Why Roofers Retire Earlier than Professors

By Kerry Pechter *Thu, Dec 10, 2015*

To learn more about the link between physically demanding jobs and early retirement, researchers at the Center for Retirement Research developed a "Susceptibility Index" that assigns ratings to different occupations.

The terms "blue collar" and "white collar" have lost their once-literal significance in the workplace, but it's still true that certain occupations are more physically taxing than others and that workers in those jobs tend to retire earlier—and claim Social Security earlier—than people in less strenuous jobs.

Awareness of the link between occupation and retirement age tends to grow during the country's periodic public debates over the health of the Social Security program. Raising the full retirement age (FRA), for instance, has been suggested as a way to improve the program's finances. But a higher FRA could harm people who must retire early because their jobs require younger minds or bodies.

In an attempt to add more precision to the conventional wisdom about physically demanding jobs and early retirement, a team of researchers at the Center for Retirement Research at Boston College has developed a "Susceptibility Index" that assigns ratings, on a scale of one to 100, to different occupations. The ratings, based on research data, indicate the susceptibilities of people in those occupations to age-related impairments that can lead to early retirement. (See chart on today's RIJ homepage.)

The researchers, Anek Belbase, Geoffrey T. Sanzenbacher, and Christopher M. Gillis, found that physical and cognitive skills required for historically blue-collar occupations, such as food service work, do not decline with age, while abilities required for others, like roofing, do decline. By the same token, certain white-collar occupations, such as detective work or licensed practical nursing, require skills that often decline with age.

Certain physical attributes, such as flexibility and "explosive strength" (the ability to jump, for instance), decline rapidly, according to the paper, but physically active individuals tend to experience relatively slow declines in stamina and endurance with age.

"Active individuals in their 60s have similar stamina as inactive individuals in their 30s," the researchers wrote. "Workers who use stamina in their jobs on a daily basis (e.g., dancers, firefighters) are unlikely to experience the declines with age that may be common for less active individuals," the researchers wrote.

Among cognitive skills, “fluid” skills, such as acquisition of new information and reaction time, tend to deteriorate in mid-life. But “crystallized” knowledge, based on education or experience, can persist into old age. Exercise, it was noted, slows the decline of cognitive skills while cardiovascular diseases such as diabetes and strokes can accelerate cognitive decline.

The researchers looked at the percentages of different groups (by ethnicity, sex, occupation and years of schooling) that fell into either the top or bottom half of the Susceptibility distribution.

People in the top half of the distribution, for instance, were almost twice as likely as those in the bottom half of the distribution (9.5% vs. 5.4%) to claim disability benefits. About 70% of those in the top half of the distribution were retired before age 65, while only about 65% of those in the bottom half were retired by then.

Men, not surprising, made up about 60% of the upper half of the distribution and about 40% of the bottom half of the distribution, with reverse results for women. In terms of education, 58% of those in the bottom half of the distribution had at least a college degree, while about two-thirds of those in the top half of the distribution had a high school degree or less.

African-Americans were about twice as likely to be in the more-susceptible half of the distribution than the less-susceptible half (21% vs. 10.7%), as were Hispanic Americans (10.8% vs. 4.6%). Average earnings for those in the top half of the distribution was $35,000, compared with $49,800 for those in the bottom half.

Among the overall conclusions of the paper:

- Some white-collar occupations, such as police detective and designer, are as susceptible to declines in the abilities required for work as are blue-collar occupations and may have similar difficulty responding to FRA increases.
- The Susceptibility Index is a significant predictor of early retirement. Workers in occupations in the 90th percentile of the Index are 5.7 percentage points more likely to retire by age 65 than workers in the 10th percentile.
- While the commonly used categorization of blue- or white-collar has no additional explanatory power in a model of early retirement, blue-collar occupations are especially susceptible to early ability declines, so workers in these occupations are less likely to be able to work to the FRA as it increases to 67.