THE PAHRC REPORT RESEARCH SPOTLIGHT

THE EDUCATION BOOST
LIFTING FAMILIES OUT OF POVERTY THROUGH EDUCATIONAL INVESTMENTS

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Education is a tool that helps to facilitate economic mobility and lift families out of poverty. Educational improvements are directly linked to better-paying jobs, higher incomes, and greater intergenerational economic mobility. The expected earnings potential of those with a bachelor’s degree is 65% higher than for those with a high school diploma and 129% higher than for individuals with less than a high school diploma. Individuals at the lowest family wealth quartile are four times more likely to move to the highest family wealth quartile if they have a bachelor’s degree. The powerful role of education in catalyzing economic mobility will likely continue as the number of jobs requiring a college education, which has doubled in the last 40 years, is expected to increase to 63% of all occupations by 2018.

Education can play an especially important role in lifting families out of poverty when paired with rental assistance. Rental assistance reduces the amount a household spends on rent, allowing families to make greater investments in education, health, and their children’s well-being. Yet lower levels of educational attainment for renters receiving rental assistance compared to low-income unassisted renters suggest that rent-assisted households are starting a step behind. Rent-assisted adults may have greater educational investments to make when compared to unassisted low-income adults in order to improve their economic mobility. The 2016 PAHRC Report: Housing is a Foundation reports that one in three adults receiving rental assistance lacks a high school diploma or GED (31.19%), compared to one in five unassisted low-income renters (19.87%). Similarly, only one in twelve adults (8.11%) receiving rental assistance has a college degree compared to almost one in five low-income unassisted renters (18.67%).

This report explores the gaps in educational attainment between rent-assisted households and low-income unassisted renters. It also estimates the value that improvements in education can have on positive exits from rental assistance and explores the costs and barriers to low-income individuals attending college. The findings demonstrate that education can be an important catalyst for economic mobility for rent-assisted households, but that further education may be difficult for many rent-assisted individuals to achieve without supports to address the additional challenges facing many individuals receiving rental assistance.
EXPLORING THE RENTAL ASSISTANCE EDUCATIONAL ATTAINMENT GAP

The difference in the average level of educational attainment for rent-assisted and unassisted household heads provides information on how rent-assisted individuals may differ from their low-income peers, and how best to use educational resources to improve economic mobility for families receiving rental assistance. The gap in high school completion or beyond is 7.4 percentage points lower for rent-assisted household heads compared to their unassisted very low-income peers and the gap for college completion and beyond is 7.7 percentage points lower for rent-assisted household heads. Yet these gaps in educational attainment differ by age, accounting for some of the overall difference in average education levels between rent-assisted and unassisted renters.

THE EDUCATIONAL ATTAINMENT PERCENTAGE POINT GAP BETWEEN HOUSEHOLD HEADS WITH RENTAL ASSISTANCE AND UNASSISTED VERY LOW-INCOME HOUSEHOLD HEADS

Looking at educational attainment gaps by age group, two important trends emerge. First, seniors drive a large portion of the high school and beyond educational attainment gap between rent-assisted and unassisted very low-income household heads. Seniors over 85 report a rate of high school completion or beyond 17 percentage points below their peers. Seniors over 65 report a high school or beyond completion rate 13 percentage points below their peers. Nearly half of rent-assisted households are headed by seniors, a much larger percentage than seniors heading unassisted very low-income households. Thus seniors drive the high school educational attainment gap for all rent-assisted households. In a similar way, 18-29 year olds receiving rental assistance drive the college completion gap.
A second and related trend is the narrowing of the high school completion and beyond gap for younger rent-assisted households versus their very low-income peers and the growing gap in college completion. For older generations, there is little difference in the rate of college completion between rent-assisted and unassisted very low-income heads. Instead, the major educational attainment gap is in high school completion. This trend, however, has flipped for those below age 65. College attainment represents the major disparity for rent-assisted households compared to their low-income unassisted peers below 65, except for those under 30. This trend may reflect the changing labor market over time, in which a high school diploma is increasingly less likely to assure an adequate wage. At the same time, college costs have risen significantly in the last 20 years, making paying for college more challenging for low-income individuals and potentially delaying college completion for those under 30.

Based on these trends, different needs emerge for different age groups served by rental assistance. Senior heads with rental assistance are more likely to lack tools traditionally gained through high school education and may need assistance navigating complex healthcare or financial systems. Without a GED, many rent-assisted seniors could have difficulty obtaining part-time employment if they so desired and were physically able to work in retirement. At the same time, middle-aged rent-assisted households, having completed high school, may hope to focus on college completion and need supports to help them manage family, work, and school. Finally, many rent-assisted individuals under 30 have delayed completing high school or enrolling in college and may need encouragement along with financial assistance and other supports to attend college.

**THE IMPACT OF EDUCATION ON EXITING RENTAL ASSISTANCE**

To better quantify the boost education provides low-income families, we estimate the chances of positively exiting rental assistance over time, based on improvements in education for heads of families receiving rental assistance. The Panel Survey of Income Dynamics (PSID) follows families over multiple years and asks questions about changes in housing, income, education, and health, allowing researchers to better understand the role of education in positive exits from rental assistance. In this case, a positive exit from rental assistance is an exit in which the household head has a source of income reported in the previous year.

**THE EDUCATIONAL ATTAINMENT PERCENTAGE GAP BETWEEN HOUSEHOLD HEADS WITH RENTAL ASSISTANCE AND LOW-INCOME PEERS BY AGE GROUP**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rent-Assisted Household Heads</th>
<th>Unassisted Household Heads</th>
<th>High School Diploma</th>
<th>College Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 85*</td>
<td>53.5%</td>
<td>72.4%</td>
<td>-17%</td>
<td></td>
</tr>
<tr>
<td>65-84***</td>
<td>62.9%</td>
<td>66.8%</td>
<td>-13%</td>
<td></td>
</tr>
<tr>
<td>50-64**</td>
<td>61.2%</td>
<td>63.3%</td>
<td>-2%</td>
<td></td>
</tr>
<tr>
<td>40-49**</td>
<td>67.6%</td>
<td>63.8%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>30-39***</td>
<td>70.4%</td>
<td>76.2%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>18-29***</td>
<td>74.2%</td>
<td>83.4%</td>
<td>9%</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  **p<.01  ***p<.001 High School/College

*Rent-Assisted Household Heads  Unassisted Household Heads  High School Diploma  College Degree*
Using a statistical model that accounts for the length of time that someone may receive rental assistance, we estimate the impact of advances in education for the household head on the chance of a household’s positive exit from rental assistance. Since many factors can impact why a family leaves rental assistance (with income), we control for a number of additional life circumstances and demographic factors that have been shown to be important to rental assistance duration. For example, families with a head and spouse (married or living together) often have twice the earning potential and would have a greater chance of exiting. Age, income, children, and labor force status would also impact a family’s ability to leave rental assistance.

Our statistical analysis estimates that for every additional year of education obtained by the household head, the chances of the family leaving rental assistance with income increase by 11%. Thus for a high school graduate earning an associate’s degree, the household’s chances of exiting rental assistance with income would increase 22%. Earning a college degree would increase their chances of a positive exit by 44%. These results demonstrate how education is an effective tool to help families exit rental assistance.

This analysis also displays interesting patterns in the impact of demographic factors on positive exits from rental assistance. For example, households with a head and spouse had a nearly 20% higher chance of a positive exit from rental assistance than did households with a single household head. Thus the presence of a potential extra earner or an added resource for child care, household chores, etc. can boost the ability for families to move away from rental assistance and afford housing on their own. Naturally, increases in household income also increase the chances of a positive exit, as does the presence of an employed household head. Households with disabled heads had the lowest chances of exit compared to households with working heads, with a
nearly 90% lower chance of exit than a working-head household. Retired and stay at home heads had an approximately 80% lower chance of a positive exit compared to working heads. Households with unemployed heads and student heads also had lower chances of exit, but only about half-again as high as a household’s chances of exit with a working head. As household heads age, they reduce their chance of a positive exit by 3% a year. For example, a household with a 60 year-old head would have a 30% lower chance of exit than a household with a 50 year old head. Finally, larger households also have lower chances of positive exits, likely because larger households often need more expensive rental units and face higher total costs for necessities than smaller families. For every additional family member, the chance of a positive exit from rental assistance decreased 9%. Thus a family of four would have nearly a 30% lower chance of a positive exit than a single-person household. These patterns provide information about which families might move more quickly toward exiting rental assistance and those that may need additional supports.

**PATHWAYS TO EDUCATION**

Education is a valuable catalyst, which can help rent-assisted families improve their ability to afford a rental unit. Yet assisted households must often make lengthy investments in education to qualify for higher paying jobs, which will enable them to afford housing in the private market. Below, we estimate the net cost of college for students from families making less than $30,000 and the length of time it might take a rent-assisted adult to complete a college degree. We also investigate patterns in college attendance for low-income students to understand which schools might be most accessible to adult and part-time learners.

Considering scholarships and grants, the average net cost of college for students in families earning less than $30,000 varies from $12,337 to obtain a two year degree at a public university to $72,630 to obtain a four year degree at a private university. With an average annual household income of around $13,000, it would take a rent-assisted adult who is under 50 years old nearly 29 years to earn a four year degree and nine years to earn an associate’s degree at a public university. With an associate’s degree at a public university, spending 10% of his or her yearly annual income on tuition with no additional loans or other sources of financing, it would take a rent-assisted adult who is under 50 years old nearly 29 years to earn a four year degree and nine years to earn an associate’s degree at a public university, spending 10% of his or her yearly annual income on tuition with no additional loans or other sources of financing. On average, rent-assisted households report spending 2% of their income on school costs. At this rate, it would take 144 years to obtain a four year degree and 47 years to obtain a two year degree with no additional loans or other sources of financing.

Despite the cost, a significant number of low-income students are enrolled in college. Just over one quarter of college students come from families earning less than $30,000 and almost 40% receive Pell Grants. More first-year low-income students attend two year institutions than attend four year institutions. Two-year institutions, like community colleges, may offer lower costs and greater flexibility for part-time students. Indeed, low-income students report higher rates of part-time enrollment and gap years due to cost concerns.
Low-income students also attend for-profit universities at higher rates than students from families with higher incomes. Nearly 18% of students receiving Pell grants attended a for-profit university in 2014, compared to 11% of students without Pell grants. For-profit universities also serve low-income students more readily than do nonprofit and public colleges, with 63% of students attending for-profit universities receiving Pell grants compared to 37% at nonprofit and public universities. This trend raises concerns that low-income students attending for-profit universities may not be receiving the same level of quality or return on their educational investments than do students attending nonprofit schools.

Universities are also serving a sizeable number of adult learners. Nearly one-third of students are adult learners over 25. More than half of adult learners attend college part time with 70% of all undergraduate adult learners attending public schools.

Education is a costly investment that many low-income and adult learners are making. However, additional resources are needed to help low-income and adult learners reach their educational goals more quickly and cost effectively.
WHERE IS EDUCATION MORE ACCESSIBLE TO LOW-INCOME STUDENTS?

In addition to cost, the accessibility of affordable education options is an important factor in whether or not low-income individuals attend college. Both factors vary by location, with some areas serving more low-income students than others. The map above represents the average net cost of one year of college for students from families earning less than $30,000 by state. The Midwest and Southeast exhibit the most states with average first year net costs below $10,000 for low-income students. In contrast, the Northeast exhibits more states with average first year net costs for low-income students above $15,000.

At the same time, the percent of individuals from families earning less than $30,000 in their first year of college also varies by state, with colleges serving higher percentages of low-income students in the upper Midwest, parts of the Northeast corridor and Pacific Northwest, as seen in the map on page nine. Naturally, a higher percentage of low-income students are served in states where more low-income families live. The correlation between the percent of first-year low-income students served and the number of low-income individuals under 50 in a county is very high, suggesting that the market may be responsive to the demand for education at lower price-points. However, looking at low-income students served by metro area, there are significant service areas for low-income students in most states, suggesting that there are opportunities for low-income students to enroll in college in most states.

However, there is evidence that many low-income students do not complete their degrees and drop out along the way. In 2013, 65% of non-Pell eligible students graduated with a bachelor’s degree within six years, while only half of all students receiving Pell Grants earned the same distinction. These differences in completion rates cannot be explained by differences in academic performance alone. Students from lower socio-economic statuses that earned math scores in the top quartile in high school were less likely to graduate with a bachelor’s degree compared to students of higher socioeconomic status who earned similar or lower math scores in high school. Thus despite the potential accessibility for rent-assisted adults to enroll in college, supports for college completion are needed.
Beyond the cost of education, low-income and rent-assisted adults face additional barriers to college enrollment and completion. Access to childcare, the need to work while attending school, transportation, peer network support, and lack of internet access are a few of the barriers faced more frequently by low-income students. A larger percentage of families receiving rental assistance have children under 18 versus their low-income peers, likely necessitating some type of childcare for non-school hours. Student parents, who make up nearly one quarter of all undergraduates, are more likely to be low-income and work full-time while attending school, making access to childcare a critical barrier to GED or college enrollment. Yet only half of two- and four-year public schools and fewer than 10% of private schools offer child-care facilities. Low-income students also are more likely to work at least 30 hours a week while attending school full-time, putting these students at risk for falling behind in their studies. Likewise, reliable low-cost transportation is a factor in an individual’s ability to attend school. Rent-assisted households spend nearly 7% of their expenses on transportation, their largest expense after housing costs and food. The expense of commuting to work or school can be problematic for many families receiving rental assistance. At the same time, internet connectivity can also present an obstacle to education. About half of renters receiving rental assistance have access to a computer in their home and slightly less than half have accessed the internet from home in the last year. Online access and word processing capabilities are important tools for educational success and accessing these from home can lead to academic improvements for low-income students.

Low-income students may also have fewer people in their peer network who can help guide them through the college application and enrollment process compared to their higher income peers, putting low-income students at a disadvantage before even being accepted to college. Low-income students are more likely to attend high schools with lower student to guidance counselor ratios and be first generation college students without direct family having attended college. Low-income first generation college students perceive that they are lacking support at home, are less likely to be academically prepared for college and are more likely to be financially independent, have children, speak English as a second language, work full-time while enrolled, and have a disability. As a result, one study found that only 11% of low-income first generation students earned a bachelor’s degree within six years compared to 55% of their peers.

Promising strategies to increase enrollment and completion for low-income and first generation students include college-preparatory courses, programs that provide advising and test preparation assistance, and mentoring programs that help students transition to college. Strategies that could support college completion for rent-assisted households include childcare support, assistance with transportation costs, mentoring or tutoring support, and online access.
CONCLUSION

Education is an important tool for economic mobility. However, many rent-assisted adults face lower rates of educational attainment than their unassisted low-income peers and may need additional supports to reach important educational milestones. By estimating the value of education and comparing demographic trends in educational attainment for rent-assisted and very low-income individuals, this analysis provides helpful information for targeting resources toward educational improvements for adults receiving rental assistance.

The findings suggest that demographic factors, especially age, are important components of understanding how rent-assisted individuals might differ from their peers and which supports might be needed to meet their educational goals. Older rent-assisted household heads report significantly lower rates of high school completion than their very low-income unassisted peers. However, they report no significant difference in college completion compared to their unassisted peers. This trend begins to flip for middle-aged rent-assisted household heads, who report similar levels of high school completion compared to peers, but significantly lower rates of college completion. Yet young rent-assisted household heads demonstrate significant gaps in both levels of attainment. Given this pattern, college enrollment and support resources might be most needed by working-age rent-assisted individuals. Rent-assisted individuals under 30 may also need support to earn a GED.

Analyses presented in this report also demonstrate how education plays a direct role in facilitating positive exits from rental assistance. Findings predict that for every additional year of education obtained by a rent-assisted household head, the family’s chance of a positive exit is 11% higher than it would be without any additional education. Yet the cost of college is still a significant hurdle for many families. Financing college out of pocket at 10% of their yearly income, the average rent-assisted individual under 50 may need up to 29 years to obtain a college degree. External resources will be needed to help low-income adults receiving rental assistance pay for college and matriculate in a reasonable amount of time. Additional barriers to education can include childcare, transportation, internet connectivity, and peer networks.

Yet there are opportunities for low-income adults to obtain a college education in each state and a high correlation between the percent of low-income first-year students enrolled in college in a metro area and the number of low-income individuals living in that area. This relationship suggests that the educational market may be responsive to opening the door for low-income students to attend college. However, the high drop-out rate for low-income students and the larger obstacles many face in college completion implies that additional supports are critical to helping them reach their educational goals.

Housing providers and their partners can play an important role in helping residents overcome barriers to education and connecting them with resources to complete their training. Resources such as onsite child care, computer labs or free wireless internet, education savings accounts, and case management can all help rent-assisted individuals’ navigate the pathway to economic mobility through education quicker and reduce the obstacles they may face.
REFERENCES

9. PAHRC tabulation of American Housing Survey (AHS) 2013. This figure represents the percentage point difference between rent-assisted household heads and unassisted low-income household heads.
14. We use a Cox Proportional Hazards Model to estimate the hazard (or chance) of a household experiencing a positive exit from rental assistance based on a series of covariates. Respondents were household heads included in the Panel of Income Dynamics (PSID) from 1986 through 2013 for households that did not experience a change in household head and reported that the government paid some or all of their rent or living in public housing at some time during their duration in the study. The dependent variable was a positive exit, or a departure from rental assistance from one year to the next while still reporting positive income for the previous year. Covariates included years of education, age, household income from wages, the presence of a spouse, and a series of dichotomous variables explaining the labor market status of the household head (student, disabled, retired, unemployed, housewife or other) compared to an employed household head.
20. Average net price is generated by subtracting the average amount of federal, state or local government, or institutional grant and scholarship aid for full-time first-year students during 2013-2014 from the total cost of attendance for that year. Total cost of attendance is the sum of published tuition and required fees (lower of in-district or in-state), books and supplies and the weighted average room and board and other expenses.
22. PAHRC tabulation of the Panel of Supplemental Income Dynamics (PSID) 2013.
24. PAHRC analysis of Institutional Postsecondary Education Data System (IPEDS) 2014 (Student Financial Aid and Net Cost and Institutional Characteristics File). Schools were classified according to their listed sector. Students attending non-degree granting universities were excluded.
25. This only includes full-time first-year undergraduates as of October 2013. Students from families earning below $30,000 that do not receive federal aid and are not in their first year of postsecondary school are not included.
26. This includes all full and part-time undergraduate students as of October 15.
27. PAHRC tabulation of Institutional Postsecondary Education Data System (IPEDS) 2014.
31. PAHRC analysis of Institutional Postsecondary Education Data System (IPEDS) 2014 (Institutional Characteristics and Fall Enrollment Files). Adult learners are aged 25 and older. Schools were classified according to their listed sector. Students attending non-degree granting universities were excluded.
32. The correlation between the number of adults below poverty and the number of first-year full-time students attending undergraduate institutions from families earning below $30,000 is .91. PAHRC analysis of IPEDS 2014 and ACS 2010-2014 at the county level. Low-income adults are adults earning below the poverty level between the age of 18-50.
44. PAHRC tabulation of the Panel of Supplemental Income Dynamics (PSID) 2013.
46. PAHRC tabulation of the Panel of Supplemental Income Dynamics (PSID) 2013.
ABOUT PAHRC

The Public and Affordable Housing Research Corporation (PAHRC) is HAI Group’s independent, non-profit research center dedicated to conducting research that promotes the national conversation about the importance of affordable housing. Through industry collaboration, data collection and independent research, PAHRC spotlights the impact, outcomes and value affordable housing brings to the families it serves and to the communities it supports. PAHRC also delivers data and tools that assist researchers, practitioners and advocates to build an evidence-based case for why affordable housing matters.

PAHRC’s mission is to provide independent research and relevant data to support the efforts of the public and affordable housing industry and its stakeholders.

PAHRC’s vision is to be a central hub for data and research on public and affordable housing.