DATA POINT

Relationship Between Educational Attainment and Labor Underutilization

This Data Point uses data from the Adult Training and Education Survey (ATES), administered as part of the 2016 National Household Education Surveys Program (NHES:2016), to examine the relationship between educational attainment and various measures of labor underutilization (defined below). ATES:2016 collected information from a nationally representative sample of over 47,000 adults ages 16 to 65 who were not enrolled in high school. The analysis for this report is restricted to adults ages 25 to 64 who were in the labor force (that is, working or looking for work).

Labor underutilization has no one set definition, but reflects the extent to which workers are unable to work as fully as they would like.[1] One commonly used measure of labor underutilization is the unemployment rate, which indicates the extent to which workers who want a job are unable to find one. Workers also can be underutilized by being "underemployed." The ATES collected two measures of underemployment: whether someone is working part time but would rather work full time (involuntary part-time workers) and whether someone is working in a temporary job but would rather work in a permanent job (involuntary temporary workers). This Data Point examines labor underutilization using all three measures.

Among labor force participants in the ATES, 9 percent were unemployed,[2] 5 percent were involuntary part-time workers, and 4 percent were involuntary temporary workers. Taken together, these measures yield a labor underutilization rate of 17 percent.[3]

Consistent with previous analyses, there was a negative relationship between educational attainment and unemployment **(figure 1)**.[4] There was also a negative relationship between educational attainment and working "involuntary part time." But there was no measurable relationship between educational attainment and the second underemployment measure of "involuntary temporary" work. Nonetheless, labor force participants who had not completed high school had higher rates of involuntary temporary work, compared to those with higher levels of education.

Figure 2 examines the two measures of underemployment together.

FIGURE 1. Percentage of labor force participants in each labor underutilization category, by educational attainment level: 2016
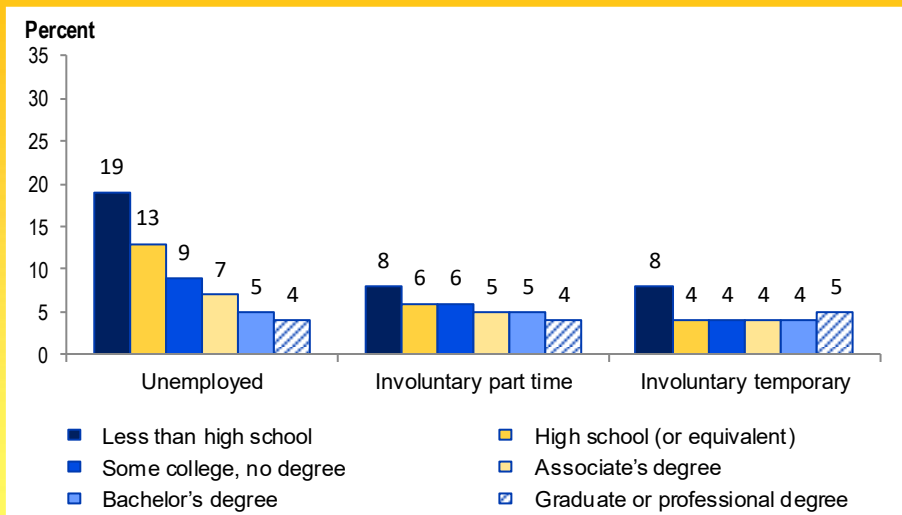
NOTE: Data are for labor force participants ages 25 to 64. Standard errors for estimates can be found at http://nces.ed.gov/surveys/ctes/tables/A82.asp.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Adult Training and Education Survey (ATES) of the National Household Education Surveys Program, 2016.

To learn more about the data collection used in this report, visit https://www.nces.ed.gov/nhes. For questions about content or to view this report online, go to http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019039.

Comparing the overall underemployment rate to the unemployment rate shows that labor force participants at different levels of educational attainment vary in their rates of being underemployed rather than unemployed. For those with relatively low levels of education (high school or less), the underemployment rate is lower than the unemployment rate. But for those with relatively high levels of education (bachelor's or higher degree), the underemployment rate is higher than the unemployment rate.

To provide an overall measure of labor underutilization, **figure 2** combines the overall underemployment rate with the unemployment rate. This broader labor underutilization rate is negatively related to educational attainment,

ranging from a low of 11 percent among those with a bachelor's or higher degree to a high of 32 percent among those who have not completed high school. Thus, while about one-fifth of labor force participants who have not completed high school are not able to find a job, expanding this narrower labor underutilization rate to include involuntary part-time and involuntary temporary work results in about one-third of these adults not working as fully as they would like.

Endnotes

[1]See https://www.bls.gov/lau/stalt.htm for a list of Bureau of Labor Statistics (BLS) labor underutilization measures (retrieved March 6, 2019).

[2]The BLS calculated an unemployment rate for 2016 of 4.9 percent (see https://data.bls.gov/timeseriesLNU04000000periods=Annual+Data&periods_option=specific_periods&years_option=all_years, retrieved March 6, 2019). Differences in how unemployment data are collected (e.g., time and length of the reference period, questions used to determine whether someone is actively looking for work) may result in differences in the unemployment rate across data sources.

[3]Not in figures; see table at https://nces.ed.gov/surveys/ctes/tables/A82.asp (retrieved March 14, 2019).

[4]See, e.g., https://www.bls.gov/emp/chart-unemployment-earnings-education.htm and indicator 3.4 on pages 252–255 in https://nces.ed.gov/pubs2018/2018144.pdf (retrieved March 6, 2019).

FIGURE 2. Percentage of labor force participants who are unemployed and underemployed, by educational attainment level: 2016
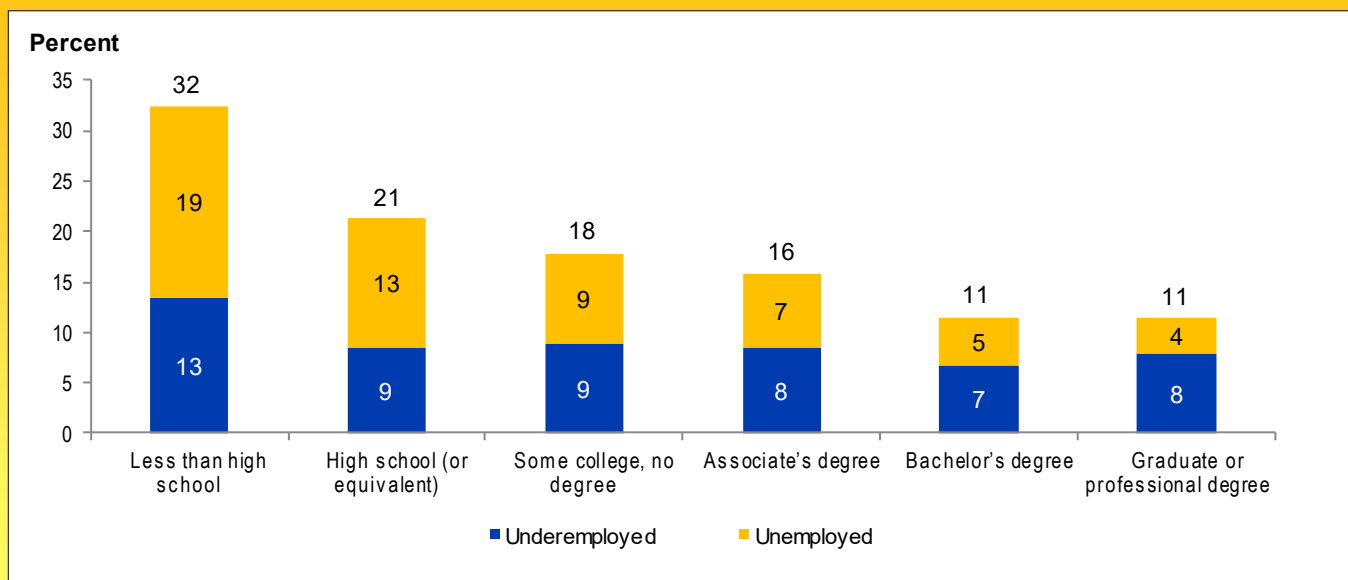
NOTE: Data are for labor force participants ages 25 to 64. The *underemployed* category includes those working part time who would rather work full time and those working in a temporary job who would rather work in a permanent job. Detail may not sum to totals because of rounding. Standard errors for estimates can be found at http://nces.ed.gov/surveys/ctes/tables/A82.asp.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, Adult Training and Education Survey (ATES) of the National Household Education Surveys Program, 2016.