in-group. When the mentor is not the protégé's immediate superior, it is reasonable to assume that the mentor will use his/her influence to establish the protégé as an in-group member to facilitate the fulfillment of the mentor's career functions. Even if for some reason this does not occur, the protégé is still a member of the mentor's in-group.

In the hybrid dual attachment model, an extension of the LMX model, there is a division between 'task' and 'leadership' needs and characteristics (Seers & Graen, 1984). The 'task' characteristics represent the physical-technical domain and closely parallel the career functions of mentoring. These represent issues related to physically getting the job done. The 'leadership' characteristics represent the interpersonal-social domain and similarly parallel the psychosocial functions of mentoring relationships. Issues dealing with the general self image of the individual are included here. These parallels illustrate the conceptual similarities between the LMX and mentoring notions.

INTEGRATION OF LMX, CHARISMATIC LEADERSHIP AND MENTORING

An Apparent Paradox

The research on charismatic leadership tells us that such leaders have had a mentor as an integral part of their professional development. The main notion of the career functions of mentoring is to enhance the possibility of career advancement for the protégé. A person who has had a mentor to provide the career functions of sponsorship, exposure and visibility, coaching, protection, and providing challenging assignments would most likely be among the small number of trusted employees who serve as advisors, assistants and confidants, in other word the in-group (Dansereau, et al., 1975).

Charismatic leaders often reject the status quo. They have goals, methods and behavior outside the accepted norms for the organization. In one study a transformational superintendent went so far as to undertake a program (she referred to it as the "Big D") specifically designed to create dissatisfaction with the existing state (Roberts, 1985). In contrast, most managers have the characteristics of transactional leaders. They strive to maintain the status quo. They stay within the norms of the organization. Sometimes an organization embraces and encourages change and the emergence of charismatic leaders is welcomed and encouraged. In many organizations, however, change is actively resisted. In organizations with a culture that defends the status quo, in-group membership implies staying within the norms of the organization. In such an organization, an individual with the characteristics of a charismatic leader would be in the out-group.

The Paradox

In organizations resistant to change, charismatic leaders seem to be in both the "in" and out-groups. The mentor has insured their being in the in-group but by rejecting the status quo they have made it necessary for them to be put in the out-group. How can this be so?

The Resolution

Perhaps the charismatic leader is indeed in both an "in" and an out-group but these groups are in different social domains. Charismatic leaders, in breaking from the status quo are taking or advocating creative action. Creative actors operate within multiple social domains that which they affect and are effected by them (Ford, 1996). An empirical assessment of a multi-domain theory of strategic choice supported the notion that creative action comes as a reaction to competitive pressure and uncertainty (Ford, Betts, Dean & Sharfman, 1996). This supports the idea that charismatic leadership emerges during periods of crisis or when opportunities present themselves. Competitive pressure and uncertainty may lead to opportunities or the need for the frame breaking action of a
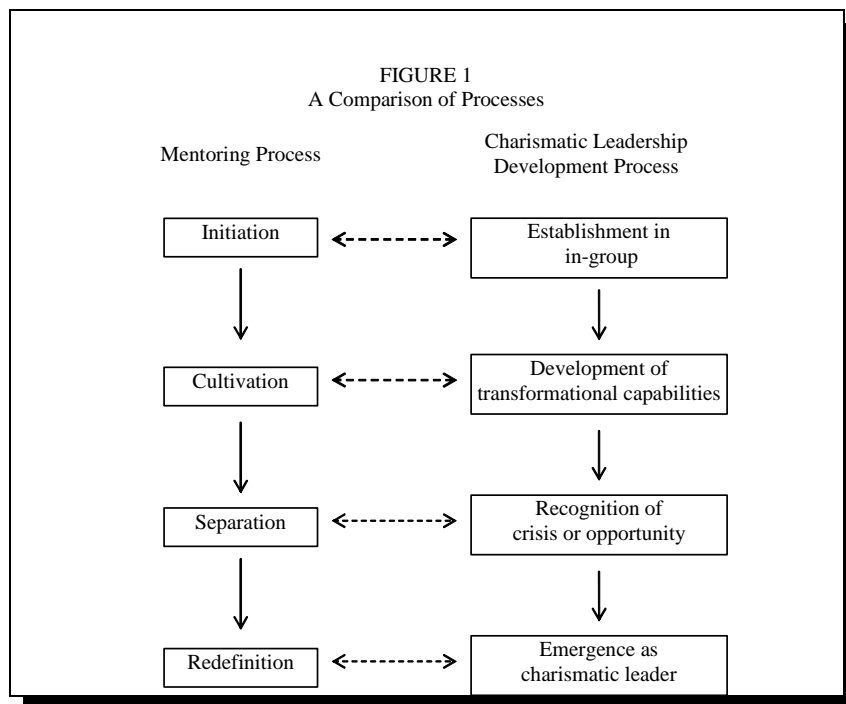
charismatic leader. It may be that a manager developed the capacity to emerge as a charismatic leader as a member of the in-group in one social domain, and then the emergence happens as these opportunities arise in another social domain in which the member was a member of the out-group. One problem with this argument is that the capabilities developed in the domain of the in-group may not be transferable to the domain of the out-group. Another problem is that many times charismatic leaders seem to emerge from the social domain of which they were member of the in-group. Our paradox is not yet resolved.

Leaders are often brought in from outside an organization, from another social domain, to affect a transformation. These leaders are specifically chosen because it is thought that their transformational abilities will be transferable to the new organization. It is assumed that they will bring these abilities with them. These leaders are not, however, members of the out-group because they were not previously members of the organization. In these cases our paradox is resolved. We are still left with those cases where the charismatic leader emerges from within.
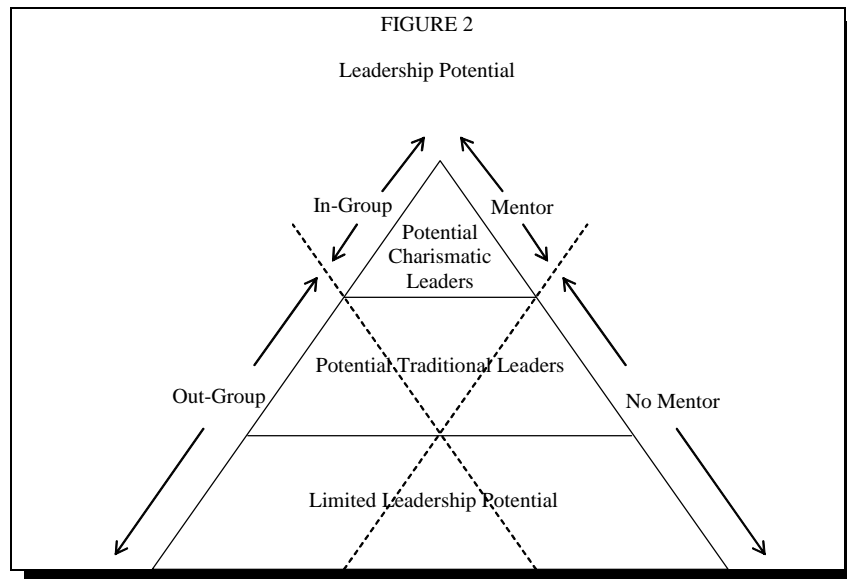
The resolution proposed in this paper is that the mentoring relationship and subsequent in-group status and the emergence of an individual as a charismatic leader does not happen simultaneously. At the point that the charismatic leader emerges, he/she was not a member of the out-group. Those characteristics that would lead us to believe that he/she would be put in the out-group either had not been dominant enough or evident at all up to that point. Those characteristics became evident or dominant later, when the opportunity presented itself or the crisis occurred.

Propositions

The development of charismatic leadership can be viewed as a four phase process. Establishment in the "in" or out-group happens first. This facilitates the second phase, the development of those capabilities that will allow him/her to eventually emerge as a charismatic leader. The first two phases of the mentoring process parallel the first two phases of the charismatic leadership development process (see figure 1). A mentor either aids in initially establishing a protégé as an in-group member, or reinforces his/her inclusion as appropriate. As the mentoring relationship grows (cultivating phase) the mentoring functions serve to develop the charismatic leadership capabilities in the protégé. Sponsorship, exposure and visibility by the mentor facilitate the protégé's accidence into a position where he/she can emerge as a charismatic leader. Coaching and providing challenging assignments help the protégé develop the skills necessary later to enact his/her vision. The mentor will protect the protégé from the negative affects of any attitudes and actions exhibited that may be appropriate for a charismatic leader but not in this pre-leadership phase

FIGURE 1
A Comparison of Processes

Mentoring Process

Charismatic Leadership
Development Process

| Initiation | <- - - - - -> | Establishment in in-group |

| Cultivation | <- - - - - -> | Development of transformational capabilities |

| Separation | <- - - - - -> | Recognition of crisis or opportunity |

| Redefinition | <- - - - - -> | Emergence as charismatic leader |

The last two phases of the process may or may not be related depending on the characteristics of the specific situation. The separation phase may trigger the emergence of charismatic leadership. A crisis may develop causing the removal of the mentor from power. This may be the event that initiates transformational action in the protégé. In other situations the emergence of charismatic leadership may trigger the separation. The transformational actions of the protégé may be opposed by the mentor causing a rift between them, initiating separation. If the mentor supports the transformational actions of the protégé, separation may or may not happen with the mentor remaining a powerful ally in a mentor or peerlike status. Many other scenarios can be drawn.

FIGURE 2

Leadership Potential

In-Group   Mentor

Potential
Charismatic
Leaders

Potential Traditional Leaders

Out-Group   No Mentor

Limited Leadership Potential

The potentials for an individual to become a traditional or charismatic leader are shown in figure 2. Being in the in-group and having a mentor are necessary, but not sufficient, conditions for a manager to have the potential to emerge as a charismatic leader. In-group status and having a mentor are, however, sufficient for an individual to be a potential traditional leader. Either having a mentor or in-group status is a necessary, but not sufficient, condition for having the potential to emerge as a traditional leader. Having neither a mentor nor in-group status severely limits leadership potential. These leadership potentials are indicated on figure 2.

An individual who strives to change the status quo, has idealized goals and employs unconventional methods outside the existing organizational framework has little chance of being included in the in-group. This set of behaviors and attitudes are counter to those held by the majority of managers. Such an individual will be perceived as presenting a risk to the manager and the organization. If an individual prone to such behaviors and attitudes establishes a mentor/protégé relationship before exhibiting them, the mentor will prevent the manifestation of these tendencies. If the mentor cannot do so, the relationship will not be successful. Without a successful mentor/ protégé relationship, the individual will not find him/herself in a position to emerge as a charismatic leader.

Proposition 1a:	Those exhibiting charismatic leader characteristics before they are in a formal position where such leadership can emerge will find themselves in the out-group.
Proposition 1b:	Those exhibiting charismatic leader characteristics before they are in a formal position where such leadership can emerge will not become charismatic leaders at any later time in the same organization.

In order to emerge as a charismatic leader an individual needs to be in a position to affect transformational change. Those who are in the out-group will not rise sufficiently in the organization to affect such changes. They will also not be given the opportunities needed to develop the necessary skills and abilities or develop a power base.

Proposition 2:	Those who emerge as charismatic leaders were at one time in the in-group.

During the initiation and cultivation phases of the mentor relationship the protégé is building a power base from which to operate, learning skills, building a reputation and otherwise positioning him/herself for leadership. This leadership may be of the transactional or transformational kind. Transactional leadership may start during the cultivation phase. In this way the mentor can assist the protégé. Transformational leadership behavior requires more autonomy than is possible during the cultivation phase. Transformational action during the cultivation phase would be counter to the support given by the mentor and cause separation. It has been suggested that a characteristic of leaders is that at some time in their career they established and then broke off intensive one-on-one relationships (Zaleznik, 1977). If separation did not occur and the mentor was still so influential, followers would attribute the charismatic leadership to him/her.

Proposition 3:	Charismatic leaders only emerge during or after the separation phase of their mentor/protégé relationship.

IMPLICATIONS

Interest in leadership development has never been higher among both researchers (Day, 2001) and practitioners (Messmer, 1999). The model presented in this article is a first step in using a developmental process to integrate the leadership member exchange model, the charismatic leadership theories and mentoring research. Such an integration provides insight into the emergence of both charismatic and traditional leaders. Empirical testing of the propositions presented and elaboration of the development process would provide even greater insight. To test the propositions

a longitudinal study design would be necessary in order to capture the sequence of stages and the dynamics of the model. There would be problems with the tracking of individuals and the long period of time between "in" and out-group and mentoring relationship formation and eventual emergence as a charismatic leader. It may be possible to minimize the time-related problems by following up on previous LMX studies. The empirical research into LMX theory contains a great variety of methods and measures (Schriesheim, Castro & Cogliser, 1999) and considering the great interest in leader and leadership development (Day, 2001) it is likely that existing research designs can be adapted to test these propositions.

Current research into leadership development exploring practices beyond the four stage mentoring model such as coaching, action learning (Day, 2001) and developmental networks (Higgins & Kram, 2001). Building on the developmental networks idea and using Granovetter's notion of the strength of weak ties (Granovetter, 1973), it may be preferable for a mentor to be outside of the direct chain of command of the protégé. In this way they provide links and access to more people, resources and information. This would be especially valuable to charismatic leaders who may need to look outside the status quo for ideas, resources and support.

The environmental and organizational context has recently become a primary consideration when examining charismatic leadership and leadership development (Day, 2001). For example, perceived environmental volatility has been linked with charismatic leadership (Waldman & Yammarino, 1999). There may be links between the internal environment such as resistance to change and charismatic leadership as well. As such the role of crisis might be different in change resistant vs. change embracing organizations. A crisis may be necessary for charismatic leadership emergence in a change resistant organization whereas the opportunity for change may be all that is necessary in an organization that embraces change. In this paper it is suggested that a charismatic leader seems to be more of a rebel when the organization is resistant to change. It may be that the charismatic individual is viewed as more rebellious in such an organization, or that a more rebellious stand is necessary to enact change in an organization resistant to change. One possible line of research is to explore if the dynamics in the later stages of the charismatic leadership development model are related to environmental volatility and resistance to change in the organization.

To the practitioner this research emphasizes the need for mentoring relationships within the organization for the development of leaders, especially transformational or charismatic leaders. Organizations need to identify and provide mentoring opportunities for in-group members without mentors. These individuals may become transactional leaders but without mentoring they will not emerge as charismatic leaders. Mentoring will provide the opportunity to those who can develop the capabilities needed to become transformational leaders. Other individuals that need to be examined are out-group members without mentors. As long as they are in the out-group any possibility of them becoming a charismatic leader is lost. The very things that place them in the out group may be the things that allow them to emerge as charismatic leaders if they were successfully mentored and afforded access to in-group status.

Unfortunately, is it usually not feasible and productive to provide mentoring to everyone (Day, 2001). It is advantageous to be able to determine who would best be able to develop into a potential charismatic leader (Messmer, 1999). How can this be accomplished? The elitism that may be associated with leadership development programs is a sensitive subject (Day, 2001; Zaleznik, 1977). Would this be perceived as a form of institutionalized elitism and be rejected by some organizational stakeholders? There are many questions that the organization must face when addressing the issue of developing leaders and leadership. Is it appropriate to try to place everyone in an in-group? The meaning of "in" and out-groups would get lost when everyone is a member of an in-group. Would the establishment of a culture that encourages the emergence of charismatic leaders cause counterproductive conflict between potential transformers? These are tough questions and maybe researchers can help provide answers.

This paper integrates the LMX, charismatic leadership and mentoring literature by proposing a charismatic leadership development process that initially parallels the mentoring process. The potential charismatic leader is a member of the in-group during these parallel phases. The emergence as a charismatic leader occurs after the separation phase of mentoring. This research contributes to our understanding of leadership by explaining the link between mentoring and group membership, and by showing its position and explaining its importance in the development of charismatic leaders.

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DIGITAL DEPRESSION, STRESS, AND BURNOUT: SAME SONG, DIFFERENT VERSE

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ABSTRACT

Digital depression is the term given to the feeling of being overwhelmed and overworked by technology. With fewer employees doing more work in nearly every industry, people are feeling the drain both mentally and physically. What many employees are doing is engaging in something called "rational endurance;" they are trying to keep focused on their jobs despite the tough economic climate, job layoffs, and technology demands. Yet, many employees are beginning to feel the stress. Common symptoms of stress include irritability, anxiety, depression, muscular tensions, digestive problems and elevation in blood pressure. To combat these symptoms, some workers become disengaged; others just burn out. Burnout, unlike disengagement, is a condition that affects motivated people with high ideals. This paper will describe digital depression, discuss the stress that follows when employees are overworked for an extended period of time, describe the resulting burnout that occurs, and describe what managers can do to help.

INTRODUCTION

"Work saves us from three great evils: boredom, vice, and need." Voltaire

The United States has surpassed Japan as the most overworked country in the industrialized world. U.S. workers earn the fewest number of vacation days out of a long list of countries. With fewer staff doing more work in nearly every industry, people are feeling the drain both mentally and physically (Ammondson, 2001). In fact, forty percent of employees say their workload is unreasonable. And in many organizations, that won't change soon. Positions have been eliminated, and many people will be expected to continue to do more work than they believe is appropriate because hiring has stalled (Bates, 2003). And as work continues to pile up and employees feel additional pressure on the job, stress, depression and burnout will occur. In a recent study conducted by the Families and Work Institute in New York City, it found that the more overworked employees feel, the more likely they are to report making mistakes at work and the more likely they are to lose sleep because of their work. In addition, the report found that many employees reach a point when increasing work demands simply become too much, a point at which personal and family relations,

personal health, and the quality of work itself are seriously threatened (Eisinger, 2001). This paper will describe digital depression, discuss the stress that follows when employees are overworked for an extended period of time, describe the resulting burnout that occurs, and detail what managers can do to help.

DIGITAL DEPRESSION

"In order that people may be happy in their work, these three things are needed: They must be fit for it. They must not do too much of it. And they must have a sense of success in it." John Ruskin

"Digital Depression" is the term given to the feeling of being overwhelmed and overworked by technology. Employees don't feel that they can escape anymore. Up to five million employees feel stressed at work and up to half a million of us suffer from stress related illnesses. Eighty percent of employees work more than 40 hours a week with only five percent feeling a sense of accomplishment at the end of the day. Technology means that employees are always accessible The profusion of communications technology, mobiles, email, wireless PDAs and laptops, are contributing to a rise in employee stress levels, which currently affects sixty-four percent of the working population. (Digital depression, 2003).

People experience stress in many parts of their lives. Stress is a by-product of modern-day life. However, stress becomes harmful when it reaches an intensity that begins to impair daily activity (Pretrus & Kleiner, 2003). Several factors contribute to feeling overworked: working more than 50 hours a week, regularly working more than five days a week, working more than one prefers, and believing that one has little or no control over his/her work schedule. Other factors include continual use of technologies like beepers, cell phones, and laptops to communicate with the office during nonwork hours, an expectation to be accessible during off-hours and off-days, and the feeling of powerlessness about the pacing of job goals and tasks (Leggiere, 2002).

Technology offers greater convenience but also fuels the flames of stress. The speed of information exchanges today drives the nonstop mentality that has made multitasking a necessity. And, one of the perils of instant communication is that because we respond so quickly, we are more apt to make careless mistakes. The classic example is someone sending an e-message and then regretting what he or she said (Eisinger, 2001).

According to research, there are seven main signs of digital depression: 1) only the most technologically up-to-date will gain career success, 2) an inability to unplug from working life, 3) the permanent interruption of work by emails, mobiles, colleagues and bosses, 4) the 24/7 working life - shorter deadlines and a faster working environment, 5) the pressure to acquire the newest digital gadget, 6) the frustration when technology does not work, and 7) the constant stream of communications that creates a sense that work never ends (Digital depression, 2003).

What many employees are doing is engaging in something called "rational endurance" (Employee view, 2003). Rational endurance is a phrase that describes how US workers are trying to keep focused on their jobs despite the tough economic climate, job layoffs, and technology. Employees are getting the job done but are becoming more stressed and burned out as they do so.

STRESS

"Over the years your bodies become walking autobiographies, telling friends and strangers alike of the minor and major stresses of your lives." Marilyn Ferguson

Common symptoms of stress include irritability, anxiety, depression, muscular tensions, digestive problems, and elevation in blood pressure. Based on research conducted during the past 20 years by the American Institute of Stress, 43 percent of all adults suffer adverse health effects due to stress and nearly half of all American workers suffer from symptoms of burnout. In addition, an estimated 1 million workers are absent on an average workday because of stress-related complaints. The Occupation Safety and Health Administration has declared stress a hazard of the workplace. And it is no wonder that workers feel overwhelmed and overworked; the average American office worker sends or receives about 201 messages a day in the form of e-mails, voice mails, faxes, and memos (Eisinger, 2001).

And, the costs of stress are high. The American Institute of Stress reports that stress costs U.S. businesses an estimated $200-$300 billion in lost productivity each year (Eisinger, 2001). Companies who think the way to increase profitability is to push for more demanding schedules should take a hard look. There is clear evidence that no allowing their people time for leisure will come back to haunt their bottom lines in the form of high turnover costs, deteriorating performance, high health care costs, and declining customer satisfaction. Employees who consider themselves overworked are 17 times more likely to make mistakes or have accidents on the job than employees who are not overworked. They are more than 40 percent more likely to feel angry with employers and co-workers, 30 percent more likely to develop health problems, and not surprisingly nearly 50 percent more likely to seek jobs elsewhere when the economy improves (Leggiere, 2002).

DISENGAGED EMPLOYEES

Others, because of the stress, simply become disengaged. Whether managers realize it or not, unhappy and stressed workers often send unconscious and conscious signals of dissatisfaction long before they become disengaged (Ware, 1997). Unhappy workers, those who are "actively disengaged" are costing American employers billions of dollar a year. About 19 percent of

American employees say they are actively disengaged from their work. That disinterest is costing U.S. firms about $300 billion in lost productivity annually (Cassiani, 2001).

Disengaged workers are rusted out, rather than burnt out. They are often formerly excellent employees who did whatever it took to get the job done and who now contribute at a minimal level. Disengaged workers are not accomplishing the same amount of work that they used to because the person has pulled his or her heart out of the work. In addition, actively disengaged workers in the US collectively miss roughly 150 million days annually (Cassiani, 2001).

Some signals that managers should watch for to identify the disengaged employees are the person used to contribute in meetings now no longer offers his or her views, or the person who always was ready to pitch in during an emergency now sits on the sidelines (Prencipe, 2001). In addition, actively disengaged workers are less loyal, are away from work more often, report higher stress levels and lower life satisfaction, and are less likely to recommend the organization to others who are looking for work (Cassiani, 2001).

BURNOUT

"One of the symptoms of an approaching nervous breakdown is the belief that one's work is terribly important." Bertrand Russell

There is the disengaged employee, the stressed employee, and the burnt out employee. Research studies suggest stress and burnout are different. Most people become stressed periodically. Burnout is much more than being stressed. Burnout, unlike disengagement, is a condition that affects motivated people with high ideals. There is a human need to derive meaning from work. High quality employees, regardless of the field, want to believe their life and work is significant and purposeful. There is an ancient desire to be fulfilled at work that goes back to a time when skilled crafts were looked upon with pride. Not surprisingly, there is a connection between idealistic dedication to a job and a heightened tendency to burnout (Stanley, 2001).

Burnout results in reduced productivity, higher turnover, and generally poor performance, which is exactly what organizations cannot afford as budgets keep getting tighter and demands from the business side keep getting louder (21 Hayes, 2003). In fact, a recent study found that employee morale is becoming an issue among workers. Seventy-one percent of managers admit that burnout is a serious problem in their organizations (McGee, 2003).

Burnout is a costly and distressing phenomenon, which damages both individuals and organizations. Employees feel undervalued and frustrated, the quality of their work deteriorates, and ultimately they may leave the organization (Beating burnout, 2002). The bottom line is employers are squeezing people to accomplish more with less, and there is a reduction of commitment and loyalty between employers and employees. And, although technology is speeding our lives along, in actuality, people are experiencing more depression, stress, and burnout (Motley, 2001).

WHAT CAN MANAGERS DO?

There are a number of things that managers can do to reduce stress and burnout. For example, managers can:

1.	Build a more supportive workplace. This can be done by giving workers the tools they need to do their jobs.
2.	Assess vulnerable populations in terms of the type and amount of work they do. Try to make accommodations to maximize their productivity and improve retention.
3.	Assess job design to see if you can reduce feelings of being overworked.
4.	Eliminate unnecessary tasks in order to increase productivity and reduce workload (Stop burnout, 2002).
5.	Set realistic goals.
6.	Encourage workers to take time out for a few minutes each day to take a brief walk or just sit quietly.
7.	Think of tasks that turn your employees on rather than overwhelm them (Avoiding burnout, 2003).
8.	Spend time with your happy and productive employees. Once you feel you know all the things your best employees like about their jobs, develop an interview format that will help you to determine how much a job candidate is like your best employees (Rovner, 2001).
9.	Establish an employee mental health at work referral system.
10.	Create information services to help employees maintain a balance between their work and family lives (McIntyre, et. al., 2003).

CONCLUSION

"It is your work in life that is the ultimate seduction." Pablo Picasso

Job stress is common today. The workplace is highly charged and organizations are in a global economy that has little mercy for companies that fall behind. And, technology, once thought of as the means to greater leisure, has paradoxically increased the pressure of work. This, in turn, challenges organizations to find ways of maintaining employees' full engagement in their work while reducing their stress Staff must be appraised and rewarded in ways which they feel are beneficial and just, and any organization which fails to meet these challenges will lose it most precious resource to burnout.

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