Education for equity or inherited advantage? Depressive symptoms among first generation college graduates vs college graduates whose parents are also college graduates

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INTRODUCTION

• Educational attainment and parental education predict less depression and lower depressive symptomatology.
• Disadvantaged subgroups face additional social and psychosocial barriers to obtain the same educational benefits as more advantaged subgroups.

METHODS

• Study Population: US Health and Retirement Study (HRS) participants 55 to 63 in 1996 (N=6,645), 2006 (N=4,056), or 2016 (N=6,096)
• Exposure: 4-category variable based on parents’ (highest of mother’s or father’s) and participant’s own completed years of education
• Outcome: Depressive symptoms using 8-item Center for Epidemiologic Studies Depression (CES-D) scale
• Analysis: Linear regression models (adjusted for age, sex, race/ethnicity, place of birth and childhood rurality) evaluated association between college completion and depressive symptoms across cohorts.
• Additional models evaluated effect modification by cohort, sex and race/ethnicity.

RESULTS

Table 1. Baseline characteristics for Health and Retirement Study (HRS) participants, stratified by 4-category exposure by analyzed cohort.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>N (Male)</th>
<th>Female</th>
<th>White</th>
<th>Black</th>
<th>Latino</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Multi-gen</td>
<td>391</td>
<td>292</td>
<td>84%</td>
<td>75%</td>
<td>89%</td>
</tr>
<tr>
<td>Gen 1</td>
<td>202</td>
<td>159</td>
<td>84%</td>
<td>79%</td>
<td>80%</td>
</tr>
<tr>
<td>Gen 2</td>
<td>517</td>
<td>453</td>
<td>84%</td>
<td>79%</td>
<td>80%</td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-gen</td>
<td>339</td>
<td>274</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
</tr>
<tr>
<td>Gen 1</td>
<td>187</td>
<td>152</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
</tr>
<tr>
<td>Gen 2</td>
<td>2774</td>
<td>2397</td>
<td>85%</td>
<td>82%</td>
<td>87%</td>
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<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-gen</td>
<td>575</td>
<td>482</td>
<td>84%</td>
<td>81%</td>
<td>86%</td>
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<tr>
<td>Gen 1</td>
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<td>336</td>
<td>84%</td>
<td>81%</td>
<td>86%</td>
</tr>
<tr>
<td>Gen 2</td>
<td>4013</td>
<td>3476</td>
<td>84%</td>
<td>81%</td>
<td>86%</td>
</tr>
</tbody>
</table>

Figure 1. Association between intergenerational education and depressive symptoms over time compared to the multi-generational reference group

First-gen college graduates had equivalent depressive symptoms to multi-generation college graduates at ages 55-63 in all cohorts.

• Depressive symptoms were equivalent for first-gen and multi-gen graduates by race/ethnicity.
• First-generation women benefited slightly more than first-generation men.
• Depressive symptoms were equivalent for first-generation white compared to first-generation black and first-generation Latino college graduates.

DISCUSSION

• Our findings differ from prior work suggesting that the associations between education and mental health differ by race/ethnicity.
• Consistent with prior work, our study found that women benefit more than men from education.
• Our study also identified a secular trend from 1996 to 2016 among participants who did not graduate from college but had at least one parent college graduate, implying that if parental education offsets some adverse consequences of low education, this may be decreasing over time.
• Our study builds on prior literature by including a first-generation college graduate context in a diverse national sample of White, Black and Latino midlife adults across time.

Strengths

• Racial/ethnic diversity in HRS study population
• Data availability for cohorts across three decades allows us to evaluate the association over time

Limitations

• Cross-sectional design prevents causal inference
• Potential unmeasured confounding

IMPLICATIONS

Additional research across younger and more diverse cohorts may help uncover the mechanisms by which education is protective against depressive symptoms over time.

ACKNOWLEDGEMENTS

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