The Impact of Leadership on Health – A Preliminary Discussion

Franco GANDOLFI Regent University, USA E-mail: fgandolfi@regent.edu Phone: 1-757-352-4483

Abstract

Contemporary leaders are confronted with unrelenting demands while setting visions, goals, and objectives for organizations. Empirical studies have shown that leaders are increasingly faced with high levels of stress which, in turn, have an impact on the health of individuals, groups, and entire organizational entities. There is a particular concern for the individual health of leaders since leaders play a particularly important role in the success and future survival of firms. This research paper endeavors to address some of the pertinent issues of the concept of leadership as they specifically relate to and impact health.

Keywords: leadership, health, organizations, leaders

JEL classification: I10, M12

Introduction

Leadership has been a mesmerizing topic and has been the center of attention for some of the world's greatest philosophers and scholarly thinkers. This may be the result of the lucent presence leadership has in society. Indeed, leadership is dispersed throughout society - including governments, schools, universities, and business organizations - in an attempt to accomplish purposes through large intricately organized systems and sub-systems (Gardener, 1990). Most recently, the study of leadership has taken a paradigm shift to focus intensively on the outcomes of leadership on employees in a society (Nyberg, Bernin, & Theorell, 2005). Earlier empirical studies, focused on the centralized authority and tasks of leaders and its direct effects, were concerned primarily with the health outcomes of employees as a direct result of leadership practices. For instance, it has been reported that middle and lower-level managers in a firm, who receive direction from executives, influence the health of subordinates (Schein, 1992). It has been further revealed that while leaders are important to an organization's growth, an individual leader who over-controls or abuses authority can negatively impact employees' health resulting in job strain, and in some cases, engendering serious health problems (Schein, 1992).

At the same time, preliminary research suggests that the study of leadership as it pertains to health and health outcomes of leaders in organizations have not been extensively researched. The scarce studies that have been conducted and published tend to show that leaders themselves can often be victims of stress

222 Volume 11, Issue 2, May 2010

among employees (Sosik & Godshalk, 2000). Nicklen (2002) posits that leaders experience symptoms of stress and, in extreme circumstances, have become workaholics. Furthermore, it has been shown that when leaders combine their work habits with improper diet, inadequate rest, lack of periodic medical checkups, and constant stress on the job, they create a synergistic effect on their health and wellbeing that can result in illness or, in an extreme case, death. It can thus be concluded that leaders are likely to experience high levels of stress due to the nature of their leadership responsibility (Nicklen, 2002).

This research paper constitutes a preliminary report purporting to address some of the pertinent issues of the concept of leadership as they specifically relate to and impact individual, group, and organizational health. Structurally, the paper addresses the key aspects of leadership and health, then examines the health of leaders and the people they lead, studies the financial impact of health on firms, and finally addresses health problems and work-related stress.

Leadership

Leadership has been pondered for thousands of years. Still, there is currently no consensually agreed upon definition of leadership among scholars (Nyberg et al., 2005). There is a multitude of definitions which vary in terms of an emphasis on the leader's personality traits, behaviors, styles, influence relationships, and cognitive versus emotional orientation. Given the relative ambiguity regarding the distinctiveness of leadership, three established definitions of leadership have been adopted for this paper to propose approximate conceptual similarities:

- 1) Leadership is a *reciprocal* process. Thus, any aspect of the leader, group member, or setting can influence and be influenced by every other variable within the organizational system (Barrow, 1977);
- 2) Leadership is often a *transformational* process. A transformational leader increases group members' motivation, confidence, and satisfaction by uniting members and changing their beliefs, values, and needs (Bass, 1997);
- 3) Leadership is an *adaptive* and *goal-seeking* process, for it organizes and motivates group members in an attempt to attain personal and group goals (Katz & Kahn, 1978).

In the multifaceted discussion of what constitutes leadership, the making of a leader has become increasingly complex focusing on the identification of skills, competencies, and capacities. Reviewing the vast body of knowledge of leadership quickly overwhelms even the most zealous researcher with endless lists of both the knowledge and the performance skills of an effective leader. Still, while the concept of leadership, and the skills and competencies of a leader, are not concertedly defined, there is agreement that a leader's main task in any leadership situation is commitment and working with others to achieve defined goals and objectives (Fiedler, 1967).

Review of International Comparative Management

Health

The notion of health is multifaceted and comprises many aspects. While definitions of health abound, this paper adopts the broad definition of health as the general condition of an organism. As such, it is not confined to human health but includes the health of individuals, teams, groups, and organizational entities. There is a vast body of knowledge discussing health in great medical detail. It is beyond the purpose of this paper to tap into that vast knowledge base. Still, it is of great importance to address some of the pertinent issues regarding individual, group, and organizational health.

Individual health

It should come as no surprise that healthy individuals are more likely to be in a position to be able to contribute to and function within society. Health is a topic of great concern for modern-day leaders since healthy employees are seen as the very foundation of healthy, thriving firms (World Health Organization, 2010). Individual health consists of various components, including but not limited to physical health and moral health.

Physical health

It has been reported that the physical health of many individuals in the developed world is fast deteriorating (World Health Organization, 2010). Heart diseases and diabetes, for example, are surging as the urbanization process matures and available medical resources diminish. The trend of global obesity has also been linked to a lack of physical activity among citizens. As a direct result, employee discrimination is likely to arise when employees have predispositions for certain diseases (Bartiromo, 2009).

Employers must find ways to actively encourage employees to pursue healthy lifestyles, including healthy eating, regular exercise, and engaging in a lifelong wellness culture. Firms need to think about innovative ways to maximize the utilization of existing resources. There is a clear link between individual health of employees and overall organizational health (Peterson & Wilson, 2002). Thus, what is needed is an approach linking physical health with financial health of an organizational entity (Bartiromo, 2009). Organizational leadership should also contribute to fostering employees' health. The World Health Organization (2010) proposed its *Working Lifespan* approach to systematically address the dynamics of a healthy workforce by focusing on strategies related to the stage when people enter the workforce, the period of their lives when they are part of the workforce, and the point at which they make their exit from it.

Moral health

Moral health is a state of mind of healthy individuals. Morally healthy people can think clearly, which is critical for their personal well-being as well as for the well-being of the firms that employ them. Morally healthy people display positive thinking and an optimistic worldview. People feel good and happy when they are morally healthy (Silverman, 2009). Studies have shown that the level of job satisfaction of individuals directly impacts their overall health (Gandolfi,

224 Volume 11, Issue 2, May 2010

2010). It is vital for individuals to be able to identify with and morally engage in their work. Therefore, the goal for managers is to create a morally healthy environment and to provide employees with acceptably safe and healthy working conditions. Silverman (2009) concluded:

The leaders must be ready to embrace change, encourage dialogue, use participatory decision making, instill a team-oriented culture and be able to build management teams that know how to execute the organization's strategies—all within a framework of cultural competence.

Therefore, since work is believed to provide individuals with a real and tangible sense of value, moral standards are critical for building health at the workplace.

Group health

There is an increased recognition that sustainability issues are critical to business structures in a global economy. Teams of employees are bringing sustainability to a firm on a daily basis. It has been reported that responsibility for a sustainability strategy has been added to the existing responsibilities of an individual or organizational unit. Indeed, teams and groups should be healthy enough to provide critical sustainable development. As such, the notion of respecting personal rhythms is significant in the employee's mental and physical health. On a practical level, many managers have completely moved away from the traditional 8-4 or 9-5 working schedule, affording their employees the opportunity to structure their working day according to their personal rhythms. In general, workplace flexibility will contribute to building healthy teams with decreased levels of stressful behavior.

Highly successful leaders are distinguished by a high degree of emotional intelligence, including self-awareness, self-regulation, motivation, empathy, and social skill (Goleman, 2003). However, leaders need to be aware of conflicts that could potentially reduce emotional intelligence in teams. Clearly, conflict can quickly turn unproductive; a well-meant constructive comment can be interpreted as a personal attack. Also, anxiety and frustration over difficult issues can develop into anger directed at colleagues and the firm at large. Personalities frequently become intertwined with issues (Goleman, 2003). Since executives pride themselves on being rational decision makers, they find it difficult to recognize, acknowledge, and manage emotional, irrational dimensions of their own behavior (Eisenhardt, 1997).

Organizational health

Corporate leaders increasingly recognize the importance of building healthy organizational cultures. The Boston Consulting Group (2010) asserts that good governance is not about rules and regulations, but about instilling and nurturing a healthy and ethical corporate culture. A healthy economy requires healthy firms for a number of reasons. First, the health of a firm can provide a company with a competitive advantage, which is much needed in today's hypercompetitive marketplace. Second, the health of an organization is the very

Review of International Comparative Management

foundation of its sustainable development. Third, company health is also a matter of social responsibility (Boston Consulting Group, 2010).

What constitutes a healthy firm? It has been reported that a healthy organizational entity has certain qualities. For instance, a healthy company possesses a sound strategy, is resilient, and is able to combat risk and weather shocks to its systems (Gandolfi, 2010). A healthy firm executes its core activities well and aligns its people and resources so that every team member is running in the same direction. A healthy company renews itself through investment in growth, innovation, and adaptation. Finally, it enjoys complementarity, which is the ability to add one and one and transform them into three (McKinsey & Company, 2010). More practically, an organization's complementarity is the ability to derive benefits from a system of mutually reinforcing elements, such as management practices, intellectual capital, and brands. It comes as no surprise to recognize that the level of health in a company helps sustain its future performance and thus, determine its very own survival (McKinsey & Company, 2010).

It has further been reported that a firm needs to have a healthy mindset and a deep care for individual, group, and organizational health in order to build and secure a competitive edge for the future. Financial performance is driven by organizational health (McKinsey & Company, 2010). Thus, healthy thinking, growth, and development can be utilized as a competitive strategy to generate sustained performance.

The World Health Organization (2010) has developed the "Healthy Thinking Plan" as shown in Exhibit 1. This plan is based upon the premise that healthy thinking is greatly influenced by the firm's leadership, policy, financial situation, and opportunities for partnership and education. Country-specific context, including the labor market, also influences the healthy thinking plan. It infers that the greater the equity, effectiveness, efficiency, and the accessibility of the health services, the better health outcomes can be achieved. The World Health Organization (2010) asserts that the healthy thinking plan contributes to overall organizational well-being.



Source: The World Health Organization (2010)

226 Volume 11, Issue 2, May 2010

The health of leaders and the people they lead

Research indicates that multinational firms and the companies that provide their health insurance are aware of the toll that leadership positions can take on the human body. Some organizations have become proactive in an effort to avert potential high costs and corporate disasters (LaGuardia, 2006). Examples in the United States include Anthem Blue Cross and Blue Shield, which has released a magazine, entitled Executive Health, which reaches out to executives and individuals who are in a position of authority to lead proactive approaches to health for themselves, their families, and their respective firms. More specifically, Executive Health is seen as a source to drive top-down transformation of a corporate culture around healthy living, nutrition, exercise, disease management, and aging. Additionally, firms have been sending key employees to medical facilities specifically designed for "Executive health" (Business Wire, 1993); for example, El Camino Hospital in the U.S., which has discovered breast, thyroid, and colon cancer, early cardiac problems, and coronary disease resulting in bypass or angioplasty (Business Wire, 1993). The examinations have also identified metabolic problems, diabetes, muscle issues, bone problems, and other potentially serious conditions (Business Wire, 1993). Active steps by both organizations and health care providers point to the reality that people in leadership positions can come under severe stress that can potentially lead to very harmful personal health issues (Hareyan, 2008).

Leaders can also come under considerable stress when those they lead are subjected to high levels of stress. A longitudinal study in the U.K. provided evidence suggesting that stress leads to long-term health problems (Scott, 2009). Researchers followed 10,308 British civil servants over a 14-year period to study the role of chronic job stress in the development of heart disease and Type-2 diabetes. The scientists searched for a connection between stress at work and metabolic syndrome, a group of factors that increase the risk of these diseases. The research determined that there was a correlation in that the higher the stress level, the greater the chance of developing metabolic syndrome (Scott, 2009). At the same time, the study failed to specify the specific roles of leadership of each worker observed in the study. Nonetheless, whether the study included many leaders or no leaders at all seems to be of no consequence, because in either case a group that had to be led by someone was showing signs of actual physical deterioration due to stress (Scott, 2009). Thus, it has been concluded that stress reduces productivity and diminishes creativity (Toneguzzi, 2003), Indeed, high levels of stress are associated with increased levels of absenteeism, employee turnover, and health risks, as well as decreased levels of employee productivity and efficiency (Gandolfi, 2010). Stress is also linked to burnout and increased healthrelated costs due to long-term disability (Toneguzzi, 2003). At its most extreme level, work stress has been linked to suicide. Sadly, a British trade union is building up a dossier of the number of suicides that are due to excessive levels of work, stress, and harassment, with recent figures toppling 100 stress-related deaths per year (Cooper & Kindler, 2009). The immediate implication is clear; whether

Review of International Comparative Management

leaders have to deal with marginal decreases in employee productivity within their respective teams or with an isolated event as severe as suicide, the job of a leader can potentially become far more difficult than it would be under ideal operating conditions – which in turn can lead to further stress for the leader and the firm as a whole.

The financial impact of health in organizations

The reality of stress is not isolated to a specific industry or country. Stress can cost organizations and its leaders in many ways. Statistics show that stress at the workplace has been calculated as costing an economy anywhere between 5–10 % of a country's Gross Domestic Product (GDP). This is the case in both the U.S. and the U.K. (Cooper & Kindler, 2009). Likewise, Canadian studies show that the estimated direct costs of absence due to work-life conflict in Canada are in excess of \$3 billion a year (Toneguzzi, 2003). It has been claimed that the financial impact of stress is so exorbitant since health-related problems are often chronic in nature. For instance, one long-lasting impact of stress is burnout, a unique and multidimensional affective response to stress consisting of emotional exhaustion, physical fatigue, and cognitive weariness (Berliner, Melamed, Shapira, Shirom, & Toker, 2006).

Cardiovascular disease (CVD) can be the direct result of prolonged, chronic exposure to stress. In 1986, the cost of CVD in the U.S. alone exceeded \$110 billion (Crump & Gebhardt, 1990). While the 2009 statistics on the actual cost of CVD have not yet been determined, factoring 24 years of medical cost inflation and population growth likely make the cost of CVD exponentially greater today. Most ominously, fatal diseases like CVD that are caused by constant stress have come to be known as *karoshi*, or "death from overwork" (Johnson & Nishiyama, 1997). This, of course, is a real concern, especially in Japan. For example, it has been reported that a reputable life insurance company investigated 500 male white-collar workers in top-ranking firms in Tokyo showing that 46 % of respondents were anxious about their own risk of *karoshi*, while a quarter of them experienced complaints from their families related to anxiety about *karoshi* (Johnson & Nishiyama, 1997).

An additional significant effect of chronic work stress on individuals is depression. Researchers in the United States have estimated that depression costs the U.S. economy \$3 billion in lost productivity (Cox, 2009). Additionally, stress-related burnout and exhaustion have been found to be related to bodily disorders, such as Type-2 diabetes as well as the impairment of reproductive functions (Berliner et al., 2006). Thus, given the extreme severity and duration of mental and physical diseases linked to stress, it is entirely plausible that firms have and will continue to experience prolonged periods of declining employee productivity (New Zealand Department of Labour, 2003).

228 Volume 11, Issue 2, May 2010

Addressing the health problem

Firms are becoming increasingly aware of how health can impact leaders, employees, and an organization's bottom line. This insight has led to the inception and development of several plans and programs that address the physical and mental impairments caused by stress. The emergence of various forms of employee assistance programs (EAP) is particularly conspicuous. EAP-related programs have grown in size and scope over the past three decades. For instance, back in 1981, a mere 50 % of Fortune 500 companies offered EAP services (Hosie, Mackey, & West, 1993), while in 2004 more than 80 % of Fortune 500 firms offered in excess of 20,000 types of EAPs covering 55 % of U.S. employees (Arredondo, Dersch, Shumway, & Wampler, 2004). While EAP's humble origin represented a way for employers to provide assistance to employees struggling with substance abuse, modern-day EAP programs are comprehensive services, including marriage, family therapy, and mental health counseling (Arredondo et al., 2004). This surge in popularity is mainly attributable to EAP's contribution to positive financial impact on the firm's bottom-line. Recent U.S. statistics have shown that successful employee wellness programs have generated an average return on investment (ROI) of \$3.48 to \$1 due to reduced health care costs and \$5.82 to \$1 due to reduced absenteeism (Walter, 2009).

Some experts recommend the adoption of learning activities for managerial employees in an attempt to recognize some of the side effects of work-related stress (British Broadcasting Corporation, 2010). Without a doubt, such endeavors could produce long-term benefit for organizations. While managers are not therapists, they should nonetheless be in a position to make a workplace more sensitive to health matters, thereby creating a more nurturing and less stressful work environment (Indvik & Johnson, 1997). It has been shown that a manager's ability to identify early warning signs of stress and stress-induced trauma could be of great benefit to both the employee and the firm. Examples of what managers should be watching for in employee behavior are frequently missed deadlines, working more slowly than usual, and calling in sick more frequently than in the past (Indvik & Johnson, 1997).

Finally, firms have come to understand the value of health and wellnessrelated programs for all employees. Activities range from basic informational programs to provision of facilities and hands-on instruction for those who desire healthier lifestyles (Crump & Gebhardt, 1990). There is statistical evidence suggesting that fitness and wellness programs reduce the occurrence of major diseases, including heart disease, that can be caused by stress (Crump & Gebhardt, 1990). However, despite the increased recognition of health and wellness-related programs, there exists still a major problem: Despite all the publicity and attempts to describe and treat it, there is scant evidence demonstrating the decrease of stressrelated illnesses and thus little ground for claiming success in response to the implementation of programs (Arthur, 2004). Additionally, there is no decline in incidence or topicality (Arthur, 2004). The fact that work stress is an issue of mainstream concern and that it cannot be contained, much less reduced, should be an issue of great concern for organizations and organizational leaders.

Addressing work-related stress

The role of organizational culture has been described in the etiology of workplace stress through the "Culture-Work-Health Model" (Peterson & Wilson, 2002). This framework constitutes a pioneering concept providing a theoretical basis for new directions in ameliorating workplace stress (Arthur, 2004). At its most basic, the framework validates the assertion that leaders need to consider, view, and subsequently tackle the issue of their own personal health, the health of their employees, and the health of the entire organizational entity. The framework depicted in Figure 1 introduces two concepts that had been largely overlooked in the field of work stress. First, it identifies organizational culture as the primary cause of distress (Peterson & Wilson, 2002). This notion places the burden on the organization to identify means by which to reduce stress at all levels of the firm. Second, it introduces the concept of organizational health and organizational stress as concepts equally important for individuals as for organizations (Peterson & Wilson, 2002). Thus, virtually every output of the firm has a direct effect on personal health, while the personal health of each employee and the collective health of the entire workforce affect the inputs and outputs of the entire firm. As such, the interconnected nature of personal health to the functioning of the organization should subsequently bring greater attention to the issue.



Source: Peterson & Wilson, 2002

Final comments

The role of leaders in organizational life remains vitally important. Leaders are tasked to meet goals and objectives set by the organization. However, in order for leaders to be able to successfully accomplish set targets, they in turn will need clear directions from their own superiors as to what exactly must be attained.

It has been established that high-pressured work generates significant degrees of stress among individuals. In a recent U.S. study, 88 % of participants in leadership positions stated that work is a primary source of stress in their lives and that having a leadership role significantly increases the level of stress experienced

230 Volume 11, Issue 2, May 2010

by individuals (Campbell, Baltes, Martin, & Meddings, 2007). While direct consequences of high-pressured work are job strain, stress, and burnout, a major cause of stress is trying to do more with fewer resources in a shorter amount of time. Anecdotal evidence suggests that managers increasingly find themselves short of resources to attain organizational objectives. This is especially the case in an economic environment where leaders face budget cuts, decreases in available resources, and increased pressure to meet stakeholder demands (Gandolfi, 2010).

Finally, to facilitate the accomplishment of the on-going demands, leaders must find ways to accomplish objectives, as well as preventive mechanisms to cope with stress. While experts have offered a variety of solutions, including access to healthy eating, exercise, and rest, an emerging solution revolves around the idea of 'boundary maintenance', which is the purposeful separation of work and personal time (Campbell et al., 2007) in the pursuit of work-life balance.

References

- 1. Arredondo, R., Dersch, C., Shumway, S., & Wampler, R. (2004) "A place for marriage and family services in Employee Assistance Programs (EAPs): A survey of EAP client problems and needs", *Journal of Marital* & *Family Therapy*, Vol. 30, No. 1, pp. 71-79
- 2. Arthur, A. (2004) "Work-related stress, the blind men and the elephant", *British Journal of Guidance & Counselling*, Vol. 32, No. 2, pp. 157-169
- 3. Barrow, J.C. (1977) The variables of leadership: A review and conceptual framework, *Academy of Management Review*, Vol. 2, No. 2, pp. 231-251
- 4. Bartiromo, M. (2009) Business of innovation: redefining health care, *CNBC.com*. http://www.cnbc.com/id/15840232?video=1295594363&play=1
- 5. Bass, B.M. (1997) "Does the transactional transformational leadership paradigm transcend organizational and national boundaries?", *American Psychologist*, Vol. 52, No. 2, pp. 130-139
- 6. Berliner, S., Melamed, S., Shapira, I., Shirom, A., & Toker, S. (2006) "Burnout and risk of cardiovascular disease: Evidence, possible causal paths, and promising research directions", *Psychological Bulletin*, Vol. 132, No. 3, pp. 327–353
- 7. Boston Consulting Group (2010) *Leadership impact stories* http://www.bcg.com/expertise_impact/Capabilities/Organization/Leadershi p/ImpactStoryDetail.aspx?id=tcm:1226817&practiceArea=Leadership
- 8. British Broadcasting Corporation (2010) *Mental health emotional health*. http://www.bbc.co.uk/health/conditions/mental_health/emotion_stress.shtml
- 9. Business Wire (1993) *Keeping Watch on Executive Health*, Business Wire, Dow Jones, November 18
- Campbell, M., Baltes, J., Martin, A., & Meddings, K. (2007) *The Stress of Leadership*, Center for Creative Leadership. http://www.ccl.org/leadership/pdf/research/StressofLeadership.pdf

Review of International Comparative Management

- 11. Cooper, C., & Kindler, A. (2009) "The costs of suicide and sudden death within an organization", *Death Studies*, Vol. 33, No. 5, pp. 411–419
- 12. Cox, B. (2009) Depression: the bottom line, IDG Japan, Vol. 79; Issue 2
- 13. Crump, C., & Gebhardt, D. (1990) "Employee fitness and wellness programs in the workplace", *American Psychologist*, Vol. 45, No. 2, pp. 262-272
- 14. Eisenhardt, K.M. (1997) "How management team can have a good fight?", *Harvard Business Review*, Vol. 75, No. 4, July 1997. http://faculty. washington.edu/janegf/goodfight.pdf
- 15. Fiedler, F. (1967) *A theory of leadership effectiveness*, McGraw-Hill, New York
- 16. Gandolfi, F. (2010) Human Resource Management: Fundamentals, Concepts, and Perspectives, LAP Lambert Academic Publishing, Köln, Germany
- 17. Gardener, J. (1990) On Leadership, Free Press, New York
- 18. Goleman, D. (2003) "What makes a Leader?", *Harvard Business Review*. http://hbr.org/2004/01/what-makes-a-leader/ar/1
- 19. Hareyan, A. (2008) "Stress may lead students to stimulants", *Exam Health*, University of Michigan. http://www.emaxhealth.com/32/21656.html
- 20. Hosie, T., Mackey, J., & West, J. (1993) "Employment and roles of counselors in employee assistance programs", *Journal of Counseling & Development*, Vol. 71, pp. 355-359
- 21. Indvik, J., & Johnson, P. (1997) "The boomer blues: depression in the workplace", *Public Personnel Management*, Vol. 26, No. 3, pp. 359-365
- 22. Johnson, J., & Nishiyama, K. (1997) Karoshi-death from overwork: occupational health consequences of the Japanese production management, Shiga University of Medical Science, Johns Hopkins University. www.workhealth.org/whatsnew/lpkarosh.html.
- 23. Katz, D., & Kahn, R.L. (1978) *The social psychology of organizations*, Wiley, New York
- 24. LaGuardia, J. (2006) "Why executive health matters (Anthem Blue Cross and Blue Shield)", *Inside Business*, Vol. 8, Issue 5, May 1, 2006
- 25. McKinsey & Company (2010) Changing the fortunes of America's workforce A human capital challenge, June 2009. http://www.mckinsey.com/mgi/reports/freepass_pdfs/changing_fortunes/ Changing_fortunes_of_Americas_workforce.pdf
- 26. New Zealand Department of Labour (2003) *Healthy work managing stress and fatigue in the workplace*. http://www.osh.dol.govt.nz/ order/catalogue/stress/detailed.shtml
- 27. Nicklen, G. (2002) Leadership and Health, Appleton, New York
- 28. Nyberg, A., Bernin, P. & Theorell, T. (2005) *The impact of leadership on the health of subordinates*, Report No. 1, SALTSA Joint Programme for Working Life Research in Europe, National Institute for Working Life, Stockholm. http://ebib.sub.su.se/saltsa/2005/wlr2005_01.pdf

232 Volume 11, Issue 2, May 2010

- 29. Peterson, M., & Wilson, J. (2002) "The culture-work-health model and work stress", *American Journal Health Behavior*, Vol. 26, No. 1, pp. 16-24.
- 30. Schein, E.H. (1992) Organizational Culture and Leadership, 2nd edition, Jossey-Bass, San Francisco
- 31. Scott, E. (2009) Stress: how it affects your body, and how you can stay healthier, *Stress and Health*. http://stress.about.com/od/stresshealth/a/ stresshealth.htm
- 32. Silverman, D. (2009) "Surviving the boss from hell", *Harvard Business Review*, September 2009. http://agc-wopac.agc.gov.my/e-docs/Journal /0000013823.pdf
- 33. Sosik, J.J., & Godshalk, V.M. (2000) "Leadership styles, mentoring functions received and job-related stress: a conceptual model and preliminary results", *Journal of Organizational Behavior*, Vol. 21, No. 4, pp. 365-390.
- 34. Toneguzzi, M. (2003) "Workplace stress reaches breaking point: expert says problem costs \$30B a year", *Calgary Herald*, February 13, 2003
- 35. Walter, L. (2009) "Employee wellness programs demonstrate positive ROI for businesses", *Penton Insight*, Dow Jones, July 23, 2009
- 36. World Health Organization (2010) Stress at the workplace. http://www.who.int/occupational_health/topics/stressatwp/en/index.html

Review of International Comparative Management