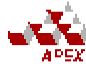
The Health Status of Executives in the Public Service of Canada

Synopsis of the preliminary findings

November 28, 2002



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The research team

APEX's *Health Status of Executives* study was conducted by a panel of nationally and internationally-recognized researchers in the field of occupational health. The groundbreaking nature of this research has been recognized by the Social Sciences and Humanities Research Council of Canada, which awarded a research grant to Drs. Lemyre, Corneil, Barette and Hepburn to examine the impact of stress and health on learning organizations.

DR. WAYNE CORNEIL
School of Medicine, University of Ottawa
DR. LOUISE LEMYRE
Institute for Population Health and School of Psychology, University of Ottawa
DR. JACQUES BARETTE
School of Management, University of Ottawa
DR. LINDA DUXBURY
School of Business, Carleton University
DR. GAIL HEPBURN
Institute for Work and Health
GRANT SCHELLENBERG
Canadian Policy Research Networks
DR. MARTIN SHAIN
Centre for Health Promotion, University of Toronto

This synopsis will be useful to those whose interest does not extend to detailed examination of the data (which is found in the 30-page *Preliminary Report*), but whose appetite will be satisfied by an explanation of the major themes emerging from the study.

Preamble

This preliminary report on the *Health Status of Executives* is intended to initiate thoughtful discussion among members of the executive community – and with senior Public Service officials – on what needs to be done to address the concerns emerging from the survey. The issues it has identified are serious and complex. This means that quick, simple solutions will be hard to find. Only a comprehensive approach that takes into consideration the systemic and structural issues underlying the Public Service's corporate culture and management styles will be effective.

The commitment of energy, resources and leadership from all levels of the executive cadre will be required to achieve positive change.

This is not the first study to come to this conclusion. Over the past five years, consecutive studies by APEX and other organizations have underscored the urgent need to undertake coordinated action on a number of fronts – and to sustain that focus. Such an effort requires the commitment of energy, resources and leadership from all levels of the executive cadre.

APEX's 1997 study raised the alarm about executives' health. For some months afterward, there was a flurry of discussion in various Public Service fora. There were debates on what action should be undertaken by central agencies, by deputy heads and by individual executives. We all talked about the requirement to introduce fundamental change in leadership practices, management styles and administrative procedures, since all of these were identified as contributing to poor health. The first major conclusion out of our 2002 study? In the last five years, almost nothing has been achieved.

Before we detail our findings, here is a brief explanation of the key elements of the research model we used.

Basic Principles

In the last ten years, there has been a growing body of research exploring the relationships among the way work is organized, the level of stress and health outcomes. The research framework shown in *Figure 1* demonstrates how key factors in the work environment interact to affect health outcomes.

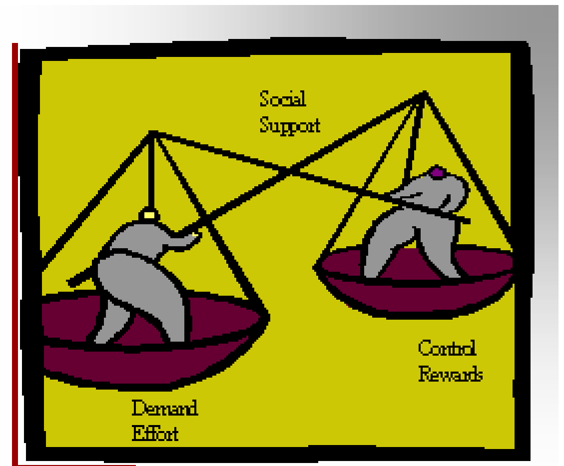


Figure 1

The APEX study, which incorporates these same key predictors of health outcomes, is based on a model endorsed in the most recent epidemiological literature.

Research has demonstrated that there are five principal forces which interact in the workplace and determine health status. The **demand/control relationship** (often referred to as *decision latitude*) and the **balance between effort and rewards** form the major axis of interaction. The effect of these

variables is moderated – or exacerbated – by the nature of **social support**[1] in the workplace. The product of the dynamic interaction among these factors is the health status of the workforce.

The most commonly recognized relationship is between demand and control. The relative presence of each predicts the individual executive's health outcome. That is, when psychological demands are high and decision latitude is low, the mix produces an unhealthy level of psychological strain. A low degree of social support further increases the risk. Increased motivation, new learning behaviours and better health outcomes are produced when high levels of demand are combined with a high degree of decision latitude.

An imbalance in the effort-reward equation – that is, when the reward for doing work is not commensurate with the amount of effort someone puts into a job – the effect on health is negative. Expenditure of a lot of effort in an environment where pressure is high, but potential for reward (i.e. promotion, recognition, pay, and so on) is low, leads to increased strain and thus to more health-related problems.

The pivot point in the model is support in the work place. (This refers to the degree to which an executive has direct access to colleagues and superiors to resolve work-related issues.) To maintain a healthy balance, an employee needs the direct involvement of both the immediate supervisor and colleagues. Interaction of this kind acts as a buffer, diminishing the negative impact of stress and increasing the employee's capacity for coping with the work environment. If we think, for example, about the influence that a supervisor has over the degree of demand placed on the employee and how much control is delegated, it is easy to understand the importance of that type of *support* in keeping competing forces in balance.

Interaction among these factors is dynamic, which means that the balance is constantly shifting under the various pressures from both within and outside of the organization. Organizations have to continually monitor and adjusting the balance.

The complex nature of these relationships and the various elements at play are further explored in the *Preliminary Report.* (A detailed review of the scientific literature is beyond the scope of this report, although a selected bibliography of current research references is appended to the Preliminary Report.)

Methodology and Reliability

> The respondent profile for the core Public Service was representative of the entire executive population.

The APEX study was conducted using standardized instruments drawn from existing epidemiologic literature. This allows the research team to compare results over time and with other published research findings. For example, the data were collected so as to provide for comparative analyses with the results of APEX's 1997 survey.

> Researchers controlled for age and gender in comparing the 1997 and 2002 data as well as data from Statistics Canada and the Canadian Institute for Health Information.

Statistics were gathered for three distinct populations: the core Public Service (response rate of 39.6 %); separate employers such as the Canada Customs and Revenue Agency, Parks Canada and the Canadian Food Inspection Agency; and the RCMP. This report deals only with the results for the core Public Service.

The respondent profile for the core Public

[1] Social support is a measure of the interaction with others which is instrumental in providing information, clarification, advice and assistance in performing tasks, making decisions and problem-solving.

Service was representative of the entire executive population for all major demographic factors: i.e. age, gender, hierarchical level, region of work and so on. This makes it possible to extrapolate the results of the study to the entire executive community. The margin of error was +/- 2.3 % , 99 times out of 100.

Indicators of Health Status

Examination of the study's results for both acute and chronic health outcomes yields an unfortunate conclusion: there has been no significant improvement over the five year period since APEX's initial study. In fact, in some respects overall health has declined. When compared to the Canadian population overall, Public Service executives are not doing as well.

Smoking, weight, use of alcohol

The research team looked at a number of lifestyle factors to evaluate how the executive community is faring. The good news is that there are considerably fewer daily smokers in the executive ranks of the Public Service than among Canadians in general. However, over half of executives are at risk as a result of being overweight or obese and consumption of alcohol on a regular basis places more executives in the high risk category than the rest of the Canadian population.

Stress, depressed mood

Measures of stress, depressed mood and distress[2] also showed that executives are not doing as well as their fellow citizens in general. Just over half of executives (52.8 %) reported high levels of daily stress, compared to 28.2 % of Canadians. Almost five times as many executives as the general population (15.2 % compared to 2.6 %) indicated depressed moods.

Distress

There was encouraging news about the level of distress. It had dropped since 1997, mostly due to a marked decline in the amount of anxiety being experienced. This may be attributable to a somewhat greater sense of job security once the downsizing and re-structuring of the 1990's was over.

Headaches

Short term health indicators – headaches and sleep disturbances, for example – were either unchanged or slighter higher than noted in the 1997 study. The rates of both gastro-intestinal upsets and headaches remained constant, while sleep disturbances increased significantly. The data show that executives are not getting enough sleep, according to standard recommendations for healthy lifestyles. Executives average only 6.6 hours of sleep per night, which is well below Canadian averages. Taken together, the short-term health indicators show a growing level of fatigue.

Disturbed sleep

One in five executives is currently experiencing some form of heart disease.

The survey asked about chronic health conditions which had been diagnosed by a physician over the preceding 12 months. We matched respondents from the 1997 and 2002 studies according to age and gender so that we could appropriately compare rates across the five year span. The most startling results are for cardiac and cardio-vascular diseases which rose from 17% to 22%. This means that one in five executives is currently experiencing some form of heart disease. The most common diagnosis is for hypertension.

Cardio-vascular

The condition can be treated, but its origins have to be explored. There is a considerable body of research which has pinpointed key risk factors commonly found in the workplace. Work strain, for example – particularly high levels of demand combined with low levels of control – have been seen to increase the risk of hypertension by over 300%.

On a more positive note, there was a substantial decline in the incidence of serious chronic respiratory ailments. Early indications are that this result is closely tied to

respiratory ailments

[2] Distress is a level of psychological strain which has reached the point of interfering with an individual's capacity to carry out daily tasks and functions.

the very low numbers of daily smokers – less than half the rate in the Canadian population overall. Having had smoke-free federal workplaces for over a decade may be an occupational health policy success that could serve as an example for other health interventions.

Soft tissue injuries

Musculo-skeletal problems continue to be a factor. A growing body of research shows a distinct relationship between organizational strain and soft tissue injury. People seem to carry their tension in the upper back and shoulders. When combined with bad work habits and poor ergonomics, this creates serious musculo-skeletal problems. The widespread use of cell phones for extended periods of time creates chronic neck pain. The common use of notebooks, PDAs and other devices – often in poor postures – contributes to an increase in shoulder nad lower back pain.

Insomnia

Depression

Diagnoses for insomnia are also up significantly from 1997. There were also considerable increases in psychiatric diagnosis, most commonly for depression.

Use of health services

It is perhaps not surprising that worsening health has resulted in higher use of all forms of health services. The number of visits per year to a physician went from 2 to 3; conversely, the number who did not visit an MD dropped by half (30% to 16%). Use of other types of services, particularly for mental health counselling, was also up significantly.

Medications

Another good indicator of health status is what medications are being used and to what degree. The most common prescriptions reported were for antidepressants and sedatives.

Work place factors

Work Demands

Through our 1997 study, we found that combining a lot of strain and limited latitude to make decisions made a good recipe for poor health. We also determined that having support from superiors and colleagues, along with a high degree of control over the immediate work environment, provided some protection from illness. The importance of this type of workplace factor has changed hardly at all in the last 5 years.

Hours of work

Travel time

The average number of hours worked each week (52) has not changed since our 1997 study. The fact that people are spending a slightly higher percentage of that time at the office may mean they are trying to achieve some form of work-life balance. The amount of work done on the weekends is still significant and time away from home on business travel has substantially increased for those working in regions.

> People who consistently work more than 55 hours a week are negatively affecting their health and productivity.

Effect of long hours

Almost half the study sample (47%) are working more than 55 hours a week. This has serious long-term effects on health and productivity. When people work more than 60 hours a week and are operating on less than 5½ hours of sleep 2 nights a week or more, their risk of coronary heart disease is increased between 200% and 300%.

As work gets more complex and executives' scope of responsibility increases, so do the time pressures and the workload. Other indicators of work demands, such as mental effort, role conflict and ambiguity and the level of responsibility, have increased slightly from 1997.

Organizational Culture

Security

Overall, executives have a greater sense of job security than they did five years ago. However, some organizations continue to engage in re-organization, re-structuring and re-engineering exercises and this has created some ambiguity for the management team. Wherever we see rapidly changing priorities, competing or conflicting demands and lack of clear direction, we also find the executives whoa re trying to

lead the transitions under greater strain.

Considerable levels of intra- and inter-group conflict show up when we look at organizational culture and work environment. Similar levels have been found in other organizations when resources are scarce and there is increased internal competition for access to them.

Conflict

Environmental Factors

The study has told us that executives are experiencing even more workload and stress than in the past. One of the key contributors turns out to be new technology in the workplace – or more precisely, the expectations that technology engenders and its role in reducing face-to-face communications. Some productivity gains are evident, but the results are uneven. E-mail can be a marvellous tool, but it often creates in the sender an unrealistic expectation of instantaneous action from someone who can be reached anywhere, any time. E-mail can also be used as an avoidance mechanism – it allows people who feel strapped for time to avoid getting into person-to-person discussions on sensitive or complex issues. This may seem efficient but has less healthy effects on the quality of decision-making, the work relationships and the work environment.

Role of technology

Most executives say they have plenty of the information they need to get their work done, BUT do not have enough staff to manage the amount of work. This assessment is consistent across all departments, regions and levels of EX below Assistant Deputy Minister level. The lack of staff is not an infrequent problem – over 80% of our sample reported this to be a routine constraint. *Doing more with less* is putting a major strain on policy development, service delivery, scientific and regulatory environments.

Resources

Effort

The amount of effort required to do one's job has kept pace with the increasing complexity of most activities. Even so, the majority of executives report that they do not have the opportunity to use their knowledge and skills to the fullest. Over half indicate they do not have time to take part in training or continuing education activities.

Complexity

The spillover effect of cuts to human resources divisions has been felt. The time executives are obliged to devote to basic human resources management – in administrative activities such as job description writing, for example – has increased significantly.

HR capacity

Protective Factors

Control

The term *decision latitude* describes the extent to which an executive has the ability to control workplace demands. It is a significant predictor of health outcomes. In 1997 we found that executives had quite limited decision latitude. The situation in 2002 is essentially unchanged despite all of the discussion following the release of APEX's earlier study.

Decision latitude

All of the research in occupational epidemiology has shown that workplaces carrying high demand and low decision latitude create measurably higher risk for all major chronic diseases. Our 1997 findings were very troubling, but no exception to this rule: increased risk of illness ranged from 30% to 1700%.

Risk

We were also able to confirm at that time that the risk is highest for lower EX levels (EX-01 and -02). Why is it not the top people – those who carry the greatest responsibilities – who are at most risk? What the study shows is that the much greater ability of deputy ministers and even assistant deputy ministers to control their work environment creates a strong mediating effect.

Rewards

In the 2002 study, APEX asked executives for their views on the *pay at risk* system to which they are subject and about other forms of recognition for a job well done. Reaction varied according to hierarchical level. Those at lower levels reported they were recognized less often for the work they do. They were also less satisfied with current performance management and recognition practices.

Social Support

Social support is the degree to which an executive has direct access to colleagues and superiors to discuss work-related issues, explore new ideas, reach decisions and so on. The level of social support reported in the 2002 study has declined significantly from 1997 to the point where it does not meet accepted norms. The reduction in *supervisory support* in particular is quite dramatic. Most respondents said that the problem was not the quality of the relationship, but the too little time leaders have to work with their staff. A great deal of direction to staff seems to be conveyed through e-mail or voice mail.

Supervisory support

Collegial support has also declined over the five year period. There are probably a number of factors at play. One may be that interaction among peers has dropped because there is so little time to get work done. There may also be some tension which is rooted in increased competition for scarce resources: reward systems are still tied to results within program areas and do not recognize contributions to cross-organizational or team efforts.

Collegial support

Harassment

One in five executives reports being harassed.

Reports of being harassed are as numerous as they were in 1997, when one in five executives reported being subject to such treatment. Given the seriousness of these results, APEX will issue a special report on harassment and health among executives in the coming months.

Organizational outcomes

The literature shows that there is a direct correlation between the health of individual executives and the state of the organization in which they work. The link shows up in factors such as absenteeism, productivity and innovation. Work satisfaction is also a key indicator of healthy organizations.

Commitment

Over two thirds of executives say they are highly committed to their work in the public service. They are dedicated and want to continue serving Canadians with integrity and quality. On the other hand, many respondents said they feel trapped in their present circumstances – that is, by the work environment in which they find themselves.

Turn-over

This unhappiness with the work environment translates into a strongly stated desire to leave their current place of work. Sixty-five per cent said they think about leaving on a monthly, weekly or even daily basis. Of this group, 22% would work elsewhere in government, 11% would prefer to work outside of government and 32% intend to retire in the near future. These numbers are consistent with data from independent studies in 2001 and 2000.

Intentions

While 76% report they are very satisfied with their work, this is primarily related to the nature of the work they do. Executives distinguish clearly between the type of work they do and the manner in which it is carried out. Their dissatisfaction stems from the *how* not the *what* of their work. The leading causes of dissatisfaction are frustration with the work environment and a desire for both better work / life balance and a reduced workload.

Satis-faction

Productivity

High levels of strain and related health problems are reflected in reduced productivity and increased absenteeism among executives. The rise in chronic illnesses results in more sick leave and disability leave being used. This has an impact on the consumption of health benefits, especially high-cost prescription medications.

Sick leave

Executives' reactions

As it does every year, APEX devoted the summer months of 2002 to engaging senior executives in dialogue about the Public Service environment and their working conditions. We led off each session with a brief overview of preliminary results from APEX's 2002 *Study on the Health Status of Executives*.

Participants were not surprised by the findings, although they were discouraged by the conclusion that the situation had not improved in the five years since our first study. Participants agreed with the characterization of executives as fatigued and close to burnout, and were concerned about the rise in negative health consequences associated with this state.

Executives acknowledge their responsibility – individually and collectively – to take steps to improve the work environment. However they believe that central agencies and deputy heads also have an essential role to play and suggested some possible solutions to explore.

Contributors to poor health status	*Suggested focus*
Executives' prevailing mood is "frustration". Tolerance for the lack of movement on major initiatives such as HR reform has dissipated. The time, energy and money that have been invested in major Public Service initiatives have not produced matching results, leading to discouragement and cynicism.	Ensure that substantive reform of the human resources management regime is implemented, is adequately resourced and puts emphasis on the culture change element.
Since the program reviews of the 1990's, there has not been a serious attempt to tailor demands and expectations to the resources available. The public's expectations of getting more service, and in a more effective and efficient way, are exceeding capacity to deliver. The problem seems particularly acute in the regions. While executives support investment in new corporate services and informatics initiatives, they say the constant levies have created anorexic base programs.	Reforms must provide mechanisms that will give executives and managers access to the human resources necessary to meet work demands.
Executives are concerned that responding to the administrative demands of a very risk-averse system diverts too much energy away from providing services to clients. They note the conflicting messages of "take risks", but "don't do anything that might get the department into trouble".	Entrust all levels of the public service with the latitude to make the decisions necessary for effective program delivery. Initiate an administrative review to cut unnecessary processes and simplify management procedures.

Many executives say they are not able to get access to superiors or colleagues when they need to reach a decision or discuss options. They also observed that there seemed to be less and less time to get things done. As a result, electronic communication prevails over face-to-face communication. Executives say the work environment, and sometimes the quality of decisions, suffer as a result.	There has to be a more disciplined approach to setting aside time for interaction with members of staff or of the team. Tackle the "culture of briefing notes" – make the expertise more directly available to those who make decisions.
Traditional professional values like respect and courtesy for others seem to be eroding. (For example, meetings and conference calls scheduled without any regard for regional time differences.)	It is unrealistic to expect healthy workplaces unless we reward appropriate behaviours at all levels in the executive community. This means ensuring that Public Service values are taken into consideration in staffing and promotions and how we reward good performance. Performance contracts must therefore have a significant reward associated with *how* results are attained.

The road to improving health status

Given enough time, great frustration with the workplace will overcome even a high degree of commitment to public service. APEX believes a large number of executives will exercise their option to leave once they meet their age and years of service conditions.

Recruiting new executives to replace them may prove to be difficult. The difference in the average work week for executives and members of feeder groups is 10 hours – if becoming an executive means devoting another full day a week to work, the feeder groups are not interested.

It has been noted that the Canadian public service is a knowledge organization: it relies on people – their knowledge, skills and creativity – to fulfill its mandate to serve the country's citizens. Like other organizations, it cannot be successful without a strong cadre of leaders. The overall decline in the health of its leadership group should be of great concern as the Public Service attempts to meet the challenges of an ever more complex and demanding world.

The words "people are our most valuable asset" ring hollow when there is no visible action to improve the work environment or to make management of people a Public Service priority. Executives and senior officials have focussed on results management to the detriment of people management. This is too important a leadership function to be delegated. When was the last time an ADM Forum or Deputy Minister retreat built its entire agenda around human resource management or even around the management of the executive cadre? Effecting change in organizational culture – including improving health and well-being – is dependent upon leaders taking charge of the situation and making personal, long-term commitments to change.

It is always tempting to go for the "quick fix". The Public Service needs to get beyond *tertiary activities* like Employee Assistance Programs (EAP) or counselling, beyond *secondary efforts* focussed on the individual's lifestyle, and focus instead on *primary interventions* designed to address root causes. This is not to take away from the importance of those other initiatives – they are all needed. The Public Service has done a good job of implementing programs and systems like EAP, Occupational Safety & Health, Disability Case Management and Return to Work, all of which are designed to help employees who have been affected or disabled by workplace factors. There have been scattered efforts to address secondary level issues with programs in stress management, workplace wellness, and physical fitness. They are all intended to increase an individual's resiliency to environmental factors. The secondary programs are not nearly as available across departments

and regions as those like EAP, which are mandated by policy.

Today in the Public Service, there are very few policies, programs or services designed to address the root causes of health problems caused by the work environment or management practices. Despite the evidence which is piling up, many senior officials do not wish to accept that serious health consequences are most often caused by the work environment, not individual or personal lifestyle factors.

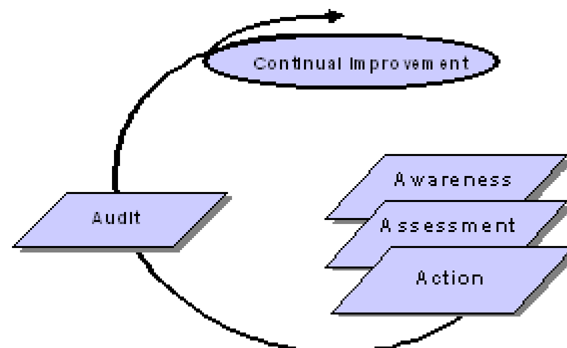
There is a proven process to address the causes and effect of health issues in the workplace: **evidence-based risk management**. It is being used successfully in the U.K., the European Union, Australia and New Zealand, as well as in selected private sector organizations in Canada. While the mechanism is relatively simple, executives charged with leading the process must be prepared to be directly involved and to provide on-going, sustained commitment. These processes can be linked to other important organizational performance measures like productivity, fiscal management, and customer satisfaction. Just as organizations are never static but constantly adjusting to the environment, so do hazards and risks evolve. It is therefore imperative that the risk management cycle become a core process which integrated with all management activities.

There are four components to the risk management cycle: **awareness**, **assessment**, **action** and **audit**. These four functions must be performed on a systemic basis throughout the organization. They cannot be delegated to a single functional community, but must be a significant part of the direct responsibility of executives and line managers.

APEX is currently at the *awareness stage* with its health study. We are attempting to create understanding of the complex nature of the issues and how they manifesting themselves within the Public Service. *Assessment* is not just about data collection. It also comprises gathering information and preparing analyses as a result of discussions and examining all activities which have been linked to health outcomes.

Included in this phase is an appraisal of the extent to which hazards are spread across departments and the level to which they manifest risks to health.

In the *action phase*, we attempt to change behaviours by developing a series of interconnected activities



which can be implemented over the course of several years. The sustained effort is necessary. All the evidence indicates that to obtain the desired health results, interventions have be running for at least three to five years. Effective *audit* requires a multi-level system of ongoing performance monitoring, similar to what is found in total quality approaches. Evaluations and measurement take place at all levels – individual, unit and organizational – with direct links to reward and recognition protocols.

Results are measured on a scale that balances productivity, financial management, customer satisfaction and employee well-being factors. The approach is very effective, but requires a long-term investment of time, energy and resources.

The *National Quality Institute Award (NQI) for Work Place Well-being* is co-sponsored by Health Canada. The NQI approach is one good example of a process which yields healthier work places and improves the quality of services. There are others.

Over the next 12-18 months, APEX will continue to update its analysis and to search for appropriate models and best practices. We will challenge all executives to get involved in finding solutions.