March 2003: To appear in the Sunday Times

If You Want to Live, Get Promoted

Andrew Oswald, Professor of Economics, Warwick University

If you want to live to be 100, get promoted at work. That is the message from a growing body of research. Although it is probably not widely known outside university seminars, the research evidence shows that health and longevity depend on career success.

Senior people in organizations are thereby doubly blessed. First, they are richer. Second, they get extra years on the planet to enjoy their pension.

How this happens is still a mystery but it is believed to work through the immune system. One of my friends, for instance, is a scientist. A few years ago he became head of his famous university department. "You know the most peculiar thing", he told me recently. "From that day onwards, I have never had a day's illness. Not even a sniffle." My friend's experience is common.

We hear a lot these days about over-work and mental strain; there is a perception that the stress of doing a top job is bad for you. That is wrong. In top posts, the supposedly high strain provides challenges and intellectual rewards. The body's ability to fight infection rises.

Early findings about the medical effects of status came from a study of male civil servants. Remarkably, their job seniority proved to be an excellent predictor of when they would die. The Sir Humphreys survived into their 80s. Fairly high-ranking men died in their 70s. Those from clerical positions passed away in their 60s. Since then, scientists have found much evidence for so-called psychosocial pathways to health.

Some researchers were, and are, sceptical. They have argued that, while the statistical correlation in the Civil Service study looks

impressive, it is spurious. The low-ranking workers simply ate poorly and smoked heavily. Yet that, we now know, is not the explanation.

A new study, the Whitehall 2 Research Project, is being done. It follows 17,000 civil servants through time. Employment grade has turned out to be a more powerful predictor of illness and lifespan than the classic 'risk' factors combined. Those include smoking, high blood pressure, and being overweight. To put it mildly, this is a remarkable finding. The size of the effect takes some getting used to. For Whitehall civil servants, the annual mortality risk among senior Administrative grades is only one quarter of those in lowly office-support clerical grades.

Studies of the animal kingdom have also been carried out. These manipulate the rank of animals within a group, and find it alters the animals' actual physiology.

One project examined social dominance among wild baboons in the Serengeti. These animals are ideal subjects for investigating psychosocial factors. Food is plentiful and predators are scarce. The baboons, who live in large packs, have plenty of time to engage in social activity. Attainment of rank within these groups of monkeys is a preoccupation among them. And, of course, baboons do not smoke or drink alcohol. The Serengeti is a perfect laboratory.

The heads of the ape packs looked just like Permanent Secretaries. Both had the best cholesterol levels. Levels of cardiovascular damage also depended on a baboon's rank – again as in civil servants. Researchers then experimentally changed which baboons were senior in the pack. Dominant animals who became subordinate suffered. They had a many-fold rise in the dangerous blood plaque levels which are known to predict heart disease. Baboons who acquired dominance, by contrast, became healthier. Their blood plaque levels improved.

It is not properly understood how rank in the workplace can feed through into a person's health and chance of long life. One likely route, however, is because the brain has ways to influence the immune system. Hormones, including cortisol, have large effects on the body's functioning, and they are moulded in part by a person's

environment and life events. Obesity is also strikingly inversely related to social rank, and obesity is linked to ill-health. Blood clotting protein, too, shows a strong social gradient. Blood glucose appears to matter particularly. Experiments show that low-status workers have difficulties in clearing dangerous levels of glucose from the body.

Chronic anxiety, insecurity, low self-esteem, and lack of control at work – all are dangerous. They hurt physical health, because they first hurt mental health. This, and the role of social position, shows up in sickness statistics. Once again, there is an intriguingly strong connection between seniority in the workplace and the number of days taken off through the sickness. In the Whitehall study, men in the lowest grade had six times the absences of those at the top. Men and women who rated their jobs as low on control had markedly worse sickness rates.

Is there anything a company can do to give its employees higher status and thus longer lifespan and better health? Here we are not certain. But it is possible that by redesigning jobs, more status can be produced in total. Fancy job titles are one example of this. It may be unwise to mock such methods.

Although things are relative, even super-stars can suffer from feelings of failure. A recent statistical study has looked at the lifespan of movie stars. If we compare the longevity of those nominated for an Oscar, and contrast it with those who actually won an Oscar, a remarkable fact emerges. Even in this select group, winning an Oscar adds nearly three extra years of life.

Human beings are hostages to a powerful need for job status.