RACE, YOUTH, AND THE DIGITAL DIVIDE: A RESEARCH AND POLICY INITIATIVE

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Outline

- Documenting the Digital Divide
- The Causes of the Digital Divide
- The Consequences of the Digital Divide
- Patterns of Internet Use in Community Centers
Documenting the Digital Divide
Data

- Computer and Internet Usage Supplement to the September 2001 Current Population Survey

- Conducted by the U.S. Census Bureau and the Bureau of Labor Statistics

- Representative of the entire U.S. population and interviews approximately 50,000 households

- Contains a wealth of information on computer and Internet use by families and individuals.

- Detailed information on computer and Internet use by individuals not found in other government data sources.

- Used in Department of Commerce Reports:
  - Falling Through the Net Series
  - A Nation Online: How Americans are Expanding Their Use of the Internet
Home Computer and Internet Use by Race/Ethnicity among Children (Ages 5-17), United States

- White
- Black
- Latino
- Mexican
- Puerto Rican
- Cuban
- Central/South American
- Other Latino
- Asian
- Native American

Legend:
- Blue: Percent with Home Computer
- Red: Percent Using Internet at Home
Percent of U.S. Population (Ages 18+) with Access to a Home Computer by Race/Ethnicity
The Causes of the Digital Divide
Percent of Adults (Ages 18+) who Have a Home Computer by Income and Race/Ethnicity

Income Level

White  
Black  
Latino  

<$10,000  
$10,000- $20,000  
$20,000- $40,000  
$40,000- $60,000  
>$60,000  

0%  
10%  
20%  
30%  
40%  
50%  
60%  
70%  
80%  
90%  
100%  

Income Level
## Explanations for Racial/Ethnic Disparities in Home Computer Rates

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Latino</th>
<th>Mexican</th>
<th>Cuban</th>
<th>Puerto Rican</th>
<th>Central/ South Amer.</th>
<th>Native Amer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/minority gap in home computer rate</td>
<td>0.244</td>
<td>0.242</td>
<td>0.296</td>
<td>0.224</td>
<td>0.139</td>
<td>0.170</td>
<td>0.199</td>
</tr>
<tr>
<td>Contributions from racial differences in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex and age</td>
<td>-4.6%</td>
<td>-10.5%</td>
<td>-9.6%</td>
<td>2.4%</td>
<td>-14.4%</td>
<td>-16.6%</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Marital status and children</td>
<td>9.6%</td>
<td>-0.2%</td>
<td>-1.3%</td>
<td>3.8%</td>
<td>7.7%</td>
<td>0.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Education</td>
<td>9.4%</td>
<td>22.5%</td>
<td>21.3%</td>
<td>14.7%</td>
<td>32.1%</td>
<td>25.5%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Income</td>
<td>27.4%</td>
<td>26.6%</td>
<td>24.3%</td>
<td>20.4%</td>
<td>45.2%</td>
<td>28.4%</td>
<td>36.2%</td>
</tr>
<tr>
<td>Region</td>
<td>3.8%</td>
<td>-4.1%</td>
<td>-4.3%</td>
<td>2.2%</td>
<td>-1.3%</td>
<td>-5.0%</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Central city status</td>
<td>0.3%</td>
<td>-0.8%</td>
<td>-0.5%</td>
<td>-2.9%</td>
<td>-1.3%</td>
<td>-2.3%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Employment / Occupation</td>
<td>2.8%</td>
<td>6.3%</td>
<td>6.3%</td>
<td>2.8%</td>
<td>4.0%</td>
<td>9.7%</td>
<td>4.4%</td>
</tr>
<tr>
<td>All included variables</td>
<td>48.6%</td>
<td>39.7%</td>
<td>36.1%</td>
<td>43.3%</td>
<td>72.0%</td>
<td>40.0%</td>
<td>47.4%</td>
</tr>
</tbody>
</table>

Notes: (1) The sample consists of adults ages 25 and over  (2) Contribution estimates are mean values of the decomposition using 1000 subsamples of whites.  See text for more details
### Explanations for Racial/Ethnic Disparities in Home Internet Use Rates

<table>
<thead>
<tr>
<th></th>
<th>Black</th>
<th>Latino</th>
<th>Mexican</th>
<th>Cuban</th>
<th>Puerto Rican</th>
<th>Central/ South Amer.</th>
<th>Native Amer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/minority gap in home computer rate</td>
<td>0.234</td>
<td>0.274</td>
<td>0.319</td>
<td>0.234</td>
<td>0.176</td>
<td>0.232</td>
<td>0.193</td>
</tr>
<tr>
<td>Contributions from racial differences in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex and age</td>
<td>-8.5%</td>
<td>-16.5%</td>
<td>-16.0%</td>
<td>0.8%</td>
<td>-20.6%</td>
<td>-20.0%</td>
<td>-18.2%</td>
</tr>
<tr>
<td>Marital status and children</td>
<td>7.8%</td>
<td>-0.1%</td>
<td>-0.7%</td>
<td>0.5%</td>
<td>5.6%</td>
<td>-0.5%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Education</td>
<td>15.6%</td>
<td>36.6%</td>
<td>38.0%</td>
<td>20.9%</td>
<td>42.0%</td>
<td>33.2%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Income</td>
<td>24.4%</td>
<td>20.8%</td>
<td>19.5%</td>
<td>16.6%</td>
<td>30.8%</td>
<td>21.6%</td>
<td>33.8%</td>
</tr>
<tr>
<td>Region</td>
<td>1.7%</td>
<td>-2.5%</td>
<td>-2.6%</td>
<td>-1.1%</td>
<td>-0.5%</td>
<td>-2.8%</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Central city status</td>
<td>0.2%</td>
<td>-0.5%</td>
<td>-0.3%</td>
<td>-2.1%</td>
<td>-0.9%</td>
<td>-1.2%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Employment / Occupation</td>
<td>4.2%</td>
<td>7.9%</td>
<td>8.1%</td>
<td>4.0%</td>
<td>4.8%</td>
<td>10.3%</td>
<td>7.3%</td>
</tr>
<tr>
<td>All included variables</td>
<td>45.5%</td>
<td>45.8%</td>
<td>45.9%</td>
<td>39.7%</td>
<td>61.2%</td>
<td>40.6%</td>
<td>54.4%</td>
</tr>
</tbody>
</table>

Notes: (1) The sample consists of adults ages 25 and over  (2) Contribution estimates are mean values of the decomposition using 1000 subsamples of whites. See text for more details.
Adjusted Home Computer and Internet Use by Race/Ethnicity among Adults (Ages 25+)

Adjusted Computer Rates
Adjusted Internet Rates

White
Mexican / non-Spanish
Mexican / Spanish only
Puerto Rican / non-Spanish
Puerto Rican / Spanish only
Cuban / non-Spanish
Cuban / Spanish only
Central/South American / non-Spanish
Central/South American / Spanish only
The Consequences of the Digital Divide
School Enrollment among Children Ages 16-18

Without Access to Home Computer: 85.4%
With Access to Home Computer: 95.2%
School Enrollment Differences from Access to Home Computers

Unadjusted Rates

Regression Adjusted Rates

9.8%
7.7%
Home Computer Ownership and Educational Outcomes for Youths (Ages 16-19)
Who are at Risk of Going to College*

* completed 11th grade as of Sept.01 or completed HS but no diploma
Patterns of Internet Use in Community Centers
### Internet Use by Location (Ages 8-25)


<table>
<thead>
<tr>
<th>Location</th>
<th>1998</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of youth who use the Internet at home</td>
<td>25.6%</td>
<td>40.3%</td>
<td>51.3%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>17,613</td>
<td>28,465</td>
<td>36,746</td>
</tr>
<tr>
<td>Percent of enrolled youth who use the Internet at school</td>
<td>14.4%</td>
<td></td>
<td>52.7%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>9,887</td>
<td></td>
<td>37,754</td>
</tr>
<tr>
<td>Percent of youth who use the Internet at a public library</td>
<td>2.7%</td>
<td>3.6%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>1,872</td>
<td>2,554</td>
<td>7,261</td>
</tr>
<tr>
<td>Percent of youth who use the Internet at a community center</td>
<td>0.12%</td>
<td>0.15%</td>
<td>0.87%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>84</td>
<td>103</td>
<td>623</td>
</tr>
</tbody>
</table>

**Sample size**

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30,608</td>
<td>30,469</td>
<td>35,874</td>
</tr>
</tbody>
</table>

**Notes:**
(1) The sample consists of youth ages 8-25. (2) All estimates are calculated using sample weights provided by the CPS.
### Internet Use by Location and Race/Ethnicity (Ages 8-25)

<table>
<thead>
<tr>
<th>Location</th>
<th>Blacks</th>
<th>Latinos</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of youth who use the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet at home</td>
<td>30.4%</td>
<td>27.1%</td>
<td>61.3%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>3,370</td>
<td>2,882</td>
<td>28,042</td>
</tr>
<tr>
<td>Percent of enrolled youth who use the Internet at school</td>
<td>40.5%</td>
<td>36.4%</td>
<td>59.1%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>4,498</td>
<td>3,866</td>
<td>27,061</td>
</tr>
<tr>
<td>Percent of youth who use the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet at a public library</td>
<td>13.2%</td>
<td>7.9%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>1,466</td>
<td>844</td>
<td>4,453</td>
</tr>
<tr>
<td>Percent of youth who use the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet at a community center</td>
<td>1.4%</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Population (in thousands)</td>
<td>155</td>
<td>88</td>
<td>330</td>
</tr>
<tr>
<td>Sample size</td>
<td>4,318</td>
<td>4,408</td>
<td>24,850</td>
</tr>
</tbody>
</table>

Notes: (1) The sample consists of youth ages 8-25. (2) All estimates are calculated using sample weights provided by the CPS.
Racial/Ethnic Composition of Youths (Ages 8-25)

Youths Using the Internet at Community Centers
- White: 52.9%
- Black: 24.9%
- Hispanic: 14.1%
- Native American: 0.6%
- Asian: 7.6%

All Youths
- White: 63.9%
- Black: 15.5%
- Hispanic: 14.8%
- Native American: 1.3%
- Asian: 4.5%
Family Income Composition of Youths (Ages 8-25)

Youths Using the Internet at Community Centers

- $75,000+, 26.1%
- $0-$25,000, 28.8%
- $50,000-$75,000, 12.9%
- $25,000-$50,000, 32.3%

All Youths

- $75,000+, 24.5%
- $0-$25,000, 27.6%
- $50,000-$75,000, 19.5%
- $25,000-$50,000, 28.4%
Rural/Urban Composition of Youths (Ages 8-25)

Youths Using the Internet at Community Centers
- Rural: 15.5%
- Central City: 41.1%
- Suburbs: 43.5%

All Youths
- Rural: 20.9%
- Central City: 29.0%
- Suburbs: 50.1%
Percent of Youths Using the Internet at Community Centers by Age (3-Year Moving Average)

Summary of Findings

• The Digital Divide is large and does not appear to be disappearing soon.

• Income, education, and language barriers are important causes of the Digital Divide.

• For many groups, however, roughly half of the disparities in technology use remain unexplained.

• The Digital Divide appears to have negative educational consequences for youth.

• Internet use in community centers is low relative to Internet use in homes, schools and libraries, but is growing rapidly.

• Internet use in community centers is relatively high among African-Americans, central city residents, and older youths.
Where to Get More Information:

http://cjtc.ucsc.edu/digitaldivide.html