

# Lefties and Longevity: Look Again

A fresh analysis of data from an encyclopedia of baseball statistics should pitch some relief to left-handed people. Contrary to earlier conclusions drawn from similar data, the new calculations suggest lefties do not die younger than their right-handed counterparts. Indeed, in the newest measure of the relationship between handedness and longevity, southpaws appear to enjoy a mild survival advantage. But that finding, too, stirs controversy.

For the past decade, researchers have debated the significance of handedness in mortality rates. The percentage of U.S. left-handers decreases with increasing age, dropping to virtually zero among 80-year-olds. Since few lefties appear to change handedness after childhood, some researchers have surmised that the decrease might stem from lower survival rates among left-handers. Possible explanations for such increased mortality include higher accident rates (either naturally or because tools, machinery and even traffic patterns are designed for the convenience of right-handed people) or some genetic linkage with life-shortening prenatal or immune disorders.

To settle the issue, two researchers last year undertook a retrospective analysis of 2,271 deceased professional baseball players. Psychologists Diane F. Halpern of California State University at San Bernardino and Stanley Coren of the University of British Columbia in Vancouver (both right-handed) tallied relative survival rates for all baseball players in *The Baseball Encyclopedia* (Macmillan, 1979). After throwing out any players showing evidence of ambidexterity, they found that for players who lived beyond age 33, the annual survival rate of right-handers exceeded that of lefties by about 2 percent.

But Max G. Anderson, a left-handed number cruncher with the Canadian Statistical Analysis Service in Vancouver, suspected those statistics masked the truth. Using essentially the same data (a more recent edition of a sports encyclopedia), he sorted baseball players by year of birth and came to a different conclusion: Right-handers *used* to live longer — but not anymore, he reports in the Sept. 14 *NATURE*. He finds left-handed baseball players born after 1890 have in general outlived their non-lefty contemporaries. Moreover, the survival gap — already surpassing 2 years, he calculates — appears to be widening.

Previous analyses “overlooked what I consider to be a better way of analyzing the data,” Anderson says. Since U.S. life-spans have increased significantly in the past 100 years, “you wouldn’t want to

lump [players] all together over a century,” Anderson hypothesizes that left-handedness evolved along with other, unrecognized genetic traits that have helped compensate for the cultural and physical biases inherent in a world historically dominated by a right-handed majority. With discrimination against left-handers now less prevalent, he contends, lefties may prove hardier than righties.

Coren disagrees. He says Anderson’s analysis does not exclude ambidextrous players as thoroughly as does his and Halpern’s. And he claims there is little evidence that left-handed life today is any less dangerous than in previous times. The researchers’ disparate conclusions

may also stem from Anderson’s inclusion of players who died younger than 33. Halpern and Coren — for reasons they cannot explain — found no associations between mortality and handedness in this group.

Last month, Coren published data showing a link between left-handedness and higher accident rates among college students, with especially high relative risks for left-handed males driving motor vehicles. He and Halpern have begun analyzing data from a new study of California death records that he says will provide a needed expansion beyond baseball statistics, which may not apply to the general population. — R. Weiss

## Sleep problems send psychiatric signals

Persistent sleep disturbances such as insomnia and excessive sleepiness have long served as cardinal symptoms of severe depression. But these sleep problems may also provide an early warning that a full-blown depression or an anxiety disorder is brewing, according to a new epidemiologic study.

Primary care physicians who quickly recognize and treat sleep disturbances may help prevent the development of depression and other psychiatric problems, say Daniel E. Ford of Johns Hopkins Hospital in Baltimore and Douglas B. Kamerow of the Public Health Service in Washington, D.C.

Interviewers asked a total of 10,534 people, representing part of a random national sample gathered by the National Institute of Mental Health for a study of psychiatric disorders, whether they had trouble falling asleep or had slept too much over a period of at least two weeks during the prior six months. Interviewers also inquired about symptoms of psychiatric disturbances. They conducted follow-up sessions one year later with 7,954 study participants.

Overall, one in 10 persons reported insomnia and about one in 35 reported excessive sleepiness (hypersomnia) at the first interview. Women, the unemployed, low-income individuals and those widowed or separated from a spouse reported the most insomnia. Subjects who were unemployed, younger than 24 or never married had higher rates of hypersomnia.

About half of those initially reporting insomnia and two-thirds of those with hypersomnia had a psychiatric disorder at that time or one year later, compared with approximately one-quarter of those without a sleep com-

plaint, Ford and Kamerow report in the Sept. 15 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*.

The most important finding, the researchers maintain, is that subjects reporting insomnia or hypersomnia at both interviews had significantly higher rates of new cases of both severe depression and anxiety disorders at the follow-up, compared with people whose sleep problems cleared up after one year and those with no sleep complaints.

The relationship of sleep problems to anxiety disorders, which include panic disorder, obsessive compulsive disorder and phobias, is not clear, the investigators note. The official manual of psychiatric diagnoses does not cite sleep disturbance as a symptom of those particular anxiety disorders.

Sleep disturbance may link most strongly to anxiety disorders among young adults, whereas a link to depression and bereavement appears more likely among older individuals, writes psychiatrist Charles F. Reynolds III of the University of Pittsburgh School of Medicine in an accompanying editorial. Further epidemiologic work is needed to address this question, he says.

Nevertheless, routine inquiry about sleep disturbances would probably lead to greater recognition of depression and anxiety disorders by primary care physicians, Ford and Kamerow conclude.

Insomnia can result from numerous factors other than a psychiatric disturbance, Reynolds adds. Behavior changes, such as setting a regular wake-up time and limiting time in bed to six or seven hours nightly, show promise as early treatments for insomnia, he says.

— B. Bower