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Profile Of The Labor Force By Educational Attainment

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Increased education is associated with both higher wages and lower unemployment. This Spotlight on Statistics highlights how that relationship has changed over time and examines additional detail on educational attainment.

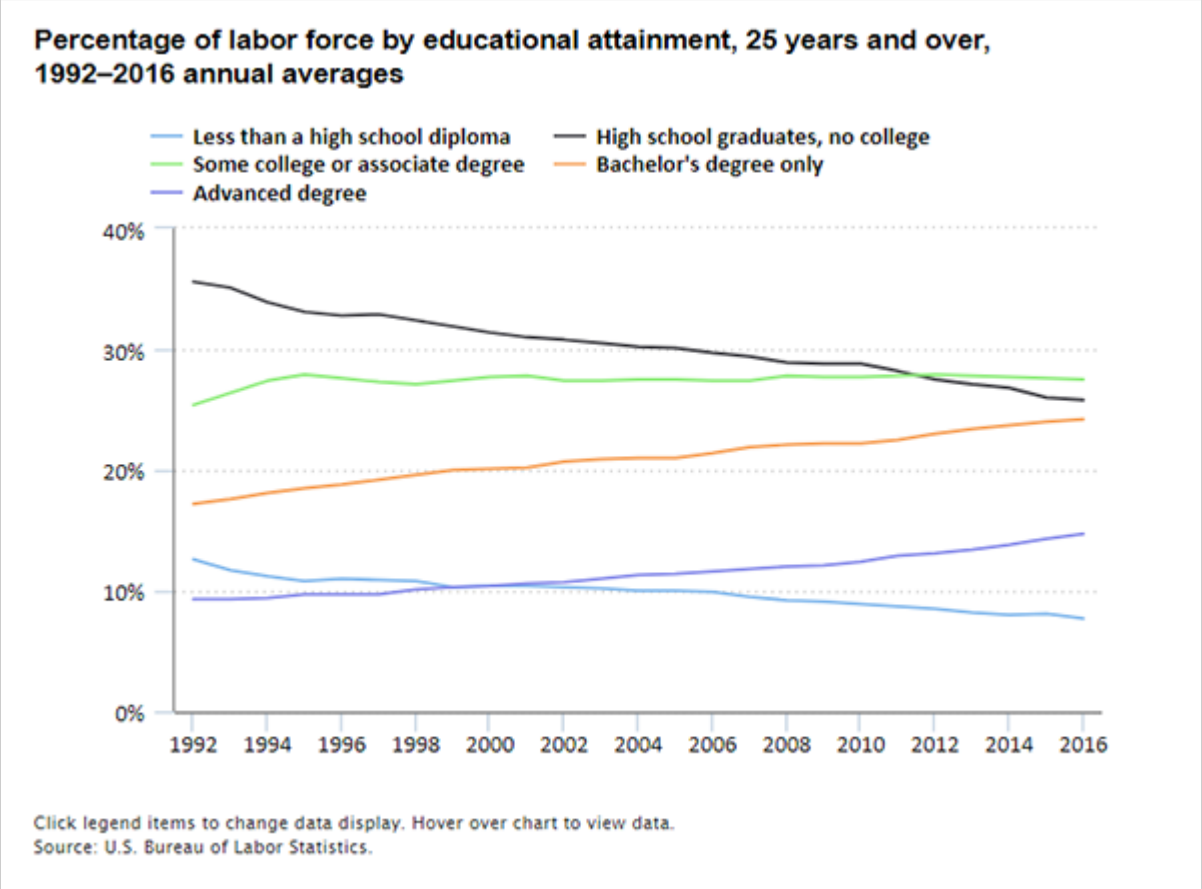
The charts and analysis that follow illustrate historical and current statistics from the Current Population Survey on the U.S. labor force for people age 25 years and older by educational attainment, defined as the highest diploma or degree received at the time the survey was conducted. QCT Patching Test. March 20, 2020.

Educational attainment rises over the last 24 years

The U.S. labor force has become increasingly educated over the last 24 years. From 1992 to 2016, the share of the labor force made up of people with a bachelor's degree and an advanced degree (includes people with master's, professional, and doctoral degrees) has grown consistently, rising by 7 percentage points and 5 percentage points, respectively.

Over the same time period, the proportion of people with either less than a high school diploma or with a high school diploma but no college experience has declined by about 5 and 10 percentage points, respectively.

Since 2012, people with some college or an associate's degree have made up the largest share of the U.S. civilian labor force compared to all other major categories of educational attainment. Prior to 2012, the largest share comprised people with a high school diploma but no college experience. QCT Post Patching Test for copy and paste defect fix. Today is March 20, 2020.

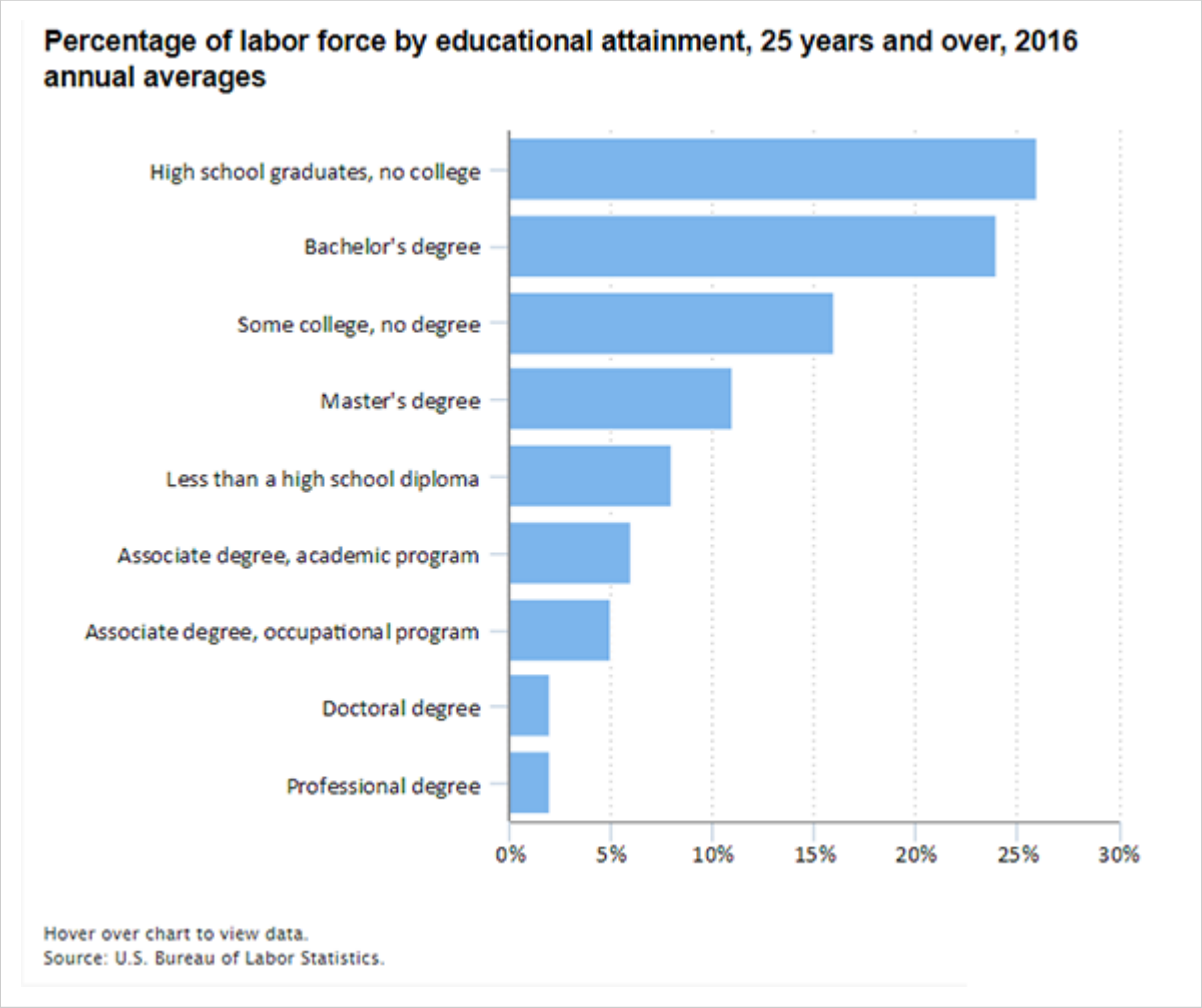


Two-thirds of labor force in 2016 had at least some college

In 2016, one-third of the labor force completed no more than high school, while the remaining two-thirds had at least some college experience.

About one-fourth of the labor force had some college (16 percent) or an associate's degree (11 percent). People with an associate's degree were about equally distributed among academic and occupational programs (6 percent and 5 percent, respectively). (Associate's degrees in academic programs are primarily in the arts and sciences and are transferable to a bachelor's degree program, while associate's degrees in occupational programs prepare graduates for a specific occupation.)

About one-fourth of the labor force had a bachelor's degree only, and 15 percent had attained an advanced degree. Of those, 11 percent had a master's degree, 2 percent had a professional degree (law, medical, dental, etc.), and 2 percent had a doctoral degree (Ph.D, Ed.D, etc.). QCT Post Patching Test for copy and paste defect fix. Today is March 20, 2020.

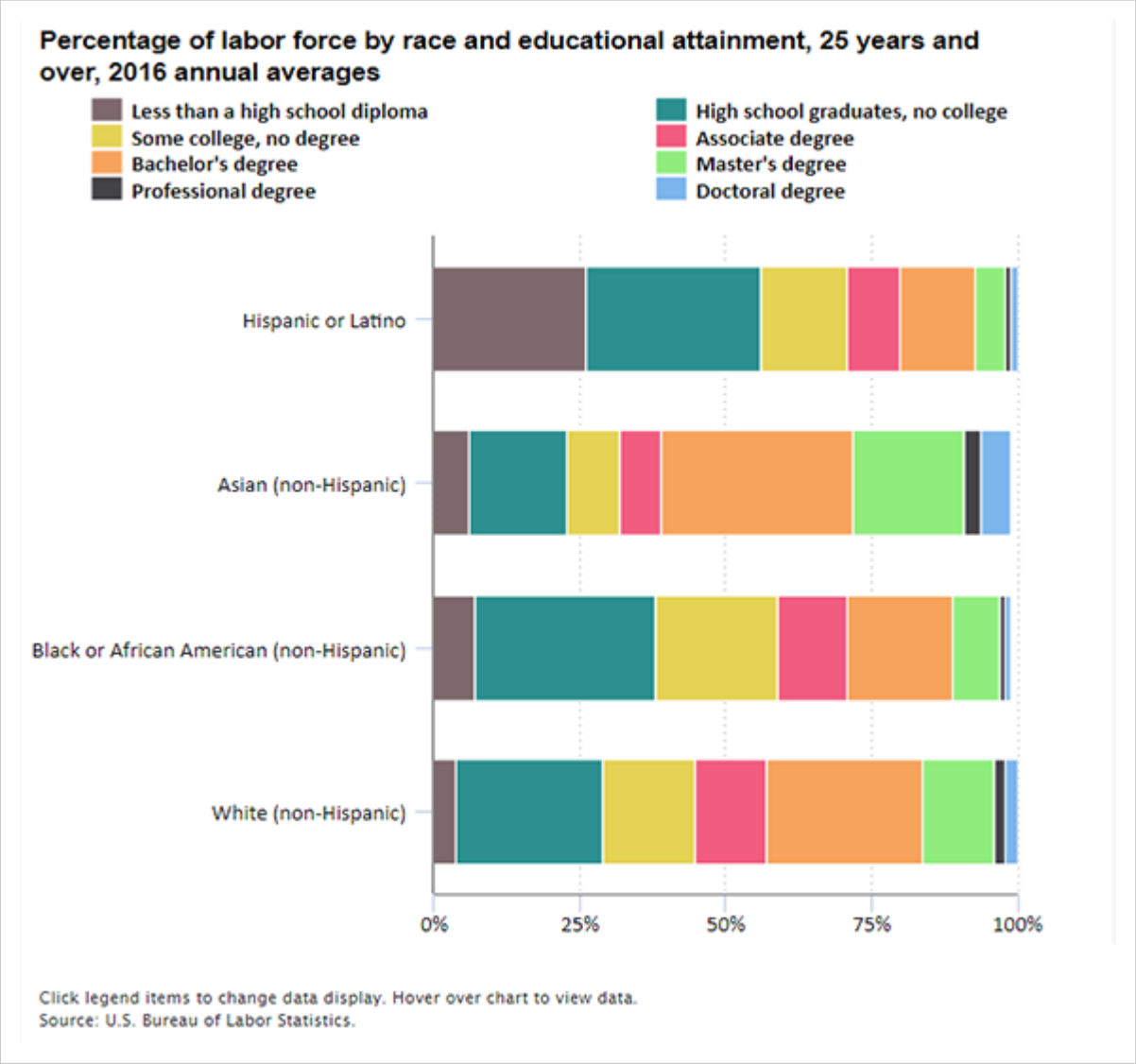


Labor force by race and educational attainment

The composition of the U.S. labor force by educational attainment varies by race and Hispanic or Latino ethnicity. In 2016, sixty percent of Asians and 43 percent of Whites participating in the labor force had obtained at least a bachelor's degree. By comparison, 28 percent of Blacks and 20 percent of Hispanics had at least a bachelor's degree.

Conversely, 26 percent of Hispanics participating in the labor force had less than a high school diploma, compared with only 7 percent of Blacks, 6 percent of Asians, and 4 percent of Whites.

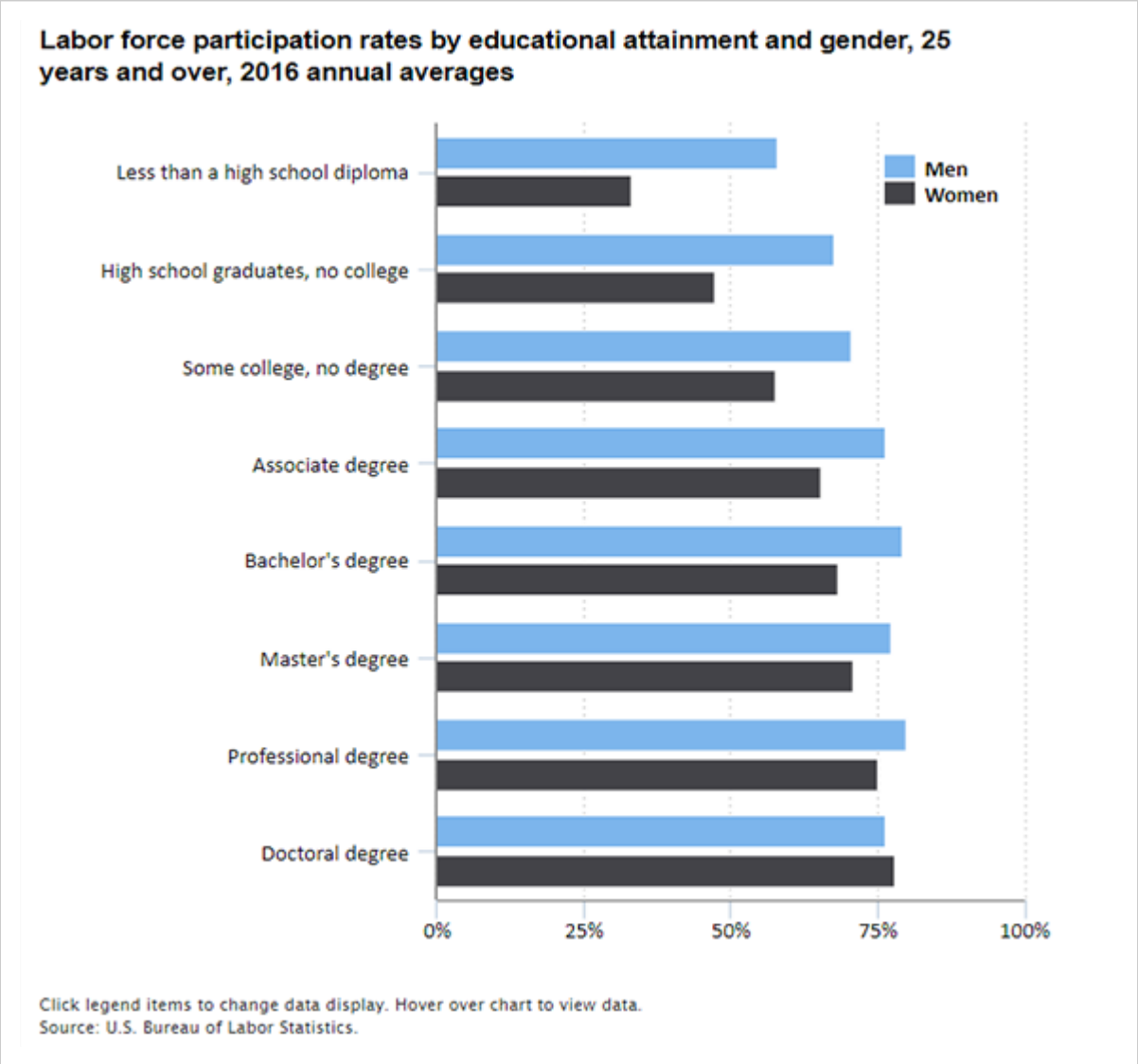
Blacks participating in the labor force were more likely than other race and ethnicity groups to have attained some college or an associate's degree (33 percent). This compared with 28 percent of Whites, 24 percent of Hispanics and 16 percent of Asians. QCT Testing Post Patching fix for copy and paste issue. Today is March 20, 2020.



Labor force participation rises with education

As educational attainment increases, men and women show higher levels of labor force participation. The gap between men's and women's labor force participation rates—that is, the sum of the employed and unemployed as a proportion of the civilian noninstitutional population—also narrows as educational attainment increases. In 2016, the labor force participation rates for men and women with less than a high school diploma were 58.1 percent and 33.3 percent, respectively. By contrast, the rates for men and women with a professional degree were 79.9 percent and 75.1 percent, respectively.

By gender, men had higher labor force participation rates than women at nearly every level of educational attainment in 2016. The sole exception was at the doctoral degree level, in which 78.2 percent of women with a doctoral degree participated in the labor force compared with 76.6 percent of men with a doctoral degree. QCT post patching test for fix on copy and paste. Today is March 20, 2020.



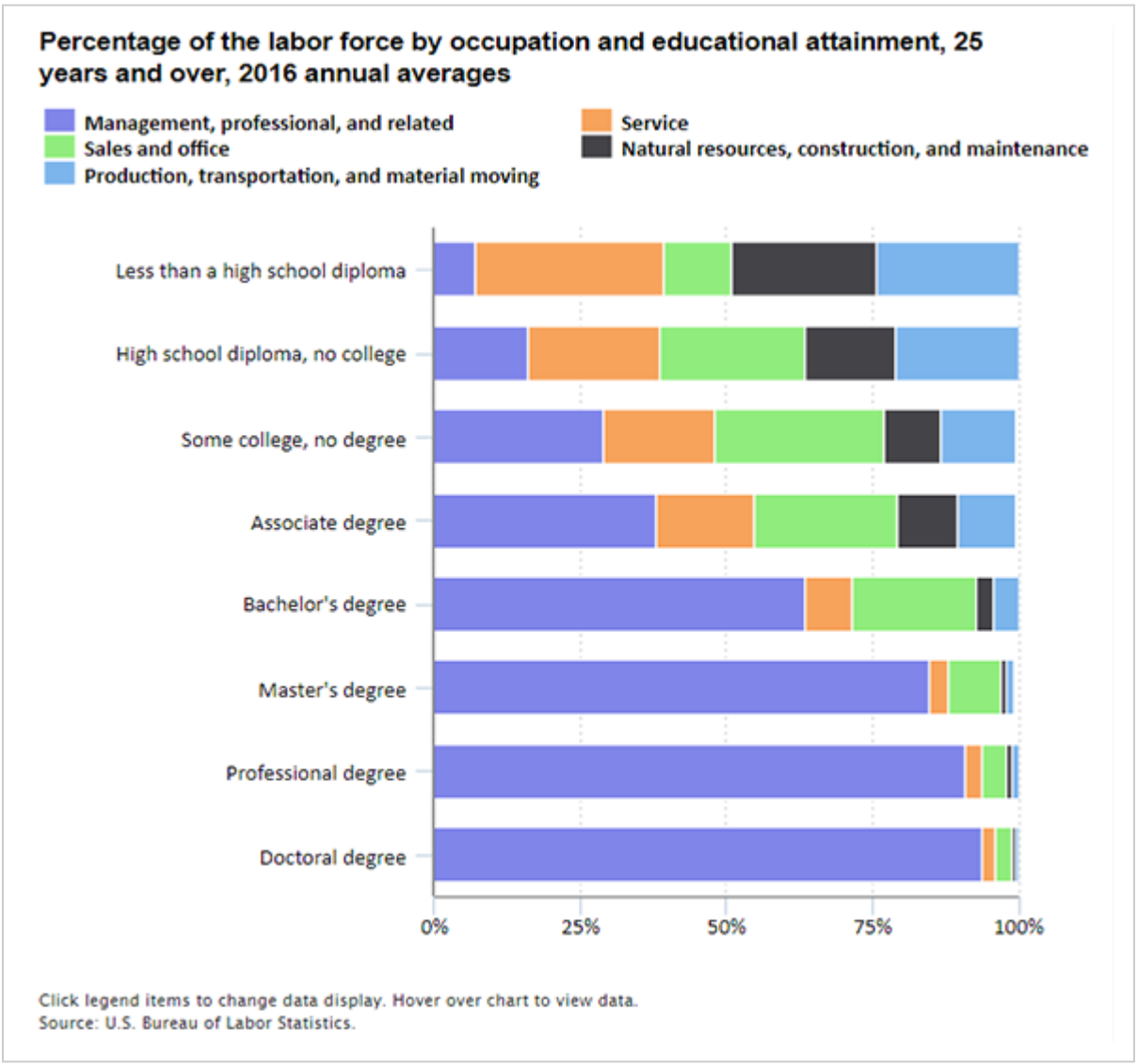
Occupations vary by education

Among the employed, the likelihood of working in a management, professional, or related occupation increases with educational attainment. By contrast, the likelihood of working in service occupations; natural resources, construction, and maintenance occupations; and production, transportation, and material moving occupations decreases by educational attainment.

In 2016, the majority of employed people with at least a bachelor's degree worked in management, professional, and related occupations. Sixty-three percent of people with a bachelor's degree, 85 percent with a master's degree, 91 percent with a professional degree, and 94 percent with a doctoral degree worked in this occupational group.

Workers with less than a high school diploma had the highest likelihood of being employed in service (32 percent); natural resources, construction, and maintenance (25 percent); and in production, transportation, and material moving (25 percent) occupations. Less than 1 in 10 were employed in management, professional, and related occupations.

Workers most likely to be in sales and office occupations were those who had at least a high school diploma but did not have an advanced degree. QCT Post Patching fix on copy and paste issue. Today is March 20, 2020.

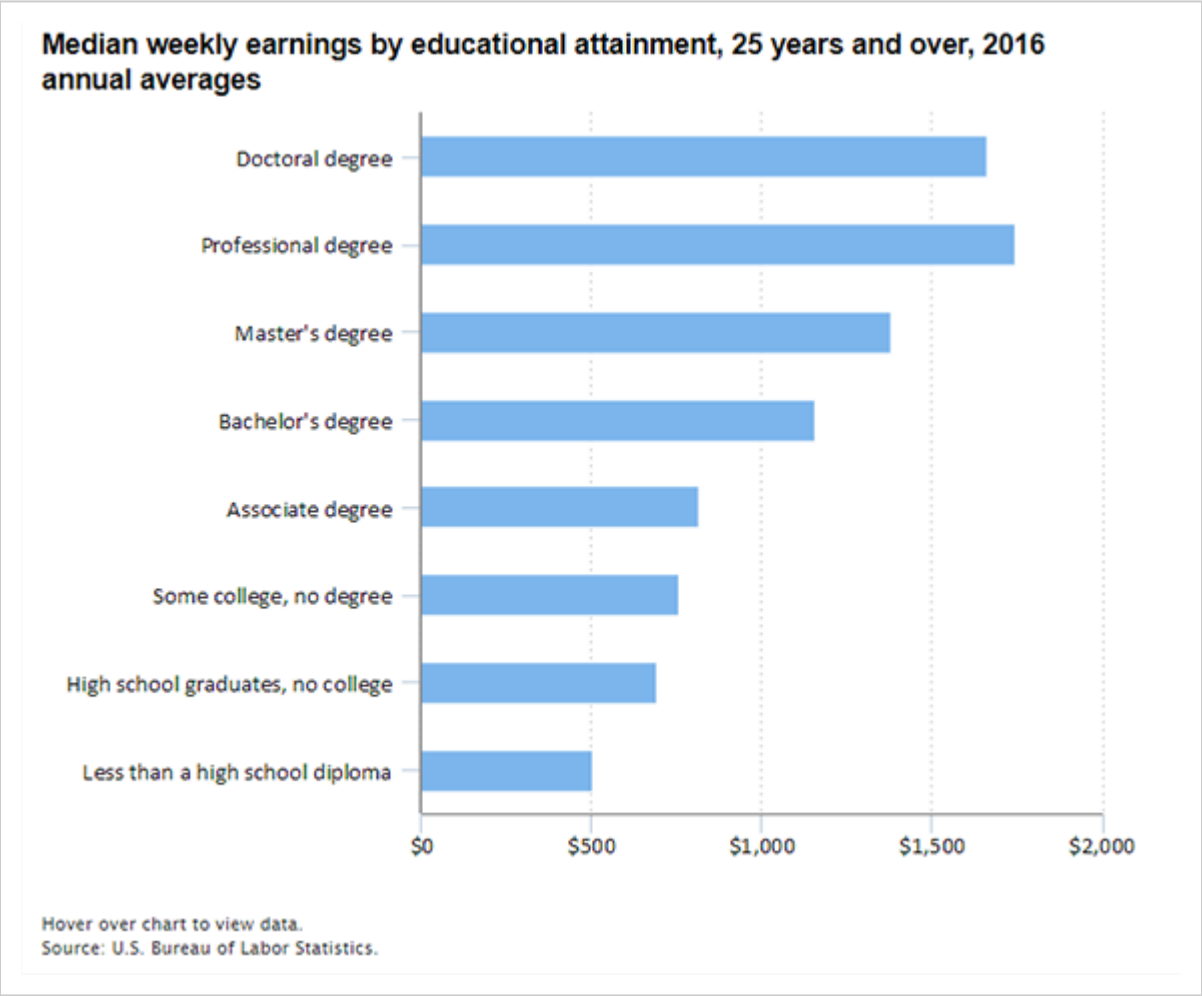

Percentage of the labor force by occupation and educational attainment, 25 years and over, 2016 annual averages
Management, professional, and related
Service
Sales and office
Natural resources, construction, and maintenance
Production, transportation, and material moving
Less than a high school diploma
High school diploma, no college
Some college, no degree
Associate degree
Bachelor's degree
Master's degree
Professional degree
Doctoral degree
0%
25%
50%
75%
100%
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

Weekly earnings rise with educational attainment

Among people age 25 years and older, median weekly earnings generally increase with greater levels of educational attainment.

In 2016, those with less than a high school diploma had the lowest median weekly earnings, at $504.

Earnings were highest for people with at least a bachelor's degree—$1,156 for those with a bachelor's degree, $1,380 for those with a master's degree, $1,745 for those with a professional degree, and $1,664 for those with a doctoral degree. QCT Post Patch test on copy and paste fix.

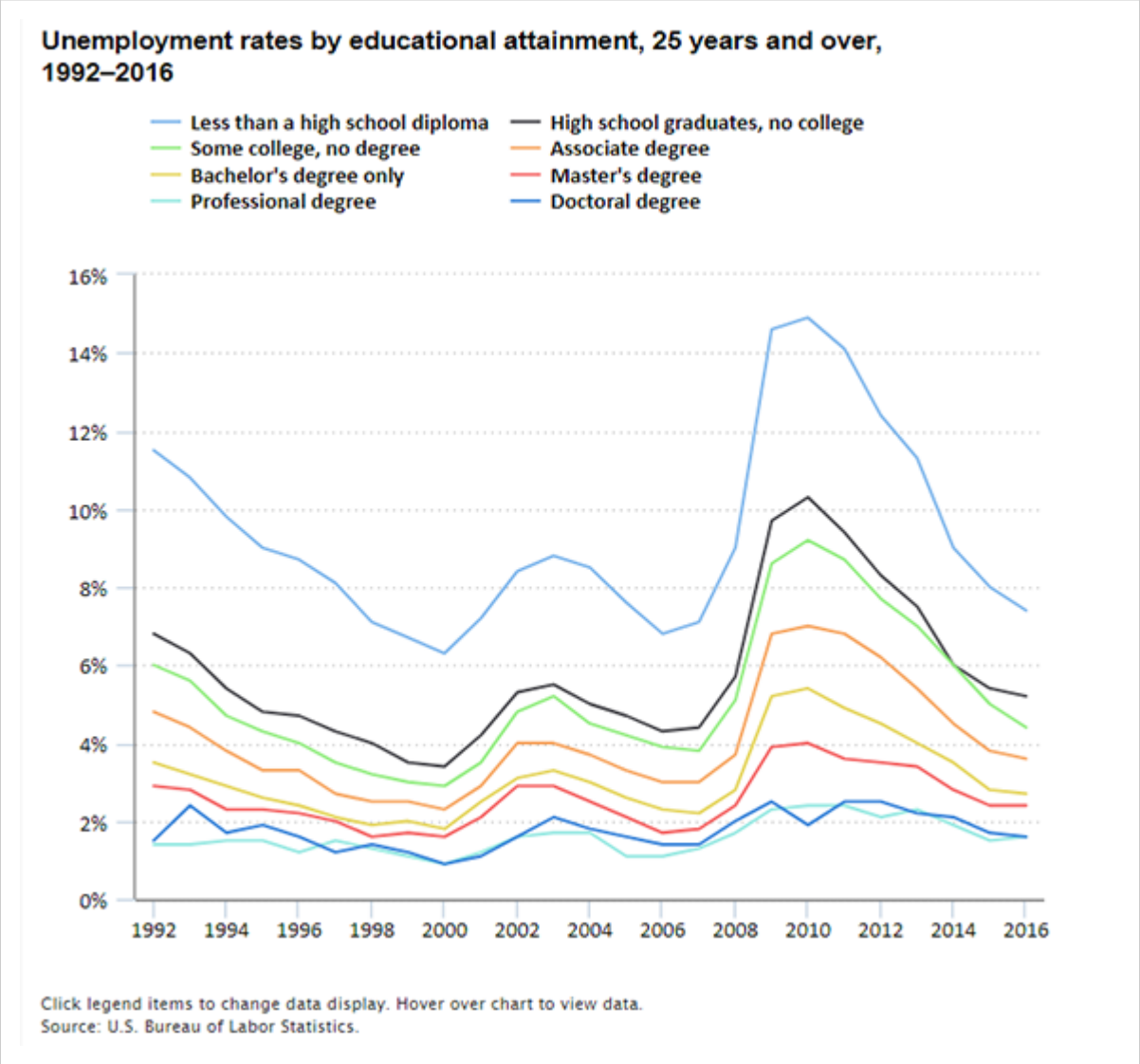


Unemployment rates fall with educational attainment

Higher levels of educational attainment have historically shown a strong correlation with lower unemployment rates. In 2016, the unemployment rate was highest for people with less than a high school diploma at 7.4 percent. This was almost one and a half times higher than that of high school graduates with no college experience (5.2 percent) and almost three times higher than that of those with a bachelor's degree (2.7 percent). Unemployment rates for people with an advanced degree were lower than all other levels of educational attainment.

The unemployment rates for people at each level of educational attainment have in general moved in tandem with the business cycle.

During the aftermath of the great recession of 2007-2009, unemployment rates reached historically high levels for nearly all of educational attainment categories. As of 2016, although these rates have subsided considerably, they remained slightly above 2007 pre-recession levels. QCT Post Patching Fix Testing for Copy and Paste issue. QCT Patch Testing. Copy and Paste fix.


Unemployment rates by educational attainment, 25 years and over, 1992–2016
Less than a high school diploma
High school graduates, no college
Some college, no degree
Associate degree
Bachelor's degree only
Master's degree
Professional degree
Doctoral degree
16%
14%
12%
10%
8%
6%
4%
2%
0%
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

More information

This Spotlight on Statistics was written by Vernon Brundage, Jr., an economist in the Division of Labor Force Statistics, U.S. Bureau of Labor Statistics. Many thanks to Eleni T. Sherman for her help. For questions about this Spotlight, please email brundage.vernon@bls.gov.

Since 1992, data on educational attainment have been based on the "highest diploma or degree received," rather than the "number of years of school completed" as previously defined in the CPS. Shaded areas in the charts represent recessionary periods as noted by the National Bureau of Economic Research (NBER). Persons whose ethnicity is identified as Hispanic or Latino may be of any race. For additional articles, charts, and tables on labor force activities by educational attainment, please see the following link, https://www.bls.gov/cps/demographics.htm#education.

Educational attainment data, along with demographic detail and labor force activity, are collected monthly in the Current Population Survey (CPS)—a nationally representative sample survey of approximately 60,000 households, which is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. QCT Percussion Patch Fix Testing.