

Women, Men and the New Economics of Marriage

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A Social & Demographic Trends Report

Women, Men and the New Economics of Marriage

By Richard Fry and D’Vera Cohn, Pew Research Center

Executive Summary

The institution of marriage has undergone significant changes in recent decades as women have outpaced men in education and earnings growth. These unequal gains have been accompanied by gender role reversals in both the spousal characteristics and the economic benefits of marriage.

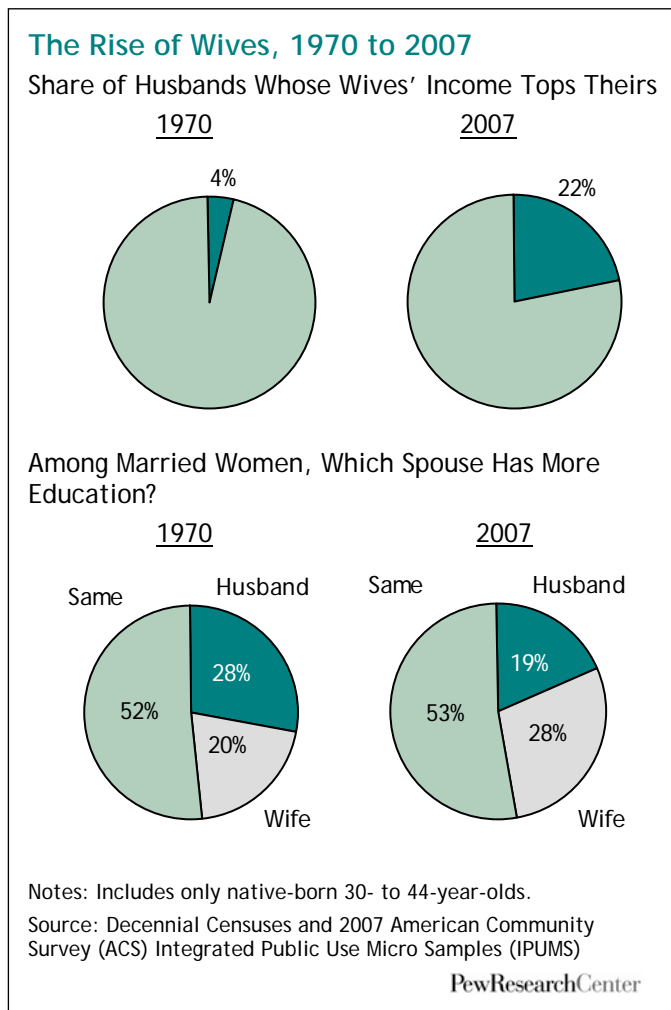
A larger share of men in 2007, compared with their 1970 counterparts, are married to women whose education and income exceed their own, according to a Pew Research Center analysis of demographic and economic trend data. A larger share of women are married to men with less education and income.

From an economic perspective, these trends have contributed to a gender role reversal in the gains from marriage. In the past, when relatively few wives worked, marriage enhanced the economic status of women more than that of men. In recent decades, however, the economic gains associated with marriage have been greater for men than for women.

In 2007, median household incomes of three groups—married men, married women and unmarried women—were about 60% higher than those of their counterparts in 1970. But for a fourth group, unmarried men, the rise in real median household income was smaller—just 16%. (These household income figures are adjusted for household size and for inflation. For more details, see the methodology in Appendix B.)

Part of the reason for the superior gains of married adults is compositional in nature. Marriage rates have declined for all adults since 1970 and gone down most sharply for the least educated men and women. As a result, those with more education are far more likely than those with less education to be married, a gap that has widened since 1970. Because higher education tends to lead to higher earnings, these compositional changes have bolstered the economic gains from being married for both men and women.

There also is an important gender component of these trends. Forty years ago, the typical man did not gain another breadwinner in his household when he married. Today, he does—giving his household increased earning



power that most unmarried men do not enjoy. The superior gains of married men have enabled them to overtake and surpass unmarried men in their median household income (see chart, page 3).

This report examines how changes at the nexus of marriage, income and education have played out among U.S.-born men and women who are ages 30-44—a stage of life when typical adults have completed their education, gone to work and gotten married.¹

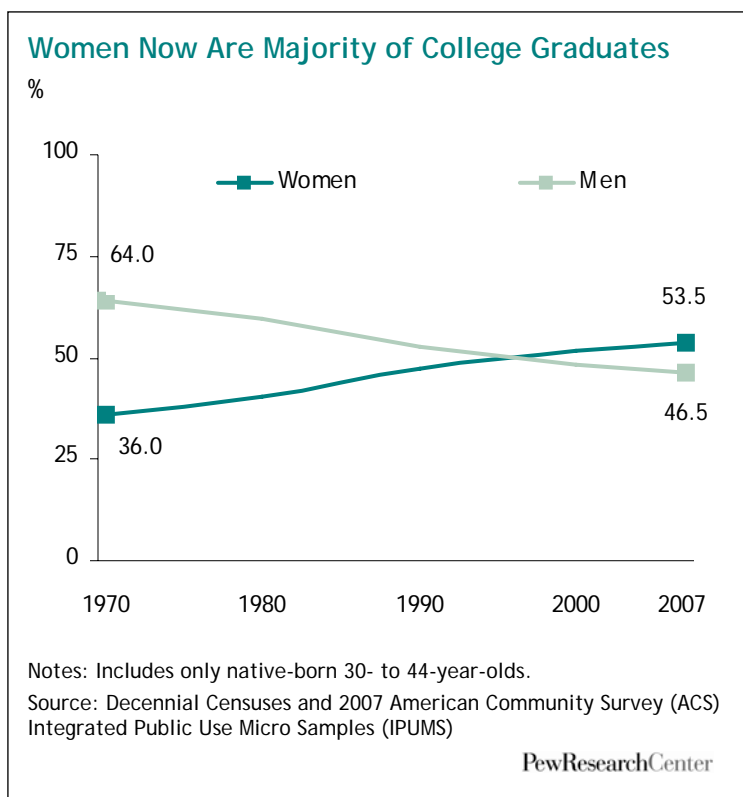
Americans in this age group are the first such cohort in U.S. history to include more women than men with college degrees.

In 1970, 28% of wives in this age range had husbands who were better educated than they were, outnumbering the 20% whose husbands had less education. By 2007, these patterns had reversed: 19% of wives had husbands with more education, versus 28% whose husbands had less education. In the remaining couples—about half in 1970 and 2007—spouses have similar education levels.

Along the same lines, only 4% of husbands had wives who brought home more income than they did in 1970, a share that rose to 22% in 2007 (see chart, page 1).²

This reshuffling of marriage patterns from 1970 to 2007 has occurred during a period when women's gains relative to men's have altered the demographic characteristics of potential mates. Among U.S.-born 30- to 44-year-olds, women now are the majority both of college graduates and those who have some college education but not a degree. Women's earnings grew 44% from 1970 to 2007, compared with 6% growth for men. That sharper growth has enabled women to narrow, but not close, the earnings gap with men. Median earnings of full-year female workers in 2007 were 71% of earnings of comparable men, compared with 52% in 1970.

The national economic downturn is reinforcing these gender reversal trends, because it has hurt employment of men more than that of women. Males accounted for about 75% of the 2008 decline in employment among prime-working-age individuals (U.S. Bureau of Labor Statistics, 2009). Women are moving toward a new milestone in which they constitute half of all the employed. Their share increased from 46.5% in December 2007 to 47.4% in December 2009.



¹ This analysis includes only the U.S. born in order to have a consistent data set over time. See methodology in Appendix B for further explanation. Unless specified, all data pertain to this specific age and nativity group.

² This report uses the measure of total income contributed by each spouse, most of which comes from individual earnings.

Overall, married adults have made greater economic gains over the past four decades than unmarried adults. From 1970 to 2007, their median adjusted household incomes, the sum of financial contributions of all members of the household, rose more than those of the unmarried.

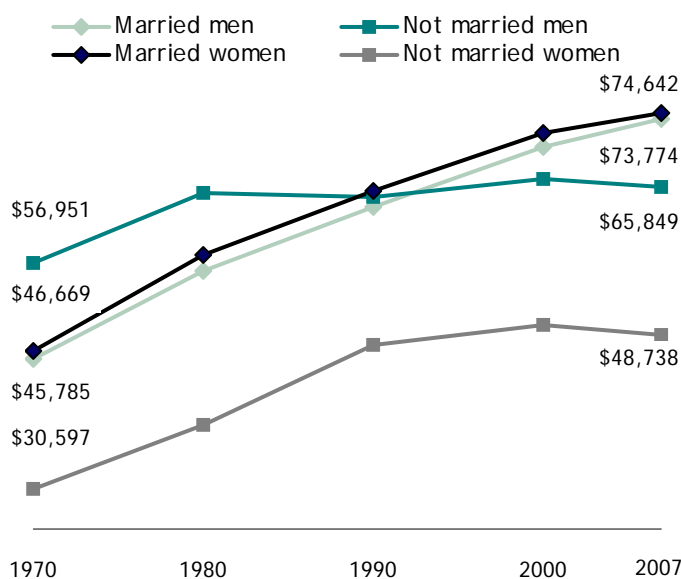
Educational attainment plays an important role in income, so a central focus of this report is to analyze economic data by level of schooling. Through this lens, too, married people have outdone the unmarried. The higher their education level, the more that adults' household incomes have risen over the past four decades; within each level, married adults have seen larger gains than unmarried adults. Among married adults at each education level, men had larger household income increases than did women. Those who gained most of all were married male college graduates, whose household incomes rose 56%, compared with 44% for married female college graduates.³

For unmarried adults at each level of education, however, men's household incomes fared worse than those of women. Unmarried women in 2007 had higher household incomes than their 1970 counterparts at each level of education. But unmarried men without any post-secondary education lost ground because their real earnings decreased and they did not have a wife's wages to buffer that decline.

Unmarried men who did not complete high school or who had only a high school diploma had lower household incomes in 2007 than their 1970 counterparts did. Unmarried men with some college education had stagnant household incomes.

Median Adjusted Household Income, by Gender and Marital Status, 1970-2007

In 2007 \$

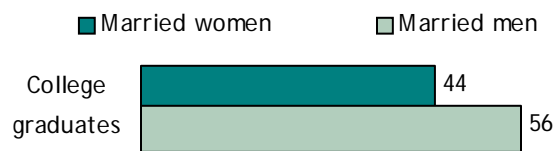


Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.
Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Household Income Growth for Married College Graduates, by Gender, 1970 to 2007

%



Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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³ All income trends in this report are based on data that have been corrected for inflation and household size. See Appendix B for an explanation of why adjusting for household size is desirable and a discussion of the method used to do so.

Unmarried men with college degrees made gains (15%), but the gains were not as great as those for unmarried women with college degrees (28%). In fact, household incomes of unmarried men with college degrees grew at half the rate of household incomes of married men with only a high school diploma—33% versus 15%.

There is an important exception to the rule that married adults have fared better than unmarried adults from 1970 to 2007. Married women without a high school diploma did not make the same gains as more educated women: Their household incomes slipped 2% from 1970 to 2007, while those of their unmarried counterparts grew 9%. The stagnant incomes of married women without high school diplomas reflect the poor job prospects of less educated men in their pool of marriage partners. These less educated married women now are far less likely than in the past to have a spouse who works—77% did in 2007, compared with 92% in 1970.

Patterns by Education Level

Americans are considerably better educated than they were four decades ago, which has enabled many adults to upgrade the educational credentials of their spouses. Among adults without high school educations and those with high school diplomas but no further schooling, a larger share in 2007, compared with their counterparts in 1970, had spouses with more education than they had.

Among adults with some college education, the pool of potential wives has expanded more rapidly than the pool of potential husbands. In this group, a higher share of men in 2007 had wives with more education than they did—28% had a wife with a college degree in 2007, compared with 9% in 1970. Women with some college education in 2007 were less likely to have a husband with a college degree than their counterparts were in 1970—21% versus 39%.

Among college-educated adults, married men are markedly more likely to have a wife who is college educated—only 37% did in 1970, compared with 71% in 2007. College-educated married women, though, are somewhat less likely to have a college-educated husband—70% did in 1970 and 64% did in 2007. (The figures differ from the perspective of husbands and wives because some U.S.-born 30- to 44-year-olds have spouses who are older, younger or foreign born.)

Of course, marriage does not increase household financial resources if the spouse does not work. Here, too, there has been great change. In 1973, only 45% of all women ages 16 and older were in the labor force. By 2007 this share had increased to 59%.⁴ Much of this increase is attributed to married women and to women with higher levels of education (Juhn and Potter, 2006). Furthermore, a sharp rise in workplace activity was reported among women married to higher-income men (Mulligan and Rubinstein, 2008). Among U.S.-born adults ages 30-44, most married men did not have a working spouse in 1970; now, most do. Married women, on the other hand, are somewhat less likely than their 1970 counterparts to have a husband who works.

⁴ U.S. Bureau of Labor Statistics. See <ftp://ftp.bls.gov/pub/special.requests/lf/aat2.txt>

Decline of Marriage

The shifts in the educational attainment and earnings capacity that men and women bring to marriage have played out against fundamental changes in the institution of marriage itself. These days, Americans are more likely than in the past to cohabit, divorce, marry late or not marry at all. There has been a marked decline in the share of Americans who are currently married. Among U.S.-born 30- to 44-year-olds, 60% were married in 2007, compared with 84% in 1970.

There is an education component to this change: The decline in marriage rates has been steepest for the least educated, especially men, and smallest for college graduates, especially women. College graduates, the highest earners, are more likely today to be married than are Americans with less education—69% for adults with a college degree versus 56% for those who are not a college graduate.

That was not the case in 1970, when all education groups were about equally likely to wed. Among college-educated men, 88% were married in 1970, compared with 86% of men without a college education. Among women, the comparable 1970 figures were 82% and 83%.

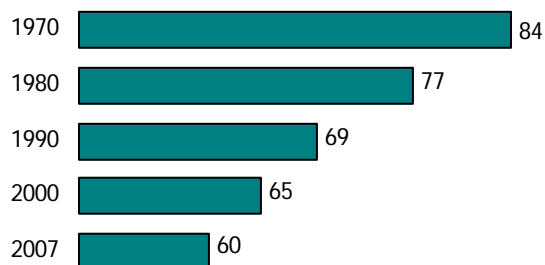
Thus, Americans who already have the largest incomes and who have had the largest gains in earnings since 1970—college graduates—have fortified their financial advantage over less educated Americans because of their greater tendency to be married.

Race Patterns

There are notable differences by race in the education, marriage and income patterns of U.S.-born adults ages 30-44. Black marriage rates, already lower than those of whites in 1970, have

A Smaller Share of Adults Are Married

% currently married



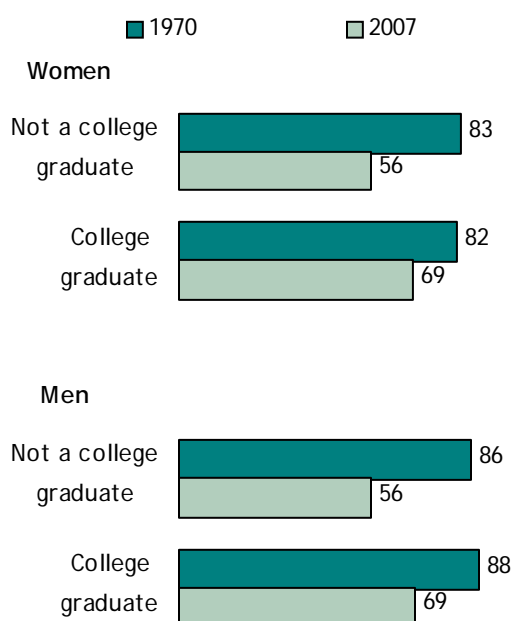
Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Marriage Declines Most among Those Without a College Degree

% currently married



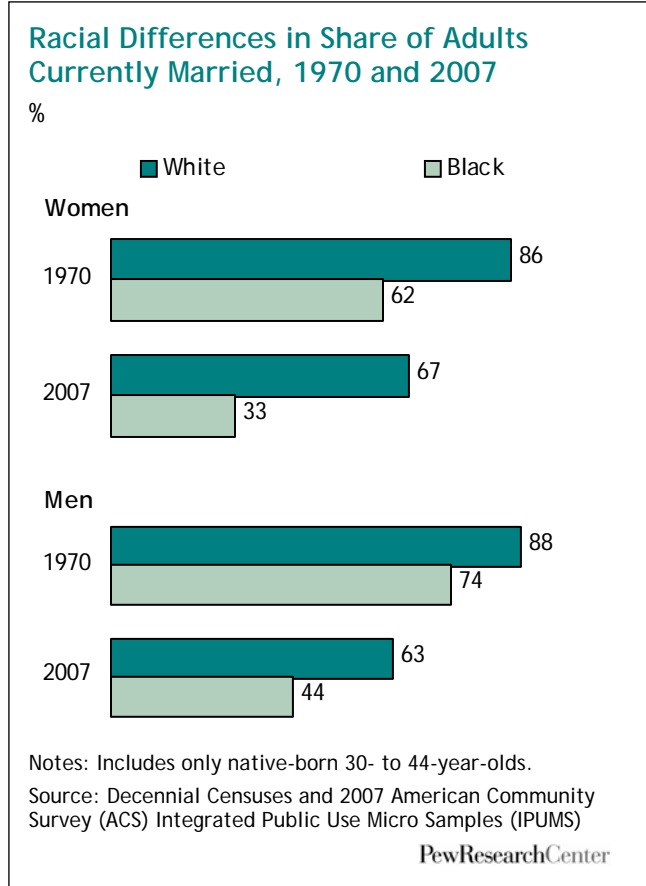
Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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dropped more sharply since then, especially for the least educated. Only 33% of black women and 44% of black men were married in 2007.

Although black men and women had higher household income growth than men and women overall, the sharp decline in marriage rates among blacks hindered growth in their incomes. Among black women with high school educations, household incomes actually declined from 1970 to 2007, reflecting a change in the composition of this group from majority married (with the higher incomes that accompany this status) to majority unmarried.



About this Report

This report presents trends in educational attainment and marriage patterns by gender and the attendant changes in the economic status of adult men and women since 1970. The findings focus on native-born 30- to 44-year-olds at five different points in time. The analysis is largely based on data from the Decennial Census micro data files of 1970, 1980, 1990 and 2000 and the comparable U.S. Census Bureau 2007 American Community Survey (ACS). Analysis of data from a Pew Research Center survey was provided by Wendy Wang. The charts were prepared by research assistant Daniel Dockterman. Paul Taylor, director of the Pew Research Center's Social & Demographic Trends project, provided editorial guidance. Daniel Dockterman and Gabriel Velasco did the number checking, and Marcia Kramer copy-edited the report.

This report is organized as follows: The first section examines trends in earnings and household incomes for men and women by education levels and marital status. The next section explores how patterns have changed in the likelihood of marrying a spouse of lower or higher education, a top-income spouse, a working spouse and a spouse whose income exceeds their own. The third section analyzes the changing likelihood of being married at all, by education group. The fourth section briefly looks at trends in education levels by gender. The last section reports on how these trends differ for black Americans. Appendix A contains additional figures and tables. Appendix B provides details on the data analysis and methodology.

A Note on Terminology

All references to whites and blacks are to the non-Hispanic components of those populations.

“Native born” refers to persons who are U.S. citizens at birth.

“College graduate” refers to a person who has completed at least a bachelor's degree. Persons whose highest degree is an associate's degree or have completed some college credits but not obtained a bachelor's degree are included in the “some college” education category.

“Household income” refers to household income adjusted for the number of members in the household. See Appendix B for the manner in which an individual's household income is adjusted for household size.

I. Economic Gains: Differences by Marriage and Gender

Married college-educated Americans have made larger economic gains than other groups over the past four decades. Their inflation-adjusted individual earnings and household incomes have risen more sharply than those of other groups. Beneath this overall pattern, though, are striking differences by gender among U.S.-born Americans ages 30 to 44.

Women made greater gains in individual earnings than men over this period, reflecting both their upgraded educational credentials and broader economic changes that favor the sectors in which they tend to work. One result: Among U.S.-born unmarried adults ages 30-44 at every level of education, women's median household incomes rose more than men's from 1970 to 2007.

But the opposite is true among U.S.-born married adults in this age bracket. At every level of education, married men in 2007 had more growth in their household incomes, compared with their 1970 counterparts, than married women did over the same time period. Why? The income-producing qualities of wives have improved more than those of husbands.

Earnings Trends

The higher their level of education, the larger the percentage gains that workers saw in their median earnings from 1970 to 2007. Comparing the genders, U.S.-born women ages 30-44, who started from a smaller base than U.S.-born men in that age group, made larger gains (or had smaller losses) than men did at each level of education.

Trends in Median Real Annual Earnings for Full-Year Workers, by Gender and Education

in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
Education Level for Women						
Less than high school	\$18,750	\$19,204	\$17,760	\$18,790	\$18,469	-2%
High school graduate	\$23,750	\$23,969	\$24,218	\$24,888	\$24,830	5%
Some college	\$26,250	\$27,695	\$30,676	\$31,110	\$30,782	17%
College graduate	\$37,750	\$37,277	\$43,592	\$47,286	\$49,250	30%
Education Level for Men						
Less than high school	\$35,250	\$35,148	\$30,151	\$30,114	\$27,703	-21%
High school graduate	\$42,750	\$45,688	\$39,333	\$38,078	\$35,912	-16%
Some college	\$50,250	\$48,456	\$47,123	\$46,042	\$45,454	-10%
College graduate	\$61,750	\$58,571	\$62,967	\$67,197	\$69,772	13%

Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Median earnings of both female and male workers⁵ who did not finish high school were lower in 2007 than those of their counterparts in 1970, but women (-2%) lost less ground than men (-21%). For adults with only a high school diploma, women in 2007 earned a median 5% more than their counterparts in 1970, while men earned a median 16% less. The median earnings of women with some college education grew 17% from 1970 to 2007, but earnings for men with some college education declined 10%. Among college graduates, median earnings were 30% higher for women in 2007 than in 1970 and 13% higher for men.

It should be noted that men in all education categories still earn more than women. Some of this earnings gap, according to research, results from men working in higher-paying fields and working longer hours than women. Women also are more likely to leave the work force to care for children; they also tend to work in lower-paying industries and firms and are less likely to hold unionized jobs. These factors do not account for the entire gap, however. Statistical studies have not conclusively quantified the role that pay discrimination may play.

However, the male-female earnings gap has narrowed since 1970.⁶ Among U.S.-born Americans ages 30-44 who worked for the full year, women's median earnings in 1970 (\$22,750) were 52% of men's (\$43,750). In 2007, women's median earnings (\$32,834) were 71% of men's (\$46,173).

Four decades ago, U.S.-born women ages 30-44 with a college degree earned less than men with a high school diploma. By 1990, their earnings exceeded those of male high school graduates. By 2000, the median earnings of female college graduates exceeded those of men with some college education.

Household Incomes

The higher their educational credentials, the more sharply that U.S.-born adults ages 30-44 have seen their median adjusted household incomes grow over the past four decades.⁷

Incomes of college graduates grew more from 1970 to 2007 than did incomes of adults without a college degree, and they in turn prospered more than those with only a high school education. Americans who did not finish high school fared worst of all.

But in comparing household incomes of U.S.-born adults who were 30-44 in 1970 and 2007, marriage and gender also play important roles. Adults who are married have done better than those who are not, at each level of education.

Among men, the 2007 household incomes of unmarried adults without a high school diploma or with only a high school diploma were notably lower than those of their counterparts in 1970 (see the Appendix A table on page 26). The household incomes of unmarried men with some college education had barely changed from those of their 1970 counterparts. But married men at these levels of education made gains over this period. Among male college graduates, both those who are unmarried and those who are married made household income gains, but married men had larger increases.

⁵ These are median real annual earnings, in 2007 dollars, for full-year workers, both full time and part time.

⁶ Many studies document the convergence in the gender earnings gap. See, for example, Institute for Women's Policy Research (2009), Blau and Kahn (2000), and Mulligan and Rubinstein (2008).

⁷ Following research on measuring the economic well-being of the household, "adjusted household income" is shorthand for "household income adjusted for the number of persons in the household." See Appendix B for further details.

Among women, married women with a high school diploma, some college education or a college degree had larger income gains over four decades than did their unmarried counterparts. Among women without a high school diploma, married women actually lost ground, while the incomes of unmarried women were 9% higher than those of their 1970 counterparts. A key reason for this exception to the rule of married people making greater gains is that the less educated men who are potential husbands to less educated women had poor job prospects and a greater-than-average decline in labor force participation during this period. As discussed shortly, this occurred even though less educated women reached higher up in the education distribution for their husbands in 2007 compared with 1970 (Rose, 2004).

Trends in Median Adjusted Household Income, by Gender and Education
in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
Education Level for Women						
Less than high school	\$34,599	\$35,875	\$30,755	\$32,330	\$27,933	-19%
High school graduate	\$46,315	\$52,894	\$51,341	\$52,482	\$48,859	5%
Some college	\$54,560	\$59,263	\$62,858	\$64,444	\$60,647	11%
College graduate	\$69,500	\$74,515	\$87,149	\$95,817	\$95,968	38%
Education Level for Men						
Less than high school	\$37,750	\$41,209	\$37,518	\$40,773	\$39,082	4%
High school graduate	\$45,500	\$54,451	\$53,451	\$58,086	\$57,145	26%
Some college	\$52,673	\$60,275	\$65,298	\$70,653	\$71,087	35%
College graduate	\$66,809	\$75,273	\$90,669	\$100,869	\$102,606	54%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.
Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)
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Married Men Compared with Married Women

Comparing the genders among married adults by education group, male college graduates in 2007 had median adjusted household incomes that were 56% higher than those of their counterparts in 1970. That surpassed the 44% gains of married female college graduates over the four-decade period (see Appendix A tables).

For married adults with some college education or married adults with a high school diploma, men's median household incomes also grew more than women's from 1970 to 2007. Recall that during this same period, median *earnings* of men in these education groups declined, while those of women in those education groups grew.

Among adults with some college, married men's median household incomes gained 39% over those of their 1970 counterparts, and those of married women gained 22%. Among high school graduates, married men's median household incomes grew 33%, compared with 21% for married women.

The gender contrast is even more stark among married adults without high school educations. The incomes of married men in this group were 10% higher in 2007 than were those of their 1970 counterparts. But household incomes of comparable women declined 2%. Men's median household incomes caught up to and surpassed those of women during the 1970-2007 period among married adults without a high school education.

II. Who Marries Whom?

The spousal characteristics of American marriages have changed over the past four decades as a growing share of women have graduated college, gone into the work force and moved into high-paying careers. The education and earnings of potential wives have improved more sharply than those of potential husbands, and this is associated with a gender reversal in the pattern of who weds whom.

For men, the changes over the past four decades have provided a larger pool of well-educated, financially secure spouses. This has been a particular economic boon to college-educated husbands, who over the past four decades have become increasingly likely to marry the highest-income wives. By contrast, college-educated wives are less likely than their counterparts four decades ago to be married to the highest-income husbands. Among all married couples, wives contribute a growing share of the household income, and a rising share of those couples include a wife who earns more than her husband.

Half of U.S.-born Americans ages 30-44 are married to someone whose education level is the same as their own, a proportion that has not changed much over four decades. What has changed is the composition of differently educated husbands and wives. In 1970, more husbands' education exceeded their wives' than the other way around. In 2007, more wives had educational credentials that exceeded those of their husbands than the reverse.⁸

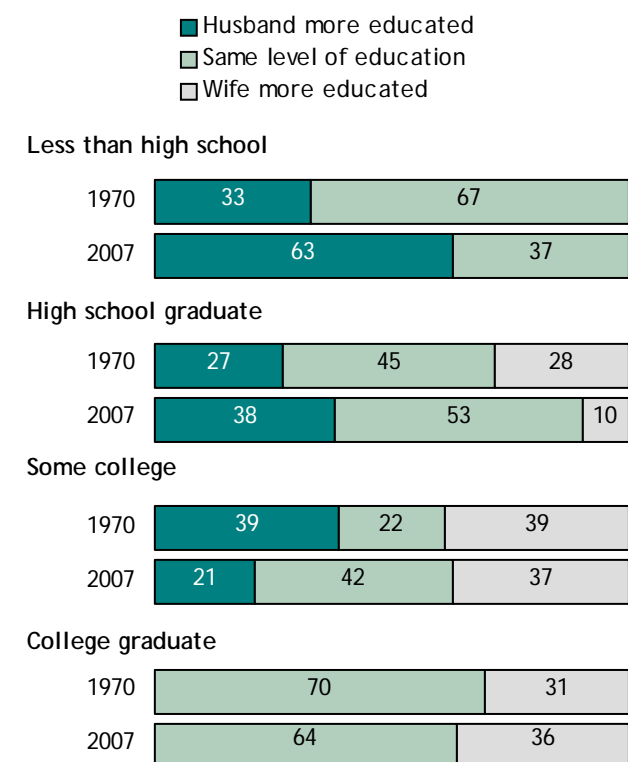
In 1970, 28% of U.S.-born married women ages 30-44 had husbands with more education than they had, and 20% had husbands with less education. In 2007, 19% of wives had husbands with more education than they had, and 28% had husbands with less education. (Told from the husband's point of view, the statistics are similar.)

The story varies somewhat, however, by education group. Because of the general rise in education levels, both men and women without a high school diploma are much more likely now than in the past to marry someone with more education than they have (Rose, 2004). This is a change from four decades ago, when most had spouses whose education matched theirs. Men (73%) are more likely than women (63%) to marry more educated spouses in this group.

⁸ This replicates the findings of Schwartz and Mare's (2005) noted study. They report that the tendency for men to marry women with less education peaked in the mid-1970s. Although a majority of marriages in 2007 included spouses with the same level of education, when partners differ educationally, it is more likely that the wife is better educated than the husband.

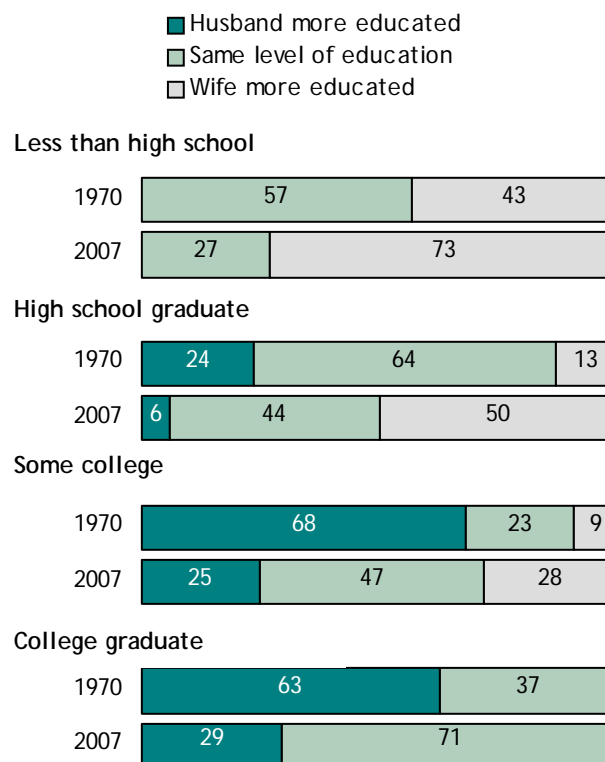
Educational Comparison between Married Women and Their Spouses, 1970 and 2007

%



Educational Comparison between Married Men and Their Spouses, 1970 and 2007

%



Notes: Includes only native-born 30- to 44-year-olds. Numbers may not total due to rounding.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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High school graduates also are more likely to have spouses who outrank them educationally than did their counterparts four decades ago, and the changes have been larger for husbands. In 2007, about half of married men with a high school diploma had wives who were better educated; among high school-educated wives, 38% had husbands whose education exceeded theirs. In 1970, the reverse pattern was true—a greater share of wives were outranked educationally by their husbands (27% versus 13%).

Among Americans with some college education in 1970, only 9% of married men had a wife who was a college graduate, but by 2007 that share had risen to 28%. For married women with some college education, 39% had a college-educated husband in 1970, but the share declined to 21% in 2007.

Among U.S.-born spouses ages 30-44 with college degrees, in 1970 women were more likely than men to be married to someone with a college degree. Now, the reverse is true, because the share of men with a college-educated wife has risen while the share of women with a college-educated husband has fallen. In 1970, 70% of college-educated wives had a college-educated husband; in 2007, 64% did. In 1970, 37% of college-educated husbands had a college-educated wife; in 2007, 71% did.

Top-Income Wives

One way in which college-educated married men have gained financially is that they increasingly are likely to be married to the highest-income wives. This was not always so. In 1970, U.S.-born men ages 30-44 at all levels of education were about equally likely to be married to a woman whose income was in the top half of incomes for all wives of U.S.-born men in this age group. About half of men in each education group were married to a woman whose income was in the top half for all wives, and about a quarter of men at each level of education were married to a woman whose income was in the top quarter of all wives.

By 2007, that pattern had shifted notably, to the advantage of the best-educated men: 54% of college graduates or men with some college education had a wife whose income was in the upper half of those for all wives. Among men with high school diplomas, 47% were married to these top-income wives. Among men with less than a high school education, only 30% were.⁹

The redistribution was even more dramatic for husbands of wives with incomes in the top quarter of wives' incomes. In 2007, 35% of college-educated men had a spouse in the top quarter, compared with 25% of men with some college education, 17% of high school graduates and 8% of men with less than a high school education.

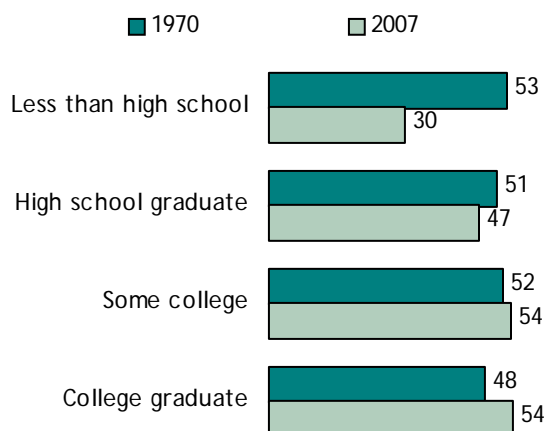
Top-Income Husbands

College-educated women were more likely than less educated women to have a top-income husband both in 1970 and 2007. However, as the pool of well-educated women has expanded more rapidly than the pool of well-educated men, a smaller share of college-educated women were married to top-income spouses in 2007 than was the case four decades earlier.

In 2007, 68% of college-educated married women had a spouse whose income was in the top half of those for all husbands. In 1970, 78% did. There also is a shrinking share of college-educated wives whose husbands are in the top quarter of earners—40% in 2007, compared with 54% in 1970.

Best-Educated Husbands Increasingly Likely to Have Highest-Income Wives

% husbands, by education, whose wives' incomes are in the top half of all wives' incomes



Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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⁹ Numerous studies have examined the relationship between women's education and marital status and husband income; see, for example, Lefgren and McIntyre (2004) and Jepsen (2005). Less attention has been paid to the relationship between men's education and the characteristics of their wives. Sweeney and Cancian (2004) find that women's earning power is an increasingly important determinant of her husband's occupational status and earnings capacity.

The likelihood of having a top-income husband declined even more sharply for women without a college degree. This is due in part to the growth in the number of women with college degrees, who are more financially desirable as marriage partners.

Among women with some college education, 70% in 1970 were married to a man whose income was in the top half of all husbands of U.S.-born women ages 30-44, but only 49% were in 2007. For high school graduates, 57% were married to a man in 1970 whose income was in the top half for all husbands, compared with 38% in 2007. For women without a high school diploma, 34% were married to a man in 1970 whose income was in the top half for husbands; in 2007, only 21% were.

Which Spouse Makes More

The share of households in which the wife brings in more money than the husband has increased sharply in recent decades, as women's earnings have grown faster than men's.

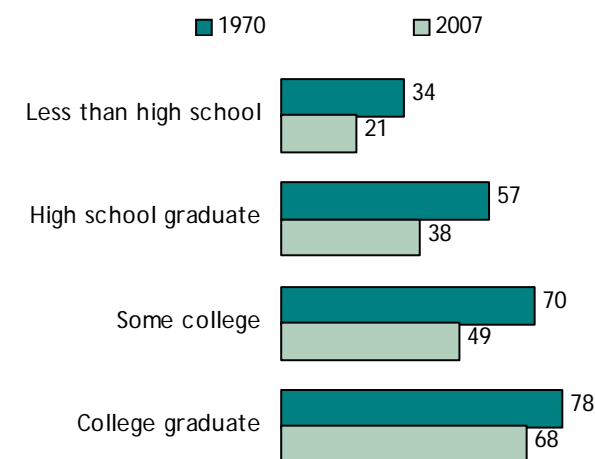
Education makes a difference in the likelihood that one spouse will make more than the other. Among U.S.-born married adults ages 30-44, both male and female college graduates are the least likely to have a spouse who brings in more income than they do.

In 1970, 89% of these female college graduates made less money than their husbands; in 2007, 70% did. For women with less education, 93% to 95% had a husband with a higher income in 1970. In 2007, 77% to 79% did.

Among married male college graduates, only 18% had a wife whose income was higher than theirs in 2007. For men in lesser education groups, nearly a quarter had a wife whose income was higher. In 1970, about 5% of

Wives Without College Degrees Have Sharpest Decline in Share of Highest-Income Husbands

% wives, by education, whose husbands' incomes are in the top half of all husbands' incomes



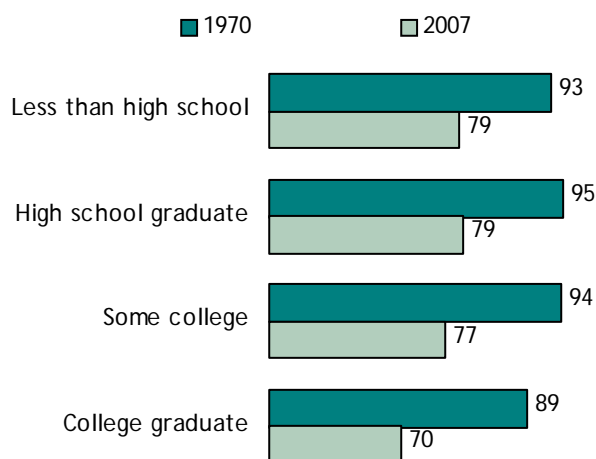
Notes: Includes only native-born 30- to 44-year-olds residing in households.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Wives Now Less Likely to Have Husbands with More Income Than They Have

% of wives, by wife's education, with higher-income husbands



Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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husbands in each education level had a wife who generated more income than they did.

The data on which spouse brings in more income do not match exactly when seen from the perspective of wives compared with that of husbands. One reason is that spousal characteristics do not match exactly; women tend to marry men who are older, for example. Not everyone marries someone who is at the same level of education. Men are more likely than women to marry someone who outranks them educationally, while the opposite now is true for women.

Spousal Share of Income

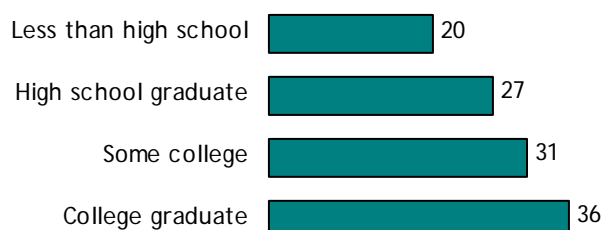
Not only is there a growing share of couples in which wives make more money than their husbands, but among all couples wives contribute a growing share of household income. This is true for all education groups.

Seen from the perspective of wives, in 1970, married women at all levels of education contributed only a tiny fraction of their total household incomes, ranging from a median 2% for women without a high school diploma to 6% for women with a college degree. By 2007, college-educated wives contributed a median 36% and women without high school diplomas contributed a median 20%. For high school graduates and women with some college education, the median contributions were 27% and 31%, respectively.¹⁰

Seen from the perspective of husbands, the share of income contributed by wives also grew dramatically between 1970 and 2007. Wives of college-educated men have contributed the lowest share—a median 26%, compared with 29% for wives of men with less than a high school education and 33% for wives of other men. This comports with data showing that earnings of men without college degrees have fallen since 1970, so incomes of their wives would make more of a difference to their total

College-Educated Wives Contribute Most to Married Couples' Household Incomes

% of household income contributed by wife, by her education level, 2007



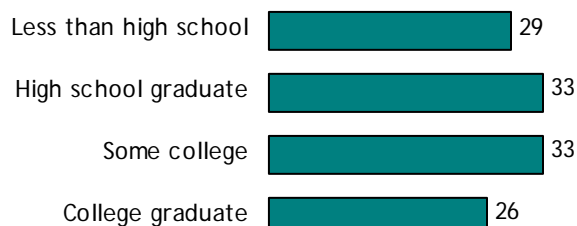
Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Share of Income Contributed by Wife Varies by Husband's Education Level

% of household income contributed by wife, by her husband's education level, 2007



Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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¹⁰ In addition to both spouses' contributions to a married couple's household income, other sources include government transfer payments and income of other residents of the household—children, for example. Other sources play a more prominent role in less educated households than in college-educated households. See Appendix A for details of both spouses' contributions by education level.

household income.

These figures include wives with no income, so they are lower than they would be if they included only working wives.

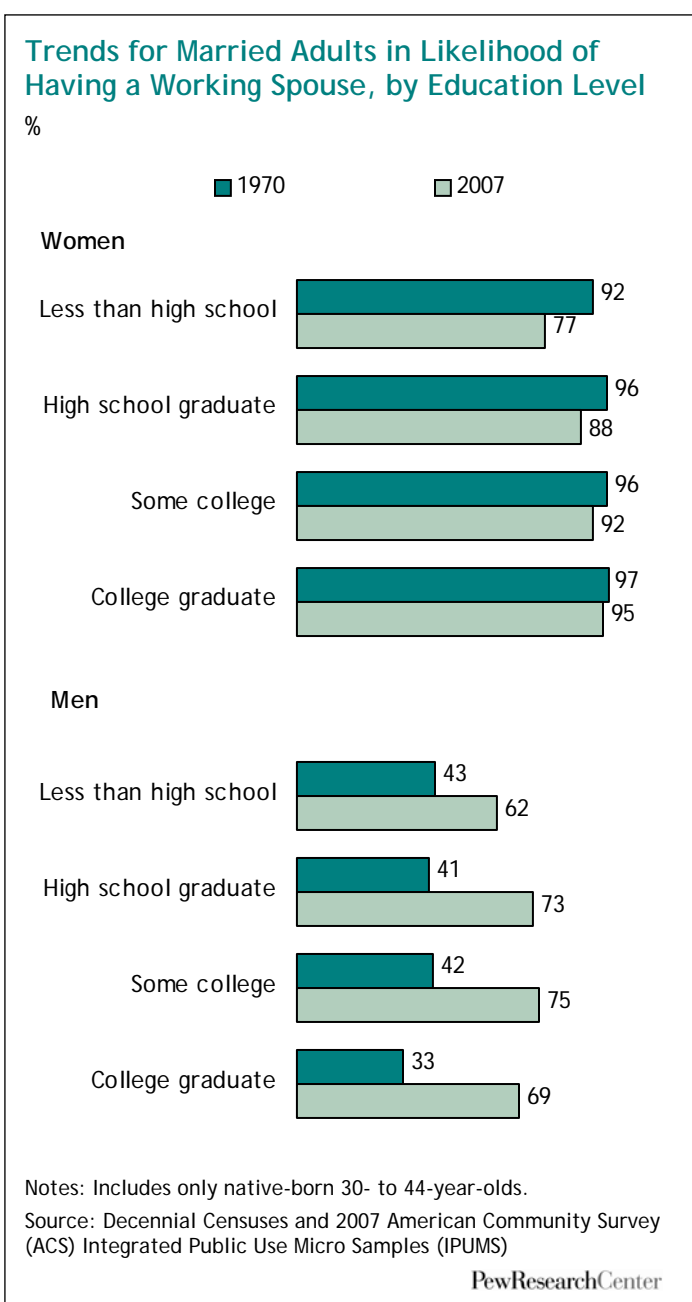
Working Spouses

Being married and having a working spouse is one way to bolster economic well-being, as shown by the household income figures cited earlier in this report. Over the past four decades, male labor force participation has fallen and female participation has risen. Husbands are somewhat less likely to be working in 2007 than their counterparts were in 1970, while the reverse is true for wives.

Among U.S.-born adults ages 30-44, the least educated—those lacking a high school diploma—also were the least likely in 2007 to have a spouse participating in the labor force. That is a change from the past.

Among married men, college-educated husbands had been the least likely to have a wife in the work force—33% did in 1970, compared with 41-43% of men in the other education categories. The situation is different these days. In 2007, husbands who did not complete high school were the least likely to have wives in the work force (62%). The share is higher for college-educated husbands (69%), and somewhat higher still for husbands with a high school diploma (73%) or some college education (75%).

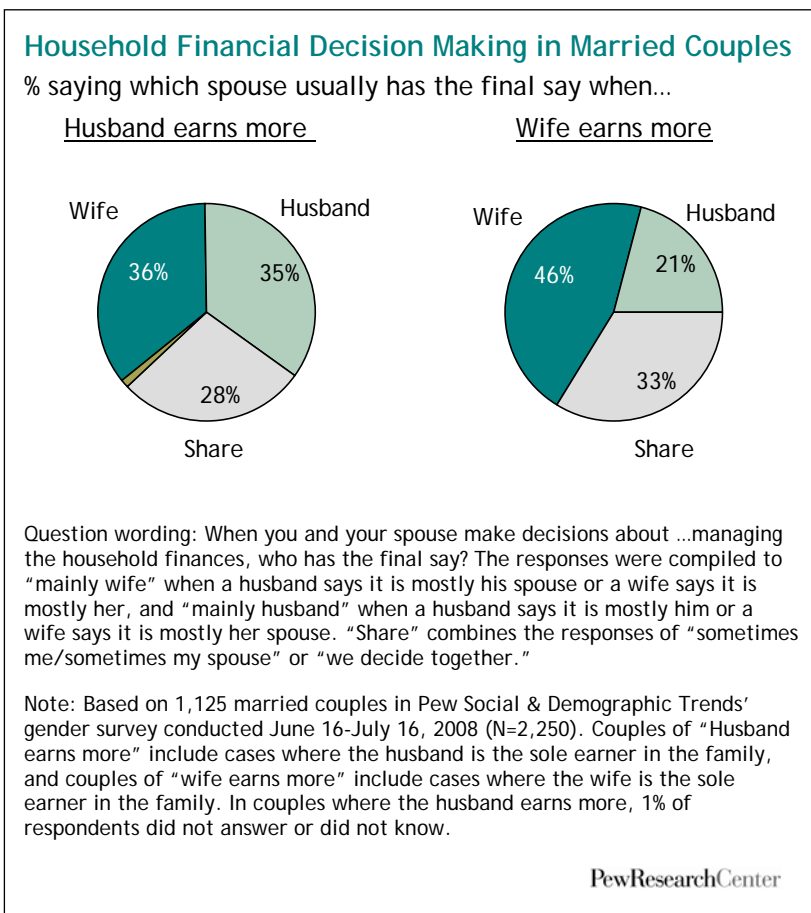
Among married women, more than 90% of wives at all levels of education had a working spouse in 1970. But a gap has developed in favor of women with more education. In 2007, 95% of college-educated married women had a spouse in the labor force, compared with 77% of married women who did not complete high school. The 2007 figures for wives with a high school diploma or some college education were 88% and 92%, respectively.



Roles within Marriage

Although this report concludes that economic gains from marriage have accrued more to men than to women, there is evidence from other research that women's growing economic clout gives them more power within marriage.

A Pew Research Center survey in 2008 found that wives who earn more than their husbands are more likely to have decision-making power, especially over major purchases and household finances. According to the survey, in couples where the husband makes more money, spouses are about equally likely to say that husbands (35%) and wives (36%) make most decisions regarding household finances. However, in couples where the wife makes more, spouses say that only 21% of husbands make most decisions on household finances, compared with 46% of wives.



III. Likelihood of Marriage

Americans are less likely to be married than they were four decades ago. They marry for the first time at older ages than they used to. A larger share of couples cohabit rather than marry. The share of divorced adults has risen.

The declining tendency to be married has been sharpest among the least educated. A wide gap has developed in recent decades between the most and least educated adults in the proportion currently married. The decline in marriage rates has been steepest for the least educated men and smallest for college-educated women.

In 1970, U.S.-born Americans ages 30-44 without a high school diploma were nearly as likely to be married—or ever to have been married—as college graduates. Not so today. Nearly seven-in-ten college graduates among U.S.-born 30-to-44-year-olds were married in 2007, in contrast to less than half of adults in that age group without a high school diploma (see chart on page 20).

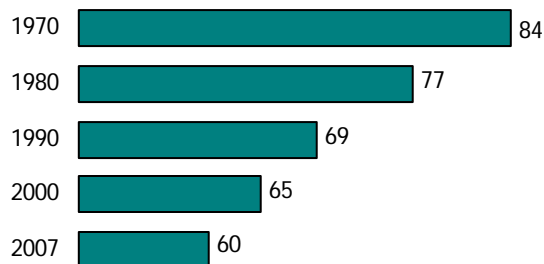
In 2007, only 43% of women and 45% of men without a high school education were married, compared with 78% of women and 84% of men in 1970. Among high school graduates, 55% of women and 54% of men were married in 2007, compared with 86% and 88%, respectively, in 1970. Among those with some college education, 60% of women and 62% of men were married in 2007, compared with 84% of women and 87% of men in 1970.

Among college graduates, 69% of both men and women were married in 2007, compared with 82% of women and 88% of men in 1970.

Less educated Americans are not only the least likely to be currently married, but they also are more likely to be divorced. Even when looking at whether people ever have been married, however, a gap remains between the most and least educated Americans.¹¹ Among college-educated Americans in this 30-44 age group, 80% of women and 77% of men have been married at some point. That compares with 71% of women and 65% of men who did not graduate from high school.

A Smaller Share of Adults Are Married

% currently married



Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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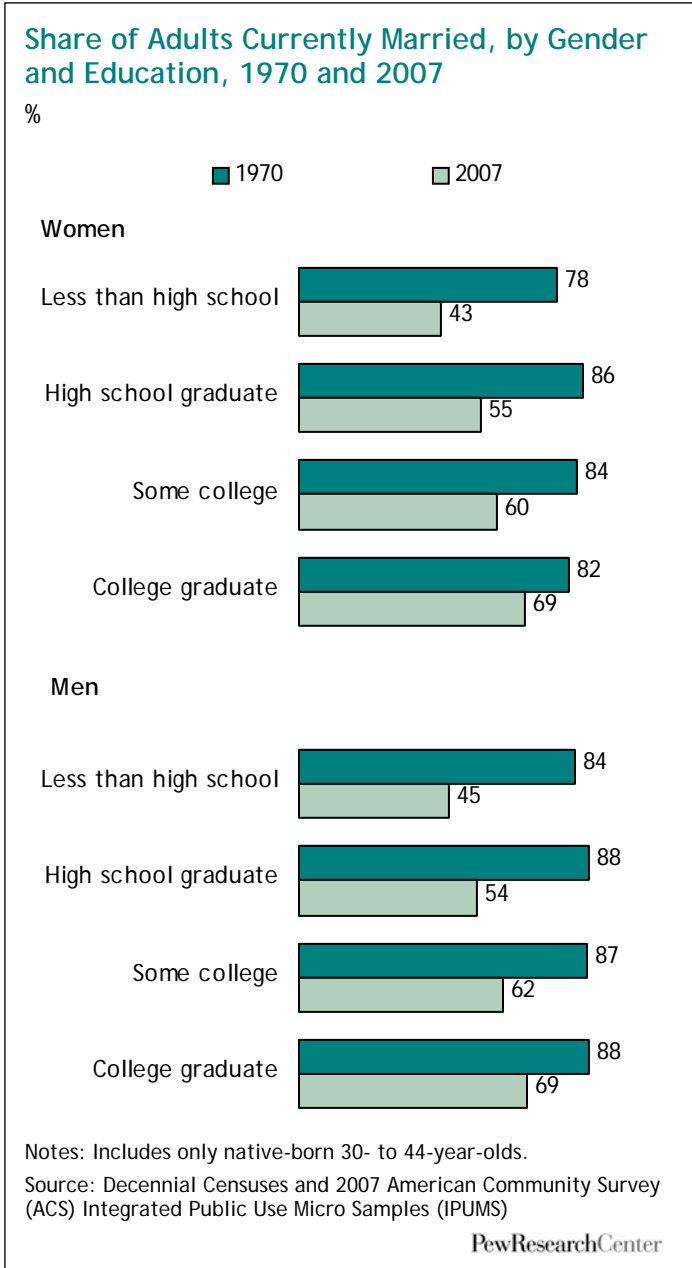
¹¹ See Rose (2004) and Lefgren and McIntyre (2004) for an extended discussion on the relationship between education and marital status, likelihood of ever marrying, and marital stability.

Importance of a Working Spouse

The importance of marriage in providing an economic advantage shows up in an analysis of the likelihood of having a working spouse for *all* U.S.-born 30- to 44-year-old men and women by education group, not just those who currently are married. The impact is particularly striking for the least educated Americans, reflecting changes in marriage rates and the marriage market as well as declining male labor force participation.

In 1970, most women at all levels of education had a working spouse, including 72% of women without a high school diploma and 79% of those with a college degree. But in 2007, only 33% of women without a high school diploma had a working spouse, compared with 65% of women with a college degree who did.

For men, college graduates were more likely to have a working spouse in 2007 than in 1970, but men without a high school diploma were less likely to have a working spouse. Among men with college degrees, 48% had a working spouse in 2007, compared with 29% in 1970. Among men who did not complete high school, 36% had a working spouse in 1970, a higher share than among male college graduates. In 2007, 28% had working spouses, a lower share than among male college graduates.



IV. Gender Trends in Education

The broad changes in marriage and income trends go hand in hand with an historic gender reversal in the likelihood to graduate college. Women became the majority of newly minted college graduates in the 1981-1982 school year and accounted for 57% of those who gained their undergraduate degrees in the 2006-2007 school year. Among U.S.-born adults younger than their mid-40s, women hold the majority of college degrees.

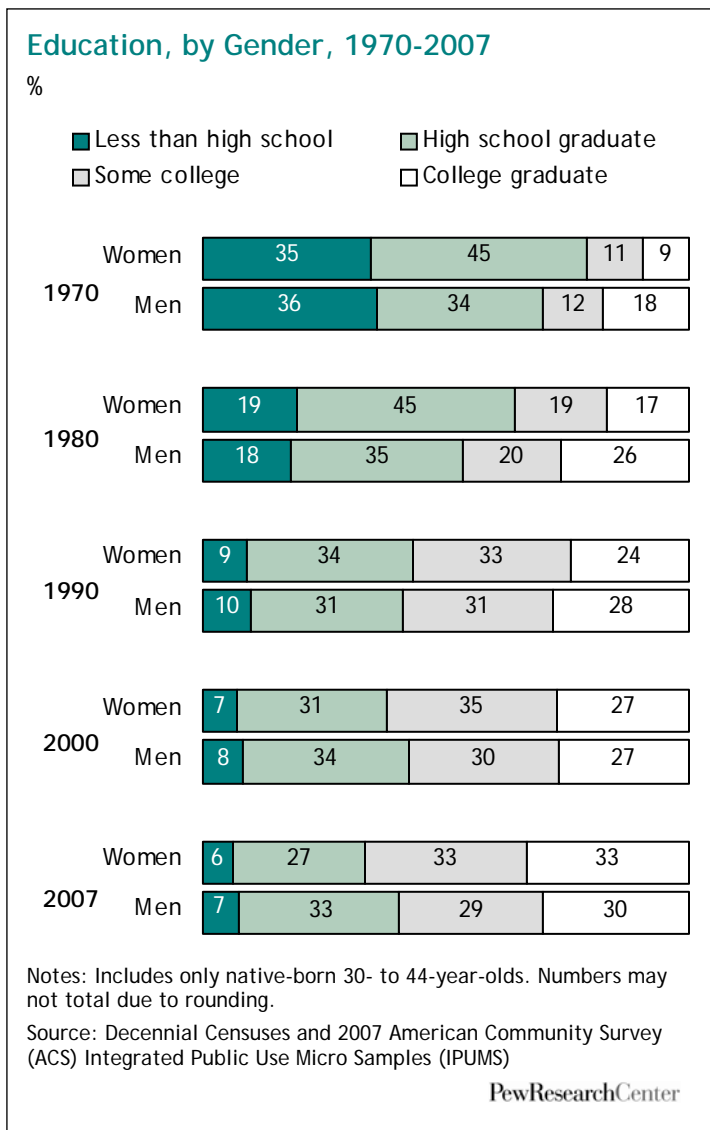
Compared with their counterparts in 1970, both U.S.-born men and women ages 30-44 are more highly educated by far—not only more likely to have graduated high school, but also more likely to have attended college or to hold a college degree. Fewer have failed to complete high school.

Women have climbed the education ladder more rapidly than men. By 2000, women in this age group had surpassed men in their likelihood to attend college. By 2007, this age group had a higher share of female college graduates than male graduates, reversing the historic pattern. In 2007, 66% of U.S.-born women ages 30-44 had attended or graduated from college, compared with 59% of men in that age group.

With the exception of the 1990-2000 period, men's college graduation rates continued to rise—but not as rapidly as women's.

In general, as the chart on this page shows, the share of 30- to 44-year-olds with less than a high school education has declined sharply—and equally for men and women.

In a reversal of the pattern that existed in 1970, men are now more likely than women to hold only a high school diploma (33% to 27%). That is because a higher share of women than men have at least some college education.



V. Marriage, Income and Education Trends for Black Adults

This section explores similarities and differences in patterns of education, income and marriage for U.S.-born blacks and other adults ages 30-44.¹²

Among black adults, the sharp decline in the marriage rate from 1970 to 2007—a steeper drop than for the population overall—is a key trend in explaining the changing circumstances of men’s and women’s lives. Among black women, 62% were married in 1970, versus 33% in 2007. Among black men, 74% were married in 1970, compared with 44% in 2007.

In contrast to the population overall, there was a marriage gap by education level in 1970 for black women: Females with college degrees were more likely to be married in 1970 than those with less education. That is still the case. Among black men, marriage rates were about the same for all education groups in 1970, but by 2007, college graduates were far more likely to be married (55%) than men who had not completed high school (27%).

Financially and educationally, black men and women overall have made greater gains than other groups. Their education levels have risen more sharply. Among black women, 57% in 2007 had attended or graduated from college—the same share as those who in 1970 had not graduated from high school. Propelled by this educational rise, median adjusted household incomes for all black men and for all black women have grown more rapidly than those of the population overall.

Household Income Trends

However, the decline in marriage rates among black adults hindered growth in their household incomes. This can be seen in an analysis of household income growth for adults at each level of education.

For black men and women with some college education or with college degrees, household incomes did not rise as rapidly from 1970 to 2007 as they did for the population overall. Black women with high school educations actually lost ground; they had lower median household incomes than their 1970 counterparts, reflecting the change in the composition of this group from majority married to majority unmarried.

Median Adjusted Household Income Growth Greatest for Black Men and College Graduates in 2007 \$

	1970	2007	Change (1970-2007)
Education Level for Black Women			
Less than high school	\$21,276	\$17,772	-16%
High school graduate	\$32,456	\$31,417	-3%
Some college	\$42,750	\$44,430	4%
College graduate	\$61,543	\$79,478	29%
Education Level for Black Men			
Less than high school	\$29,228	\$31,778	9%
High school graduate	\$39,952	\$47,687	19%
Some college	\$48,250	\$61,769	28%
College graduate	\$64,750	\$92,413	43%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household. Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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¹² Of all U.S. resident black adults in this age group, 88% in 2007 were born in the United States, compared with 98% in 1970.

Earnings and incomes for black adults, although lower than for the population overall, have displayed similar patterns by gender and education over the past four decades. Men's earnings have declined for all education groups except for college graduates. Women's earnings have gone up in real terms—including for women without a high school diploma, an exception to the pattern for the overall population. Among college graduates, earnings of women have risen more than those of men, echoing the pattern for the population overall.

Looking at household income, black married men overall have seen greater gains than unmarried men. Household incomes of black married women and unmarried women rose by about the same amount. This difference persists when household income gains are analyzed by level of education: Unmarried black men lost more ground, or gained less, than comparable married men at each level of education. Married women gained more than unmarried women at each level of education, except among women without a high school diploma.

Comparing the Spouses

For married U.S.-born blacks ages 30-44, the likelihood of having a working spouse fell more sharply for black women than for all women, and it rose less sharply for black men than for all men. However, the combination of poor job prospects for the least educated and the declining marriage rates overall has depressed the likelihood that all U.S.-born black Americans ages 30-44 will have a working spouse. Only 11% of all U.S.-born black women in this age group without a high school diploma and only 19% of black men lacking a diploma had a working spouse in 2007. The comparable figures for all women was 33% and for all men 28%.

Among blacks who are married, the patterns of spousal education and income differ somewhat from those of the general population. In part, this reflects a long-standing pattern of higher education levels among black wives, compared with their husbands, and of black women's longer history of high labor force participation, compared with other women.

Looking at educational similarity of husbands and wives, spouses in 2007 were less likely to be similarly educated than they were four decades ago, in contrast to the stability of this measure for the population overall. In 1970, 58% of black wives and 57% of black husbands were married to someone with the same level of education; in 2007, that was true for 46% of wives and 48% of husbands.

The historic pattern of higher education levels of black wives has intensified over time. In 1970, there were more marriages in which black wives were better educated than their husbands than the reverse; this is the opposite of what was then the pattern for the population overall. In 2007, a third of black wives were more educated than their husbands, a higher share than for the population overall.

Unlike wives overall, black wives with a college degree were more likely in 2007 than in 1970 to have a college-educated spouse, and those with some college were as likely to have a college-educated spouse. Wives at other levels of education also improved their husbands' education quality, sometimes more than did wives of other races. For example, black wives with a high school diploma were more than twice as likely to have a husband with some college education in 2007 as in 1970. Black husbands also made gains in their wives' educational credentials.

In addition, college-educated black wives were more likely to have a top-income husband in 2007 than in 1970 (52% had a husband with income in the top half of all husbands in 2007, compared with 42% in 1970). College-

educated black husbands were slightly less likely to have a top-income wife in 2007 than in 1970. Both trends are the opposite of those in the population overall.

Married black women in 1970 contributed higher shares of household income than did married women overall, so there has been less dramatic change in their contributions. College-educated wives provided 44% of household income in 1970 and 47% in 2007. Wives with a high school diploma contributed 21% in 1970 and 38% in 2007.

Education Levels Improve

The hefty improvement in spouses' education levels is in part a consequence of the disproportionately rapid improvement in educational attainment among blacks, compared with the population overall, from 1970 to 2007. Education levels of black Americans, however, have not caught up to those of whites.

Among U.S.-born blacks, men and women ages 30-44 in both 1970 and 1980 were equally likely to have attended or graduated from college, while for the population overall, men had higher rates in those years. Black women began pulling ahead in 1990, earlier than women overall. By 2007, 57% of U.S.-born black women in this age group had attended (36%) or graduated from (21%) college, well ahead of the 48% of black men who had attended (31%) or graduated (17%).

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Appendix A: Additional Tables and Charts

Trends in Median Adjusted Household Income for Women, by Education and Marital Status

in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
All Women	\$44,548	\$53,993	\$60,263	\$64,832	\$64,867	46%
Married Women	\$46,669	\$57,915	\$65,465	\$72,174	\$74,642	60%
Less than high school	\$37,568	\$42,082	\$38,559	\$40,476	\$37,002	-2%
High school graduate	\$47,631	\$56,049	\$56,336	\$59,272	\$57,460	21%
Some college	\$56,508	\$63,656	\$67,939	\$70,803	\$68,866	22%
College graduate	\$69,884	\$77,505	\$90,613	\$99,675	\$100,411	44%
Not Married Women	\$30,597	\$38,216	\$47,457	\$49,775	\$48,738	59%
Less than high school	\$19,702	\$20,781	\$19,074	\$23,623	\$21,547	9%
High school graduate	\$35,250	\$36,412	\$37,193	\$38,576	\$36,255	3%
Some college	\$42,500	\$44,956	\$50,050	\$50,294	\$46,724	10%
College graduate	\$66,762	\$66,867	\$79,095	\$85,347	\$85,483	28%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Trends in Median Adjusted Household Income for Men, by Education and Marital Status

in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
All Men	\$46,669	\$57,651	\$64,016	\$69,312	\$71,087	52%
Married Men	\$45,785	\$56,202	\$63,619	\$70,494	\$73,774	61%
Less than high school	\$37,181	\$41,247	\$37,962	\$42,029	\$40,964	10%
High school graduate	\$44,152	\$53,234	\$53,132	\$58,486	\$58,913	33%
Some college	\$51,095	\$58,458	\$63,906	\$70,048	\$71,087	39%
College graduate	\$65,054	\$72,265	\$88,411	\$99,550	\$101,732	56%
Not Married Men	\$56,951	\$65,199	\$64,760	\$66,815	\$65,849	16%
Less than high school	\$42,002	\$40,676	\$36,303	\$38,796	\$36,938	-12%
High school graduate	\$61,055	\$61,869	\$55,367	\$57,116	\$54,792	-10%
Some college	\$70,798	\$70,522	\$69,911	\$72,850	\$70,982	0%
College graduate	\$92,015	\$88,240	\$97,876	\$104,652	\$105,559	15%

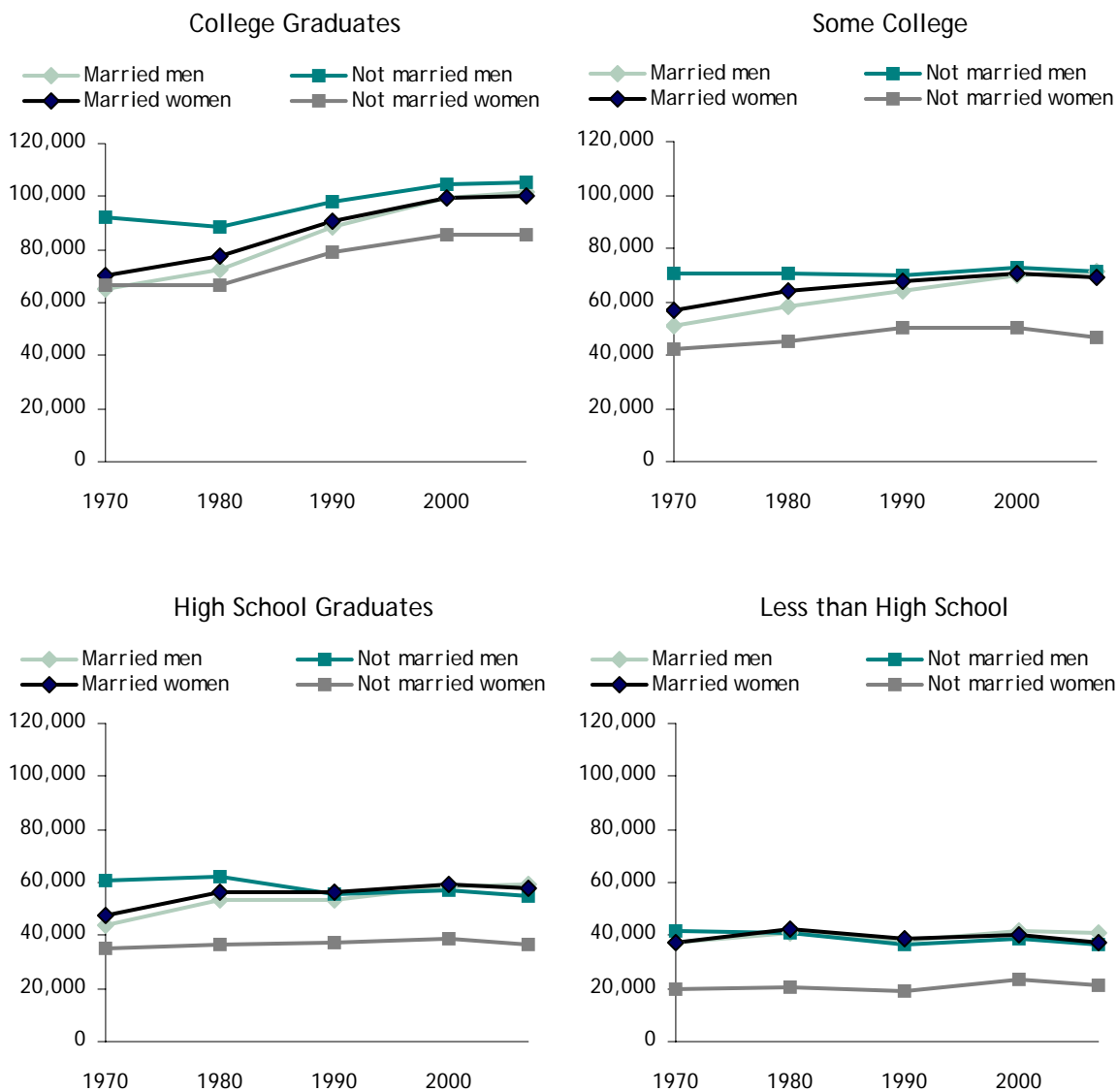
Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Median Adjusted Household Income, by Education, Gender and Marital Status, 1970-2007

in 2007 \$



Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

Trends in Spouses' Contribution to Household Income, by Gender and Education

	1970	1980	1990	2000	2007
Wife's Education Level					
Less than high school	2%	9%	15%	18%	20%
High school graduate	1%	13%	21%	26%	27%
Some college	1%	14%	26%	30%	31%
College graduate	6%	20%	32%	35%	36%
Husband's Education Level					
Less than high school	88%	76%	66%	62%	60%
High school graduate	95%	81%	70%	65%	61%
Some college	95%	82%	71%	66%	64%
College graduate	99%	88%	76%	74%	72%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Trends in Median Real Annual Earnings for Full-Year Working Blacks, by Gender and Educational Attainment in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
Education Level for Women						
Less than high school	\$15,250	\$18,645	\$17,760	\$18,666	\$17,033	12%
High school graduate	\$21,250	\$25,433	\$24,218	\$24,141	\$23,600	11%
Some college	\$26,250	\$29,292	\$30,676	\$31,110	\$30,782	17%
College graduate	\$36,750	\$39,939	\$43,592	\$46,042	\$46,173	26%
Education Level for Men						
Less than high school	\$26,250	\$28,440	\$25,795	\$24,888	\$25,652	-2%
High school graduate	\$34,750	\$37,277	\$32,291	\$31,110	\$30,782	-11%
Some college	\$38,750	\$42,601	\$40,363	\$39,820	\$37,965	-2%
College graduate	\$47,750	\$50,785	\$51,665	\$54,753	\$56,433	18%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Trends in Median Adjusted Household Income for Black Women, by Educational and Marital Status in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
All Black Women	\$27,224	\$35,349	\$39,769	\$43,740	\$42,684	57%
Married Black Women	\$32,187	\$46,607	\$53,389	\$58,361	\$60,801	89%
Less than high school	\$26,163	\$32,697	\$30,761	\$31,597	\$26,641	2%
High school graduate	\$36,630	\$46,114	\$45,207	\$46,447	\$46,886	28%
Some college	\$47,176	\$56,368	\$58,065	\$61,267	\$59,609	26%
College graduate	\$65,601	\$75,011	\$82,341	\$88,849	\$93,371	42%
Not Married Black Women	\$18,031	\$25,004	\$29,930	\$34,701	\$33,929	88%
Less than high school	\$14,524	\$16,147	\$13,842	\$17,243	\$15,834	9%
High school graduate	\$23,245	\$26,258	\$24,717	\$27,003	\$25,769	11%
Some college	\$32,259	\$33,919	\$37,605	\$40,484	\$36,560	13%
College graduate	\$51,312	\$55,957	\$64,318	\$69,685	\$71,087	39%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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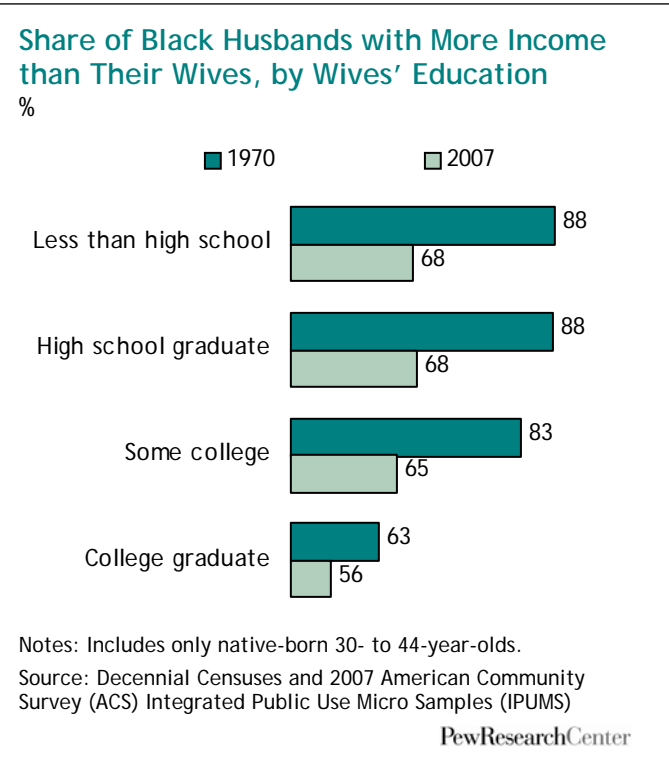
Trends in Median Adjusted Household Income for Black Men, by Educational and Marital Status in 2007 \$

	1970	1980	1990	2000	2007	Change (1970-2007)
All Black Men	\$34,857	\$46,125	\$48,938	\$53,905	\$56,172	61%
Married Black Men	\$33,114	\$46,690	\$52,551	\$58,486	\$62,201	88%
Less than high school	\$28,169	\$34,254	\$33,110	\$36,087	\$34,655	23%
High school graduate	\$37,968	\$46,766	\$45,442	\$48,617	\$51,539	36%
Some college	\$46,863	\$55,843	\$58,725	\$64,467	\$63,821	36%
College graduate	\$63,220	\$71,330	\$81,534	\$89,640	\$95,861	52%
Not Married Black Men	\$39,404	\$44,938	\$44,743	\$49,684	\$51,303	30%
Less than high school	\$32,909	\$33,562	\$29,083	\$30,753	\$30,423	-8%
High school graduate	\$48,064	\$46,125	\$41,009	\$44,051	\$44,430	-8%
Some college	\$54,382	\$56,762	\$55,913	\$60,725	\$59,359	9%
College graduate	\$71,035	\$74,755	\$78,300	\$86,236	\$88,859	25%

Notes: Includes only native-born 30- to 44-year-olds. Incomes adjusted for household size and then scaled to reflect a three-person household.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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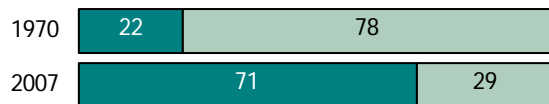


Educational Comparison between Married Black Women and Their Spouses, 1970 and 2007

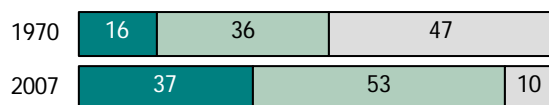
%

■ Husband more educated
■ Same level of education
■ Wife more educated

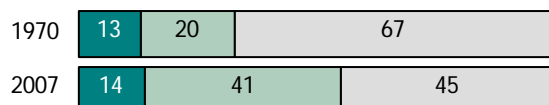
Less than high school



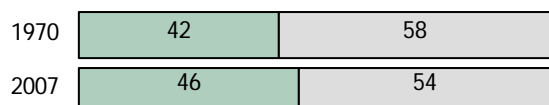
High school graduate



Some college



College graduate

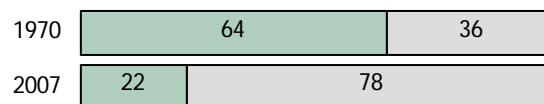


Educational Comparison between Married Black Men and Their Spouses, 1970 and 2007

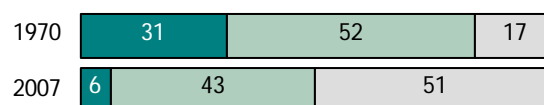
%

■ Husband more educated
■ Same level of education
■ Wife more educated

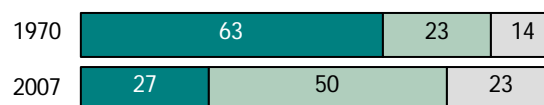
Less than high school



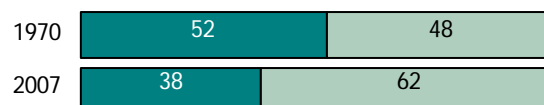
High school graduate



Some college



College graduate



Notes: Includes only native-born 30- to 44-year-olds. Numbers may not total due to rounding.

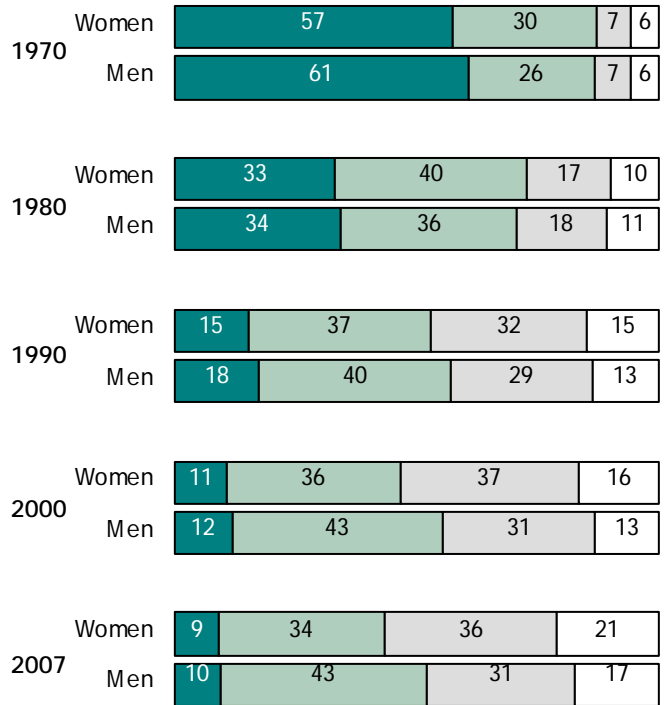
Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Education, by Gender, for Blacks, 1970-2007

%

Less than high school
 High school graduate
 Some college
 College graduate

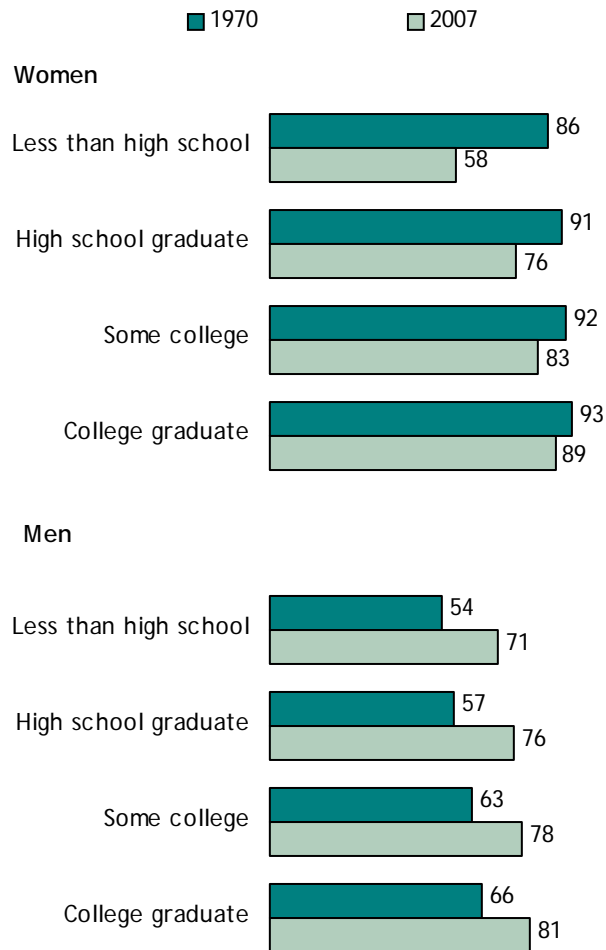


Notes: Includes only native-born 30- to 44-year-olds. Numbers may not total due to rounding.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

Share of Black Married Adults with Working Spouses, by Education, 1970 and 2007

%



Notes: Includes only native-born 30- to 44-year-olds.

Source: Decennial Censuses and 2007 American Community Survey (ACS) Integrated Public Use Micro Samples (IPUMS)

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Appendix B: Data Sources and Methodology

Data

The analysis utilizes the Integrated Public Use Micro Samples (IPUMS) of the 1970, 1980, 1990 and 2000 Decennial Censuses and the 2007 American Community Survey (ACS). The ACS is the largest household survey in the United States, with a sample of about 3 million addresses. It is conducted by the U.S. Census Bureau and covers virtually the same topics as those in the long form of the Decennial Census. Documentation on the IPUMS is available at <http://usa.ipums.org/usa/index.shtml>. The 1970 data are a 3% sample of the population. The 2007 data are a 1% sample of the population. The 1980, 1990 and 2000 census samples are 5% samples of the population. However, to speed computation, non-Hispanic whites were randomly subsampled, so the white populations in these three years are 0.5% samples. The minority populations in these three years were 5% samples. Given these sampling rates, the unweighted sample sizes for native-born 30- to 44-year-olds residing in households are as follows:

	1970	1980	1990	2000	2007
All	959,009	480,809	635,446	728,469	464,230
Whites	820,706	165,371	222,561	218,360	374,396
Blacks	101,880	212,073	255,806	306,147	46,982

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The analysis is restricted to persons residing in households because household income is defined only for such persons. The vast majority of native-born 30- to 44-year-olds (98% in 2007) live in households. The analysis focused only on the native born because there is evidence that marital couples often meet in school or that educational institutions function as marriage markets (Nielsen and Svarer, 2009). This suggests that if we want to explore U.S. marriage markets we should focus on adults educated in the U.S. While some immigrants are partially or completely schooled in the U.S., restricting the analysis to native-born adults ensures that we are examining U.S.-educated adults. Lefgren and McIntyre (2006) also restrict their analysis to the native born. This requirement does, however, limit our ability to produce specific analyses for Asian- and Hispanic-origin adults in this age group, because most living in the U.S. are foreign born.

Note that although the analysis is restricted to native-born adults between the ages of 30 and 44, this does not imply that the adult's spouse is either native born or necessarily in that same age group. The married adults in this analysis across the sexes are not necessarily married to each other, although most are. The married women tend to marry older men, so some of their husbands are older than 44. Married men tend to marry younger women, so some of their wives are younger than 30. The fact that married persons ages 30-44 are not

necessarily married to each other explains why one occasionally obtains a slightly different understanding of phenomena when examining outcomes for wives versus husbands.¹³

The Census Bureau's questionnaire has changed since 1970, and thus a number of comparability issues arise. In 2000 the question on racial identity enabled respondents to report more than one racial classification. To bridge the old and new racial categories, we utilized the IPUMS RACESING variable. Details are available at <http://usa.ipums.org/usa-action/variableDescription.do?mnemonic=RACESING>. In 1990 the Census Bureau altered the question on educational attainment from years of school completed to highest degree completed. The old and new educational classifications were bridged by using the IPUMS EDUCREC variable. Details are available at <http://usa.ipums.org/usa-action/variableDescription.do?mnemonic=EDUCREC>. The 1970 census file does not include a measure of total household income. As directed by the IPUMS documentation, total household income for 1970 was obtained by summing the personal incomes of all members of the household ages 15 or older.

A very convenient feature of the IPUMS data is its ability to associate the spouse's characteristics for married adults.

Methodology

The earnings reported refer to the earnings of "full-year" workers, that is, those who worked at least 50 weeks in the year prior to the interview. Analyses of the gender pay gap typically examine the earnings of full-year, full-time workers (for example, Blau and Kahn, 2000, and Institute for Women's Policy Research, 2009) to compare homogenous groups of workers in terms of labor market effort. Unfortunately, analyses of earnings using Decennial Census data cannot be restricted to full-time workers because the 1970 census does not have information on usual hours worked per week.

Economic status is measured by total money income. Because individuals in a household share resources within it, the adult's household income rather than that person's individual income is used to measure well-being. However, an individual in a \$50,000 household with more members is presumably less well off than a person in a \$50,000 household with fewer members. So the household income measure utilized adjusts household income for the size of household.

One solution is simply to divide household income by the size of the household to obtain household income per capita. The shortcoming of this procedure is that it does not recognize scale economies in the household or the notion that "two can live cheaper than one."

The analysis in this report assumes that an adult in a two-person household with a total household income of \$50,000 is better off than an adult in a one-person household with an income of \$25,000.

The extent of scale economies in the household is a matter of judgment. A common scale factor is an adjustment parameter of 0.5, or the assumption that a two-person household requires 1.4 times the income to be as equally

¹³ As an example, the figure on page 1 of the report indicates that in 1970, 20% of wives were more educated than their husbands and that the incidence of women marrying less educated men rose to 28% by 2007. This is based on examining the nature of the marriages of 30- to 44-year-old native-born wives. Alternatively, we can assess educational matching by examining the marriages of 30- to 44-year-old native-born husbands. In 1970, 21% of the husbands had wives who were better educated than they were. By 2007, 27% of husbands had better educated wives.

well off as a one-person household (Burkhauser, Cutts, Daly and Jenkins, 1999).¹⁴ Our method assigns each adult his/her adjusted household income where

$$\text{Adjusted household income} = \text{Household income} / (\text{Household size})^{0.5}$$

The adjusted household income and earnings figures were deflated using the research series of the Consumer Price Index (CPI-U-RS) to obtain real or inflation-adjusted amounts. The U.S. Census Bureau also uses this price index series to deflate nominal incomes. In the Decennial Census, the earnings and household income refer to the prior calendar year; the 2000 census, for example, asked respondents to report their earnings for calendar year 1999. So the price index for 1999 was utilized to inflate 1999 earnings to 2007 dollars. Monetary amounts in the American Community Survey are slightly different. The ACS ascertains income over the prior year. But the ACS is a rolling survey, collecting information from respondents in each month from January 2007 to December 2007. Therefore, the income data span the months from January 2006 to November 2007. The average of the CPI-U-RS for 2006 and 2007 was utilized to deflate the 2007 ACS incomes and earnings.

¹⁴ In the household equivalence literature, adjusted household income = Household income / (Household size)^{adjustment parameter}

The adjustment parameter ranges between 0 and 1. If an adjustment parameter of 1 is assumed, adjusted household income equals household income per person and no economies of scale are allowed for. Alternatively, if the adjustment parameter is set to 0, adjusted household income equals household income and we would be assuming all individuals with the same household income are equally well off regardless of the size of their household.