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Guest Opinion: Human Aging There's Less to It Than We Thought

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Hearing and memory losses, cognitive decline, easily fractured bones, crankiness and depression are often considered to be inevitable accompaniments of the aging process. How often do we hear such comments as, "I can't remember where I put my glasses; I guess that means I'm getting old." Yet many losses which have traditionally been thought of as age-determined are, on more careful examination, turning out to be merely age-associated. In other words, many of the declines we associate with being elderly can be explained in terms of lifestyle, habits, diet and other psychosocial factors which are not a necessary part of the aging process.

Common stereotypes about skin changes provide an excellent example. When I teach medical students, I often ask them to examine the skin of elderly patients. Usually, observing an array of wrinkles, blotches, freckles on an 80 year old patient's arm, the students report what seems obvious: "That's caused by aging." But then I ask them to look at the underside of the patient's arm, which has been protected from the sun. Here, the skin is soft and unblemished. "But isn't this also the skin of an elderly person?" I ask. "Why hasn't this skin aged?" The point is, of course, that wrinkling of the skin is age-associated but not age-determined. Skin which has been protected from the sun and other environmental damage appears less "old" than exposed skin. In addition, heavily pigmented skin appears to age less than lighter skin; thus elderly black men and women often appear younger than elderly whites.

Much recent research, including my own, is focused on distinguishing changes that are age-determined (intrinsic) from those that are merely age-associated (extrinsic). Some illnesses result from a combination of intrinsic and extrinsic factors. For example, osteoporosis, the decline in bone density which causes bones to fracture easily, is to some extent an intrinsic process — both men and women experience a decline in bone mass with advancing age. But extrinsic factors such as cigarette smoking, alcohol consumption, inadequate calcium intake and lack of exercise cause a remarkable variance in bone density among the elderly. As people become aware of these extrinsic factors, they can obviously modify their life-styles accordingly: reduce cigarette smoking, increase exercise, etc.

Thus a common, crippling and expensive disorder like osteoporosis, once thought to represent the "normal" aging process, is now recognized as being influenced by both aging and nonaging factors.

Emotional and psychological changes once thought intrinsic to the aging process have also come under scrutiny. In recent years a number of studies have shown the importance of control or autonomy — that is, the extent to which people are able to make decisions. Older people often find that their autonomy is reduced for a variety of reasons: physical impairments, reduced income as wages are replaced by pensions, residential moves from their own homes to combined or institutional living arrangements. The research results show that lack of control has adverse effects — on emotional states, performance, and a sense of well-being.

In one set of experiments, nursing home patients were gradually allowed increased control over their own daily lives. Residents on one floor of a nursing home heard a lecture from the nursing home administrator about decisions that they could and should make for themselves, including such matters as planning menus, organizing exercise programs, and redecorating common areas. A comparison group, on another floor, heard a lecture explaining how the staff would take care of such matters. During the first three weeks after these lectures, the people in the experimental group were happier and more active, according to a self report, and spent more time in social activities as reported by the nurses, who also judged them to be generally more improved than those in the control group. These changes persisted and the differences between the groups increased over an 18-month period.

Such experiments as this one have important implications for social policy, influencing our thinking about such subjects as retirement. Mandatory retirement has become a controversial issue lately, with some gerontologists arguing that people should not be forced to retire, but should be encouraged to remain active and working. The autonomy studies, however, suggest that the crucial factor in terms of personal happiness may be whether or not the individual involved feels that she has made the decision to retire herself. A great many workers look forward to retirement, while others prefer to continue working. Recognizing this heterogeneity, we should begin to question policies which are age-determined, with their implicit assumption that the elderly are all alike in their interests and needs.

An important distinction should be drawn between usual and successful aging. In the past, gerontology research has generally focussed on average or "usual" age-linked tendencies. But averages don't tell the whole story, and I believe that this approach exaggerates the effects of the aging process. By shifting the focus to what I have called "successful" aging, we can concentrate on those extrinsic factors (including diet, exercise, and autonomy) which are associated with health and happiness in old age. Once we have identified the extrinsic factors which contribute to successful aging, we will have a better idea of which approaches and policies are likely to be in the best interests of the elderly.

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