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The stress of life: a modern complaint?

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In a series of apocalyptic novels published shortly before his death, the British author J. G. Ballard (1930-2009) imagined the potential impact of progressively advanced modern societies on human behaviour. Struggling to cope with new forms of work and wealth and with the expansion of leisure, the disaffected middle-class characters that inhabit *Cocaine Nights* (1996), *Super-Cannes* (2000) and *Millennium People* (2004) seek release from the stress of life by turning to violence, sexual license and carefully calculated forms of madness. According to Ballard's dystopian vision, the frustration, insecurity and loneliness of modern lives are only capable of generating communities oppressed by social unrest, political instability, immorality and injustice.

Although eccentric and controversial, Ballard's fictional portrayals of a species under stress captured an emergent reality. In 2000, the British Health and Safety Executive (HSE) reported that there had been a 30% increase in occupational stress between 1990 and 1995. Four years later, the Whitehall II study highlighted the role of stress in shaping sickness patterns amongst civil servants. In 2009, the HSE estimated that 13.5 million working days were lost to stress each year and that the annual cost of work-related stress was in the region of £4 billion. Concerns about the socio-economic impact of work-place stress have been accentuated by claims that rising trends in hypertension, heart disease and depression might also be caused by the stress of modern lives. According to the American biologist Robert M. Sapolsky (b. 1957), many chronic diseases can be explained in terms of the neuro-endocrine disturbances generated by attempts to cope with the stress of rapid social, cultural and technological change. While a certain degree of stress is accepted as necessary for performance and productivity, unmitigated stress appears to be threatening the health and happiness of modern Western populations in particular.

Although we may like to believe that we are more stressed than our predecessors, complaints about the stress and strain of life have a long history. Even Ballard's idiosyncratic prophecies have their precursors. In the 1970s, the left-wing American writer Alvin Toffler (b. 1928) argued that post-war populations were suffering from 'future shock', a state caused by 'the shattering stress and disorientation that we induce in individuals by subjecting them to too much change in too short a time'. The inhabitants of modern 'throwaway society', he insisted, were struggling to adapt to the 'unwanted tempo' of life manifest in the transience of people and places, the speed of technological innovation, and the surfeit of choice in consumables, education and the media. In the eyes of Toffler and many of his contemporaries, the inability to cope with change was directly responsible not only for epidemics of heart disease, obesity, anxiety, depression and suicide, but also for escalating levels of aggression and crime, the demise of sexual standards, and the instability of international relations.

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Toffler's opinions gained some credibility from scientific and clinical studies of stress. In the 1930s and 1940s, the Hungarian-born scientist Hans Selye (1907-82) had suggested that many chronic diseases were the result of faulty adaptation to stress, or what he referred to as the 'general adaptation syndrome'. Shortly after the Second World War, Selye developed a more comprehensive account of human pathology by insisting that failures or irregularities in the hypothalamic-pituitary-adrenal axis were responsible for the inability to cope with stress. Selye's descriptions of the biochemical mechanisms of stress reactions and his vigorous attempts to popularise the language of stress not only initiated further scientific studies of neuro-endocrine pathways, leading eventually to the identification of hypothalamic releasing factors, but also encouraged doctors and their patients to explain patterns of health and illness in terms of the escalating stress of life.

Selye's laboratory investigations were mirrored by psychological studies of stress. The role of stress in shaping individual behaviour had become particularly apparent during the Second World War, when British, American and Canadian air-force authorities had blamed the poor performance of some pilots on 'flying stress'. In the decades after the war, a number of researchers pursued the psychology of stress in more detail. In his studies of appraisal and coping, for example, the American psychologist Richard Lazarus (1922-2002) argued that psychological stress reactions, which he regarded as directly analogous to the physiological mechanisms revealed by Selye, were shaped by people's perceptions. Around the same time, two American psychiatrists, Thomas H. Holmes (1918-88) and Richard H. Rahe (b. 1936), developed the Social Readjustment Rating Scale, which attempted to quantify stressful life events such as bereavement, divorce and illness and to provide doctors with a provisional scheme for predicting disease onset.

Accounts of stress developed after the Second World War were themselves not entirely original, but were heavily dependent on inter-war studies of the manner in which sociopolitical instability and deepening economic recession were precipitating new forms of nerve strain and rising levels of sickness absence and social unrest. In 1937, the British cardiologist Lord Horder (1871-1955) argued that 'the stress of modern life' was a product of the 'monotony and drabness' of work, a lack of exercise and sleep, an 'increasing sense of international insecurity', and the 'anxiety connected with the competition of living'. In an article in the *Lancet* published four years earlier, Walter Langdon Brown (1870-1946), Regius professor of physic at Cambridge, had already suggested that the proliferation of functional disorders, caused by emotional disturbances operating on the autonomic nervous system, could be explained in terms of a failure to adjust 'to conditions which are changing so rapidly'.

According to some inter-war clinicians, prolonged stress led not only to functional nervous diseases, but also to organic conditions. In 1925, the Chicago psychiatrist William S. Sadler (1842-1910) suggested that it was the 'tension, the incessant drive of American life, the excited strain of the American temperament' that was responsible for rising mortality rates from high blood pressure and diseases of the heart and kidneys. Humans, he argued, had not yet adapted to the 'stress of a civilization which counts on the airplane and the wireless as commonplaces'. Of course, for Sadler the prevalence of stress-related conditions served to establish America's social and technological superiority, an example of hubris also captured

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by the term 'Americanitis', which was popularised by the Harvard psychologist William James (1842-1910) with reference to his own nerve strain.

James's insistence on a link between stress and psychological disturbances was in turn based on earlier studies of insanity and nervousness. In 1890, the English psychiatrist Charles Arthur Mercier (1852-1919) had argued that insanity was a 'function of two variables': heredity and stress. For Mercier, stresses ranged from internal physiological disturbances associated with puberty and pregnancy through to external factors such as overwork, marital problems, insomnia, and head injuries. Other clinicians echoed Mercier's approach, pointing at the same time to the association between stress-induced insanity and social progress. According to the American physician William A. White (1870-1937), insanity could be initiated by the 'stresses incident to active competition' in the civilised, industrial world.

Perhaps the most persistent late Victorian version of a connection between advanced societies and stress was embedded in the concept of neurasthenia, a term popularised in the 1860s by the American neurologist George M. Beard (1839-83) and widely adopted by European physicians and their patients. In several books on neurasthenia, or what he referred to as 'American nervousness', Beard explained the growing prevalence of nervous fatigue in terms of the pressures of modern life. In a passage that betrayed a multitude of anxieties about rapid technological and cultural change, he argued that nervousness could be traced to the principal features of 'modern civilization', namely 'steam-power, the periodical press, the telegraph, the sciences, and the mental activity of women'. As in many later pronouncements on the consequences of failing to adapt to accelerating social progress, stress and nervousness were thought to be more common amongst the affluent Western middle classes.

Late nineteenth-century doctors and their patients also believed that stress could generate or exacerbate physical illness. Clinicians sometimes explained the development of cancer, diabetes and thyroid disease, or the appearance and severity of influenza, in terms of the debilitating effects of over-work and over-worry. The emotional stresses and strains of bereavement, domestic difficulties, financial problems and the pace of life were all regarded as plausible triggers of pathology. In 1872, an article in *The Times* suggested that rising death rates from heart disease were the 'unavoidable result of the great mental strain and hurried excitement' generated by steam and electricity, over-crowded communities, and the relentless and exhausting struggle for existence. Contemporary belief in the capacity for stress to produce both mental and physical disease was so strong, according to the prominent Cambridge physician T. Clifford Allbutt (1836-1925), that many people regarded the nineteenth century as 'a century of stress'.

Even a cursory historical survey suggests that it would be presumptuous to assume that we are more stressed, or indeed more preoccupied with stress, than our predecessors. As Hans Selye pointed out in 1980, when we proclaim ours as an 'age of stress', we tend to ignore the traumas and dangers faced by earlier societies and the fact that inhabitants of those societies equally regarded themselves as stressed. In the early twenty-first century, we are stressed by global economic recession, job insecurity, marital breakdown, and political and religious extremism. Past populations have been no less stressed by analogous cocktails of

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warfare, epidemic disease, unemployment, and poverty. Since at least the mid-nineteenth century, these narratives of distress have been bound together not primarily by mutual understandings and shared experiences of stress, but by the apocalyptic fear that stress is the inevitable result of the psychological pressures generated by the unfettered growth of industrial and technological capitalism.

Further reading

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