THE CHANGING TASK CONTENT OF JOBS FOR OLDER WORKERS IN THE UNITED STATES

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September 2021

With data on occupational task content from O*NET and ORS and survey data from the American Community Survey (ACS) and 1979 National Longitudinal Survey of Youth (NLSY79), we document how the physical, cognitive, routine, and social characteristics of work in the United States have evolved since the early 2000s; we also examine how the task content of work changes with age; and estimate the effects of changing task content on work outcomes.

Task Content of Work for Older Americans

First, we find that the intensity of routine manual and routine cognitive tasks has risen between 2004-2019. By contrast, cognitive, physical, and social skill task intensities either have remained stable or declined over the same period. Workers nearing retirement have experienced declining rates of nonroutine tasks, such as cognitive (analytical and interpersonal), social, and physical, while routine tasks, whether manual or cognitive, have risen over time.

Second, we find significant racial/ethnic and gender differences in task content as workers age. White and Asian workers tend to work in occupations high in nonroutine cognitive, both analytical and interpersonal, and social skill task intensity. Non-routine and social skill task intensity increases for White males with age. For other groups, including White females, the rate at which these tasks are completed rise with age but then fall around mid-career. Hispanic and Black workers, especially men, work in the most physically demanding jobs over their entire working lives.

Third, we find the largest earnings gains are associated with higher nonroutine cognitive analytical, nonroutine cognitive interpersonal, and social skill tasks. Workers who worked in an occupation in 2004 with high cognitive analytical task intensity were out of the labor force less, while those employed in an occupation with high nonroutine manual physical tasks were out of the labor force more. Nonroutine cognitive analytical task intensity is negatively associated with occupation switching, particularly for a job with a differently employer, whereas nonroutine cognitive interpersonal task intensity is positively related to occupation switching, but the switching tends to occur within the worker’s current employer. Workers in high nonroutine manual physical task intensity were less likely to switch occupations. We find no statistical link between changing task content and employment in more than one job.

Blacks and Hispanics work the most physically demanding jobs late into their careers, while Whites, particular men, transition to the most cognitively demanding jobs as they age.
Notes: Using the combined O*NET and ACS data sets from 2004-2019 (described in detail in the full report), the figure presents the relationship between the nonroutine cognitive analytical task intensity and age for different races/ethnicities by gender. To create the figure, we first aggregate the data to the 520 age-race/ethnicity-gender cells, and then separate the task intensity measures into centiles (100 bins). The plotted lines use locally-weighted regression (i.e. LOWESS) to construct the plots for each race/ethnicity-gender group.

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Implications

- Information on how the requirements of jobs typically performed by older workers have changed and the impact of such changes on older workers’ labor market outcomes is important for Social Security Administration (SSA) policy.

- By documenting age disparities in certain types of work tasks performed by different demographic groups, policy makers can better gauge the impact of changes to SSA rules and regulations on those different groups.