



MLDS CENTER

Maryland Longitudinal
Data System

Better Data • Informed Choices • Improved Results

Adolescent Homelessness and Long-term Educational and Workforce Outcomes

New Evidence from the Maryland
Longitudinal Data System

Bess A. Rose

Beyond Housing

New York, New York

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Acknowledgements

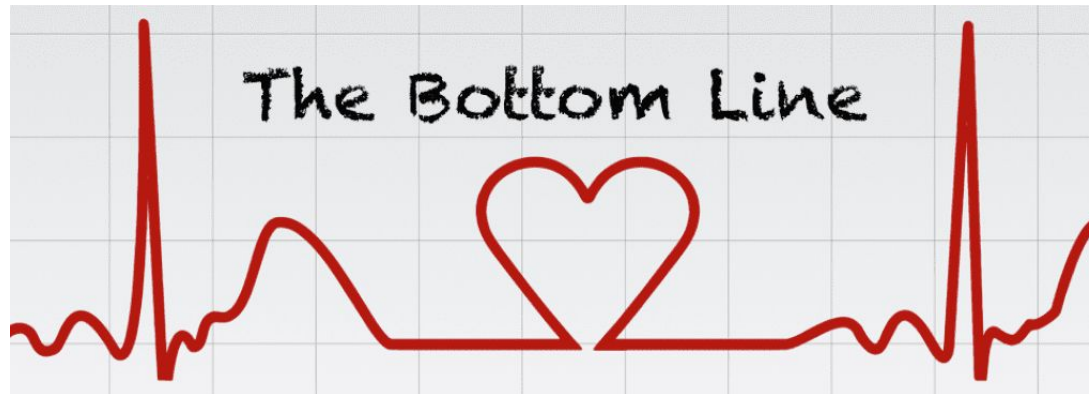
Bess A. Rose, Ed.D., is a member of the Research Branch at the MLDS Center and statistician at the University of Maryland School of Social Work (SSW).

Angela K. Henneberger, Ph.D., is director of the Research Branch at the MLDS Center and Research Assistant Professor at the University of Maryland SSW.

Dawnsha R. Mushonga, Ph.D., LCPC, ACS, NCC, is an assistant professor at the University of Baltimore.

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- Adolescent homelessness leads to **higher chances of dropping out of school** and **lower chances of enrolling in college**
- Among whites not enrolled in college, adolescent homelessness leads to **lower wages after high school**

Overview



- Introduction to the MLDS Center and our poverty study
- Homelessness and poverty
- Dropping out
- Enrolling in college
- Wages earned
- Discussion

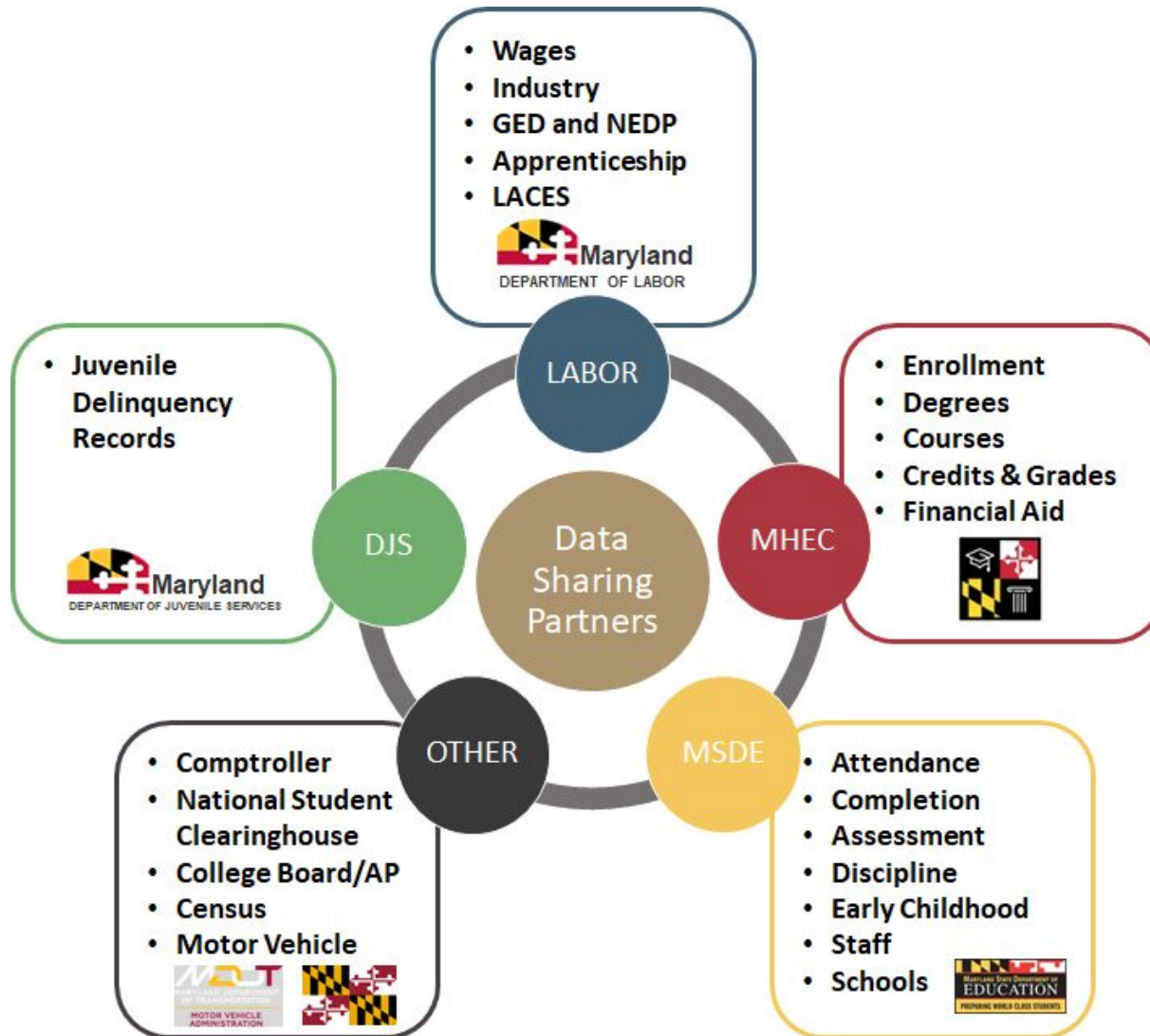
Introduction to the MLDS Center and our poverty study

The MLDS Center

- Our mission: to provide analyses, produce relevant information, and inform choices to improve student and workforce outcomes, while ensuring the highest standards of system security and data privacy.



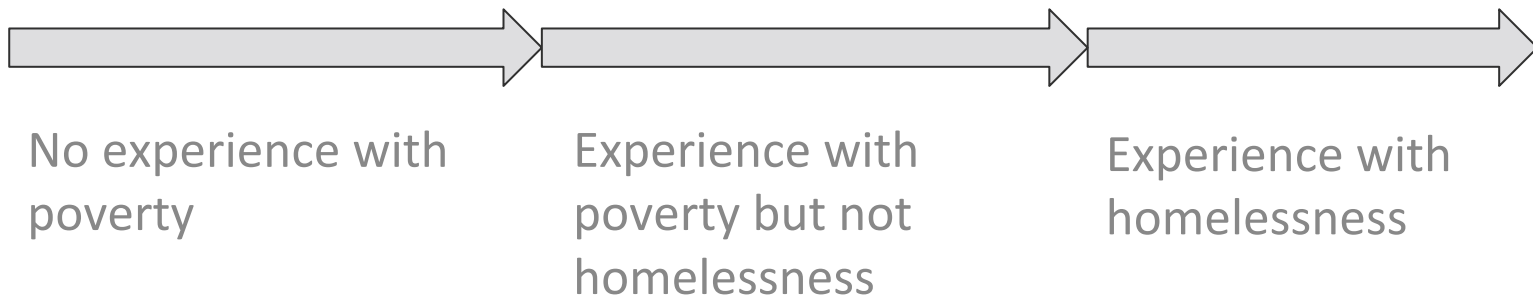
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The MLDS poverty study

- Ongoing study into the effects of adolescent poverty on long-term outcomes
 - Poverty experiences during grades 6-12
 - Poverty at home
 - Concentration of poverty in school
- *Single-cohort study* of all 6th graders in MD public schools starting in 2007-08 (N=52,610)

Homelessness and poverty during adolescence



Poverty:

FARMS eligibility thresholds

- Household income below 185% of federal poverty threshold
→ Below \$45,510 in 2017-18 for a family of 4



Household income thresholds for a family of 4

Homeless students

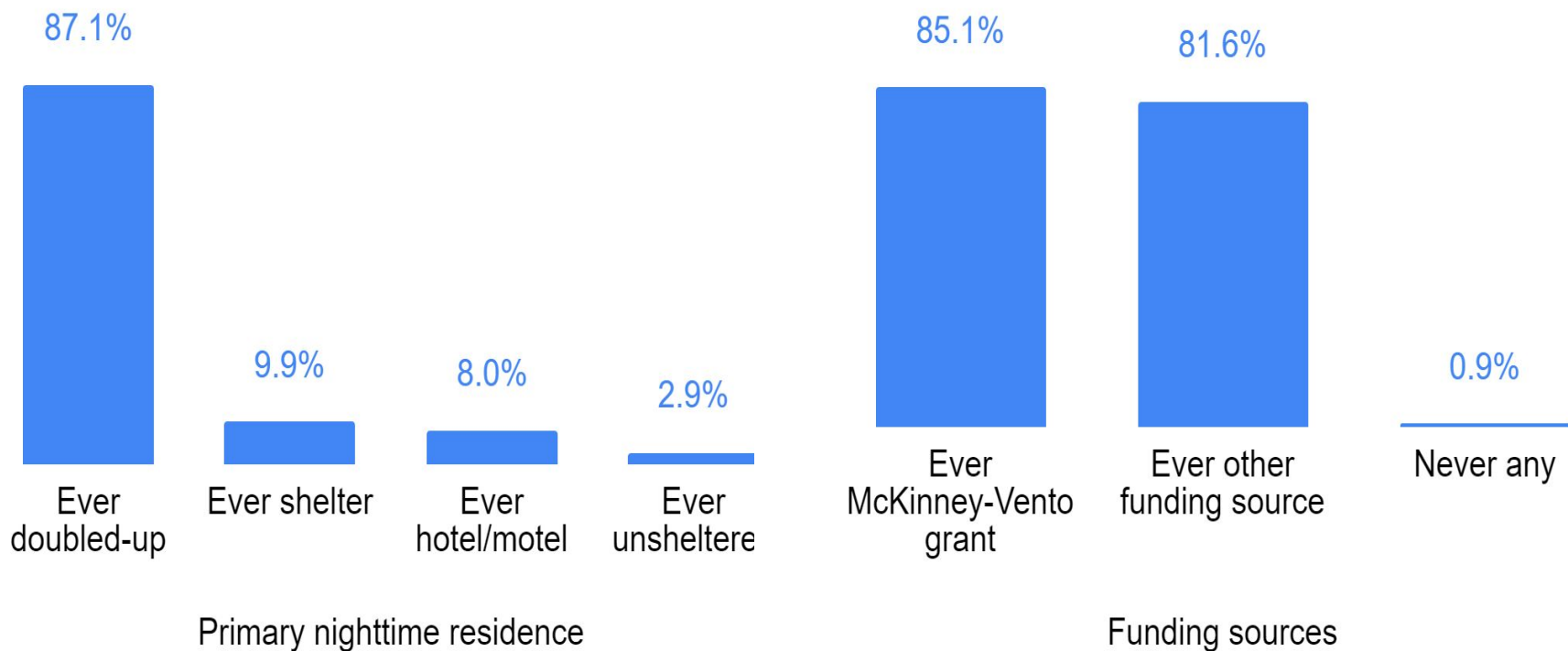
- Under McKinney-Vento, students experiencing homelessness have certain rights
- Definition of homeless includes temporary shared living arrangements, “doubled-up” and “couch surfing”
- All students identified as homeless are automatically eligible for free meals (FARMS)
- The experiences of students who are homeless likely differ from the experiences of students who are eligible for FARMS but not homeless

Poverty and homelessness in a longitudinal context

Looking at students *longitudinally* picks up on higher chances of experiencing poverty or being homeless *at some point in time*

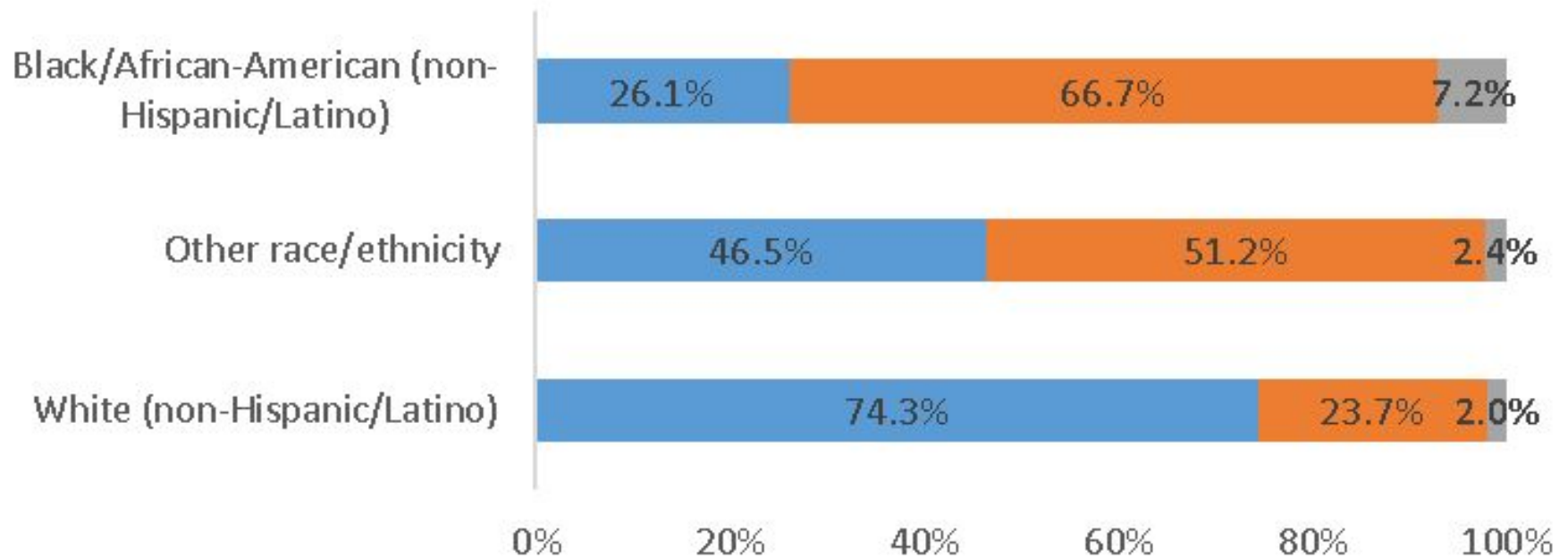
	Point in time for state (2019)	Longitudinal for study cohort (2008 - 2018)
FARMS (includes homeless)	42.3%	48.1%
Homeless	1.5%	3.9%

Homeless students in study cohort



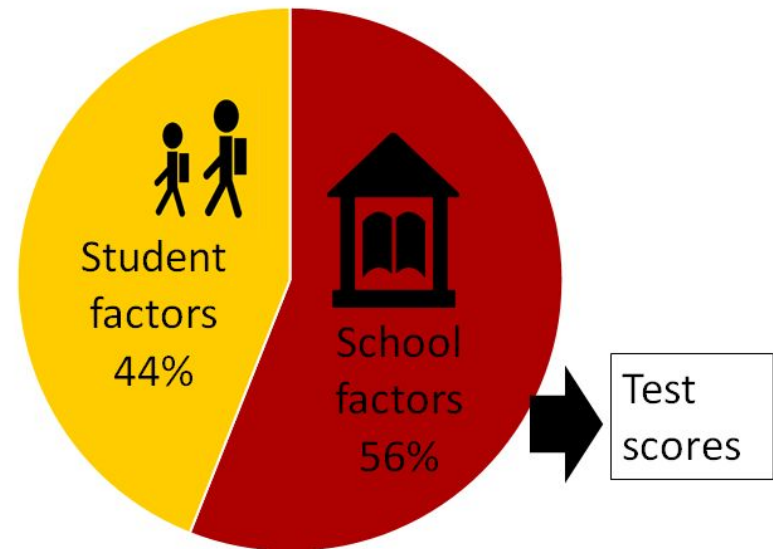
Poverty and homelessness by race/ethnicity

■ Never FARMS or Homeless ■ FARMS but not Homeless ■ Homeless

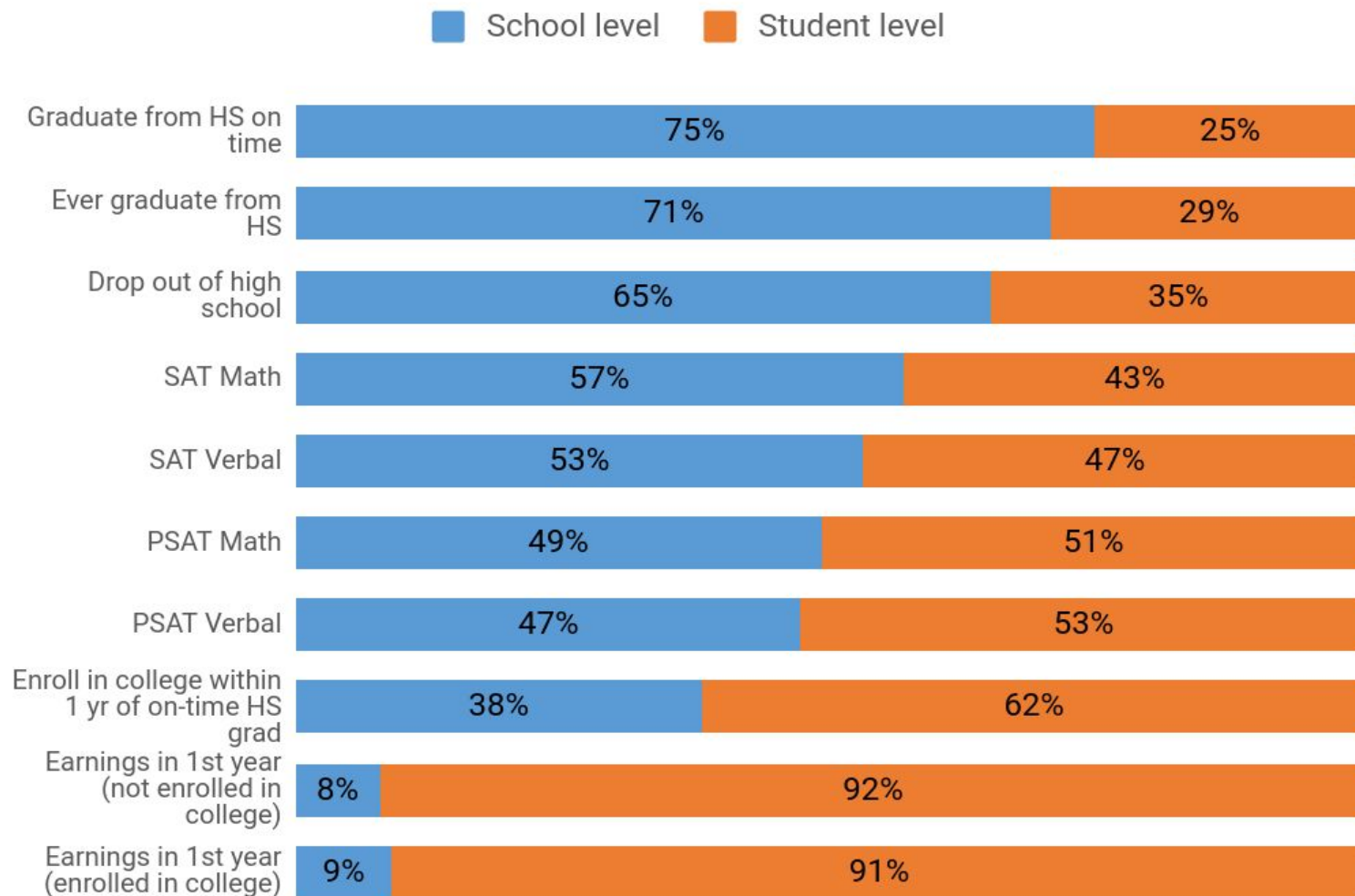


School context

- Students experiencing poverty are clustered in schools
- School-level factors account for most of the variance in many academic outcomes
- School *concentration of poverty* has a distinct effect on outcomes



Role of schools in outcomes



What are the effects of homelessness during adolescence?

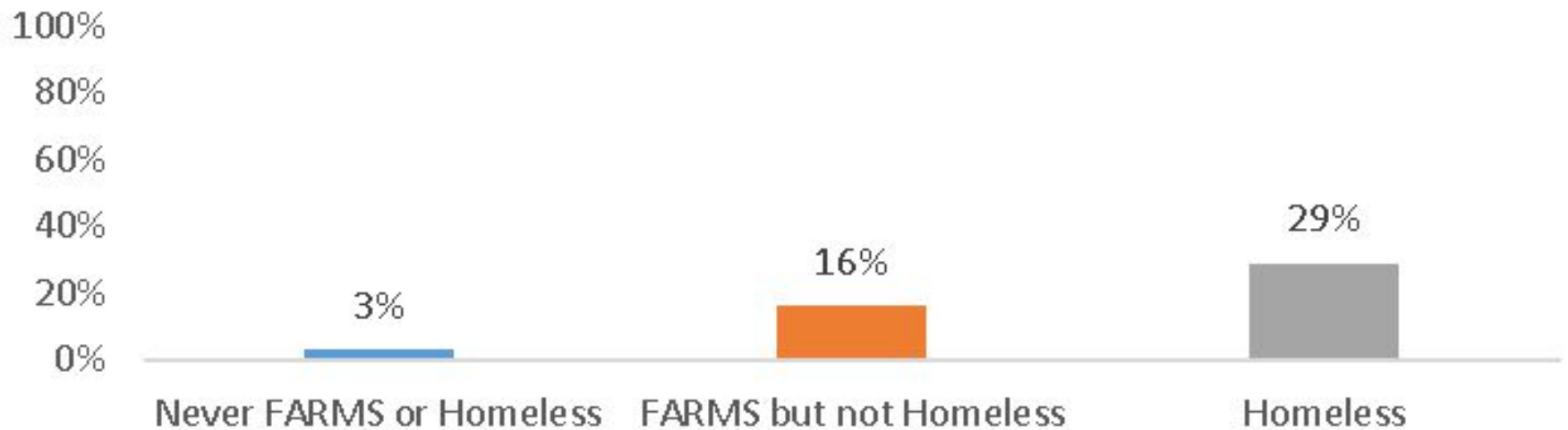
- Are homeless students predicted to have worse outcomes than students experiencing poverty without homelessness, even after controlling for race/ethnicity, prior academic performance, and school context?
- Are results the same across all 3 outcomes (dropout, college enrollment, wages)?

Model results and predictions

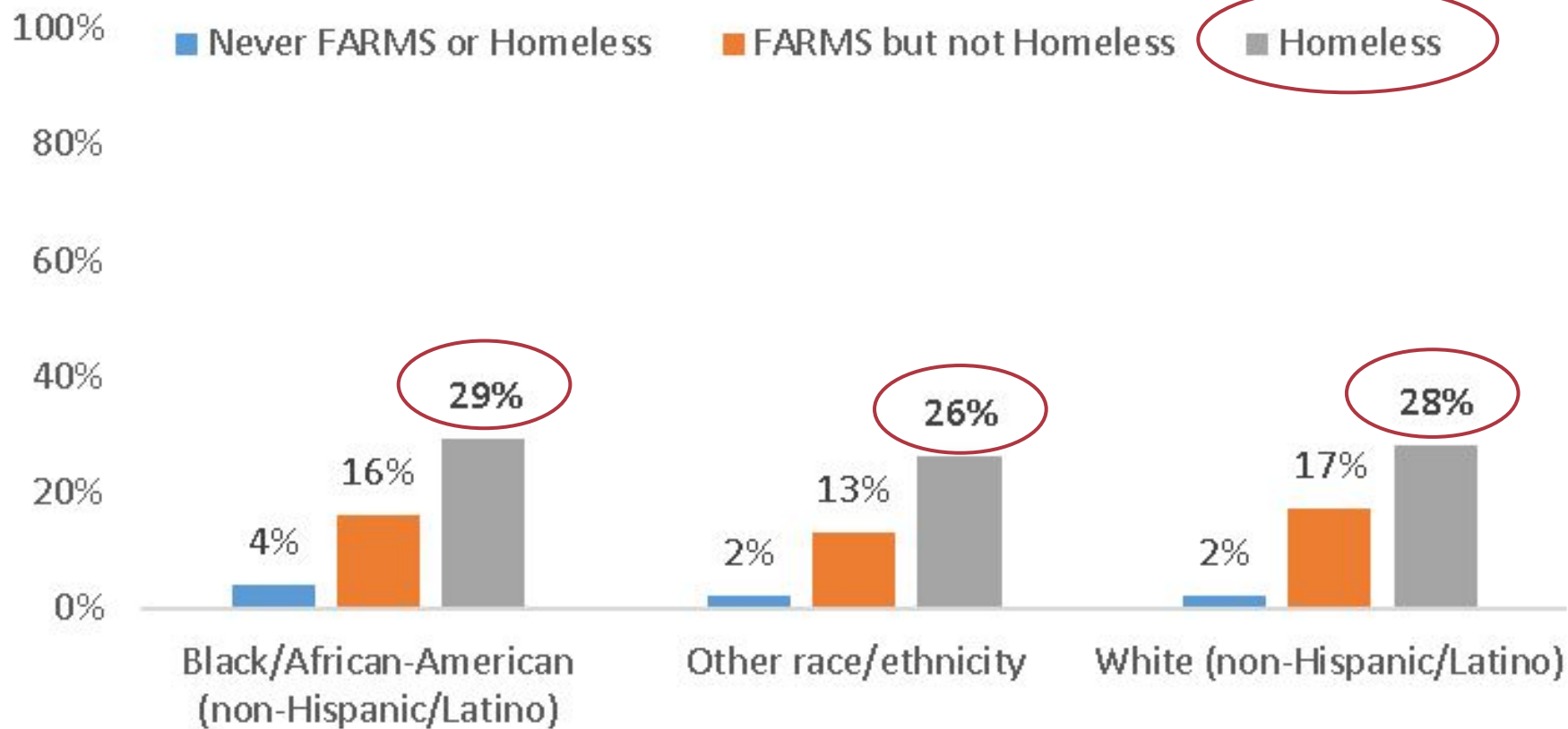
- Multilevel models allow us to estimate the effects of homelessness, apart from race/ethnicity, baseline academic achievement, and school composition
- Results quantify the size of the effect of homelessness compared to poverty alone

Dropping out

Dropout rates by type of poverty



Dropout rates by type of poverty and race/ethnicity



Dropout (N=52,610)

Intercept

B

-2.89

OR

0.06

Student-level

Never FARMS or homeless

-1.24***

0.29***

FARMS but not homeless

referent

referent

Homeless

0.74***

2.10***

Black, non-Hispanic

-0.89***

0.41***

Other race/ethnicity

-0.60***

0.55***

White

referent

referent

Grade 6 Reading

✓

✓

Grade 6 Math

✓

✓

School-level

Sch pct never FARMS or homeless

✓

✓

Sch pct homeless

✓

✓

Sch pct black

✓

✓

Sch pct other race

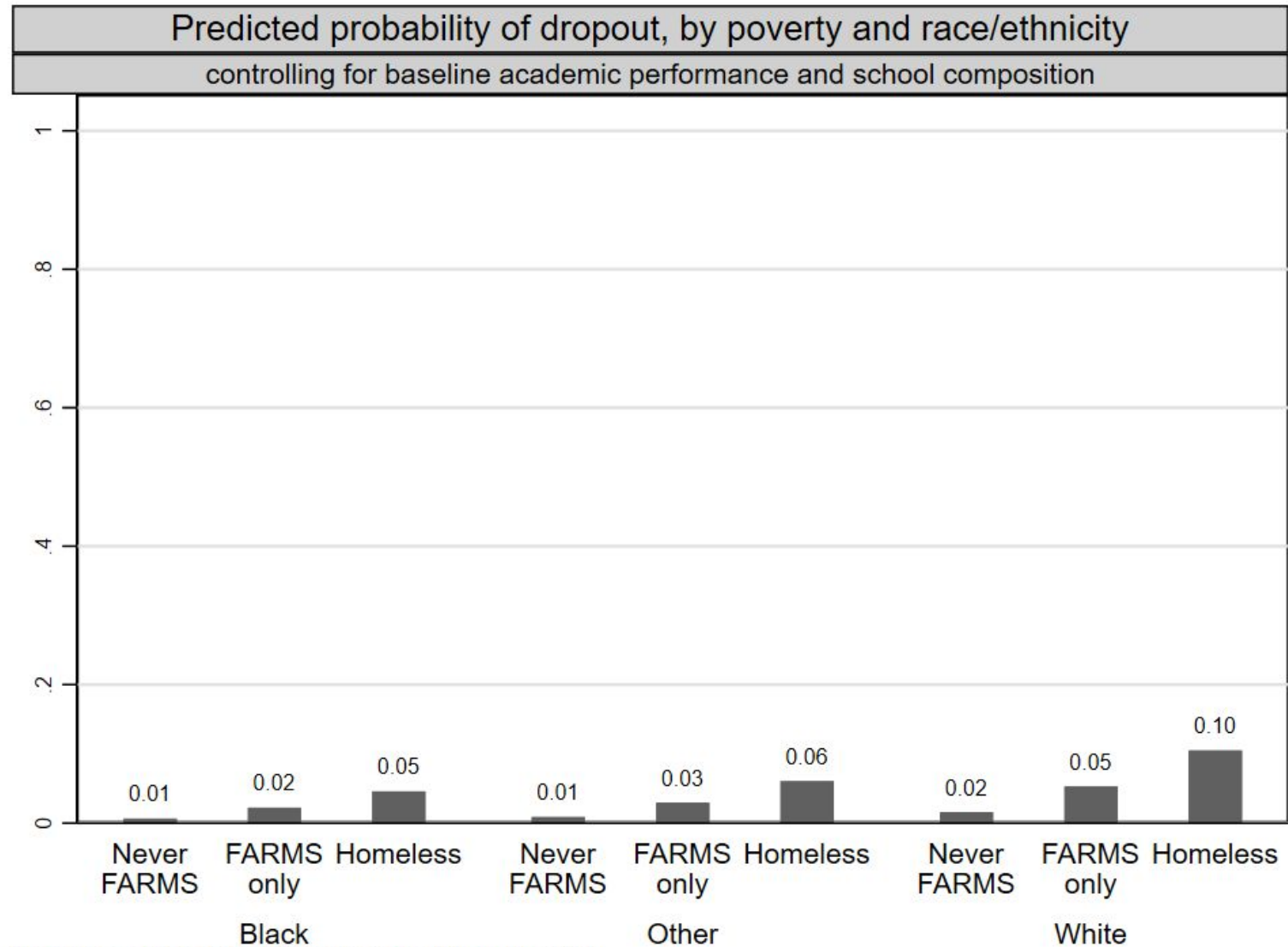
✓

✓

Sch mean Grade 6 Reading & Math

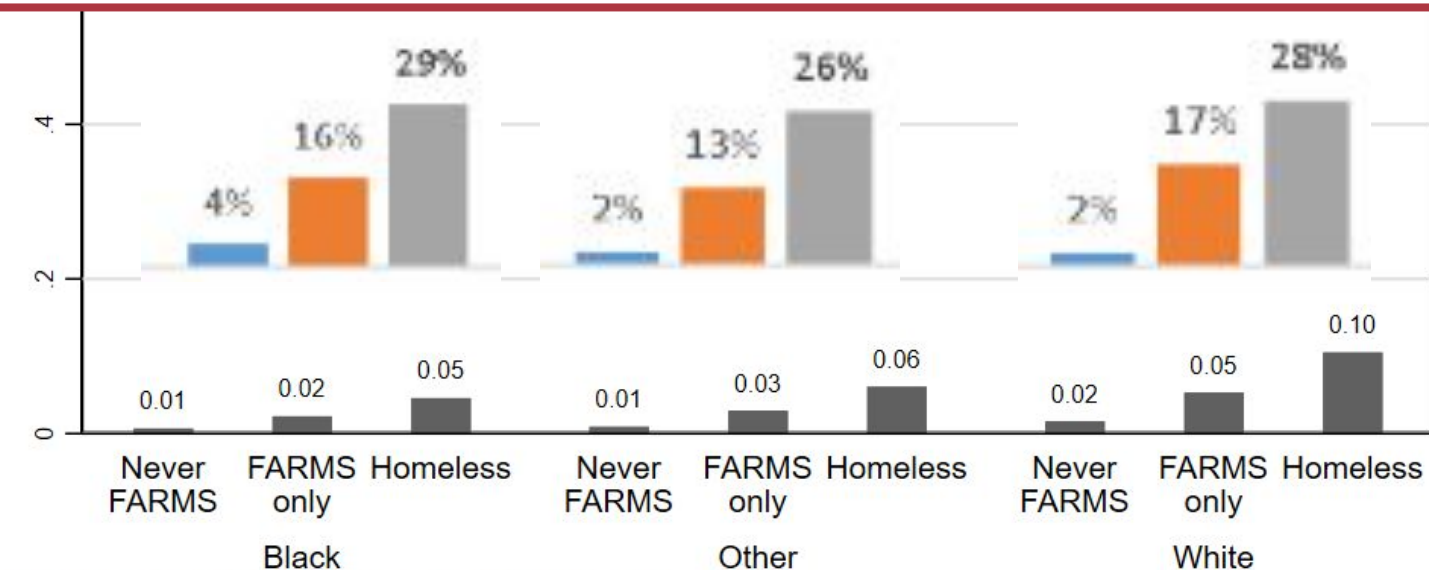
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Note. Model-based predictions based on the cohort of 6th graders in 2007-08, n=52,610.

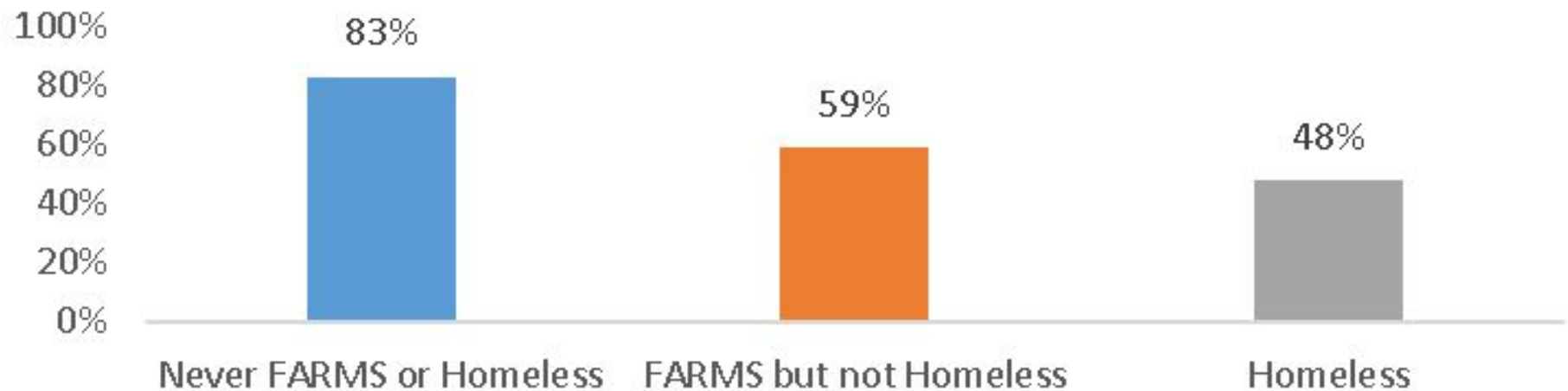
Model predictions are for the average student in the average school with the same baseline academic performance and school composition, and controlling for the effects of students being clustered in schools. These are apple-to-apple comparisons focused on the effects of student homelessness.



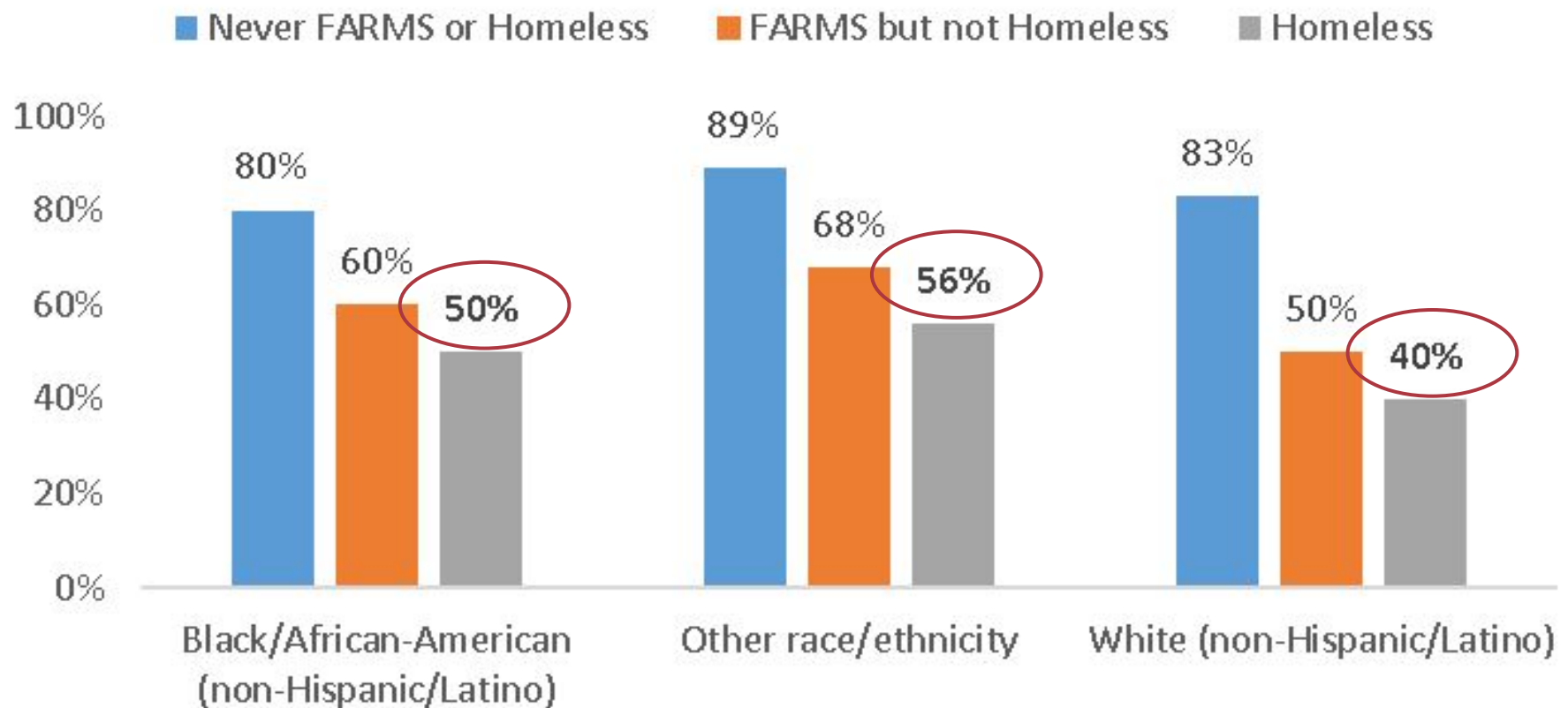
Note. Model-based predictions based on the cohort of 6th graders in 2007-08, n=52,610.

Enrolling in college

College enrollment rates by type of poverty

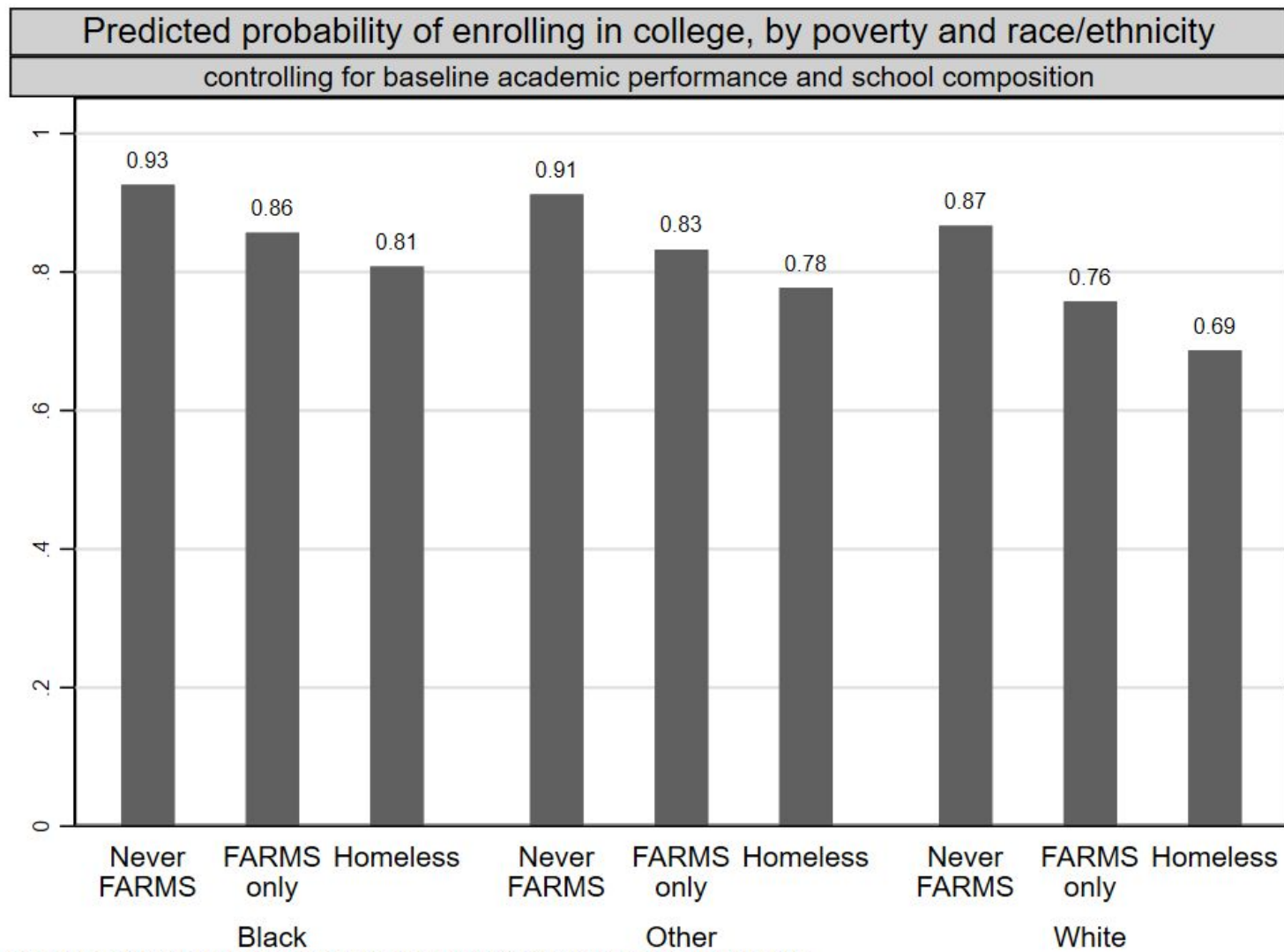


College enrollment rates by type of poverty and race/ethnicity



College enrollment (N=45,580)

	<u>B</u>	<u>OR</u>
Intercept	1.14	3.120
Student-level		
Never FARMS or homeless	0.73***	2.085***
FARMS but not homeless	referent	referent
Homeless	-0.35***	0.703***
Black, non-Hispanic	0.65***	1.917***
Other race/ethnicity	0.47***	1.592***
White	referent	referent
Grade 6 Reading	✓	✓
Grade 6 Math	✓	✓
School-level		
Sch pct never FARMS or homeless	✓	✓
Sch pct homeless	✓	✓
Sch pct black	✓	✓
Sch pct other race	✓	✓
Sch mean Grade 6 Reading & Math	✓	✓



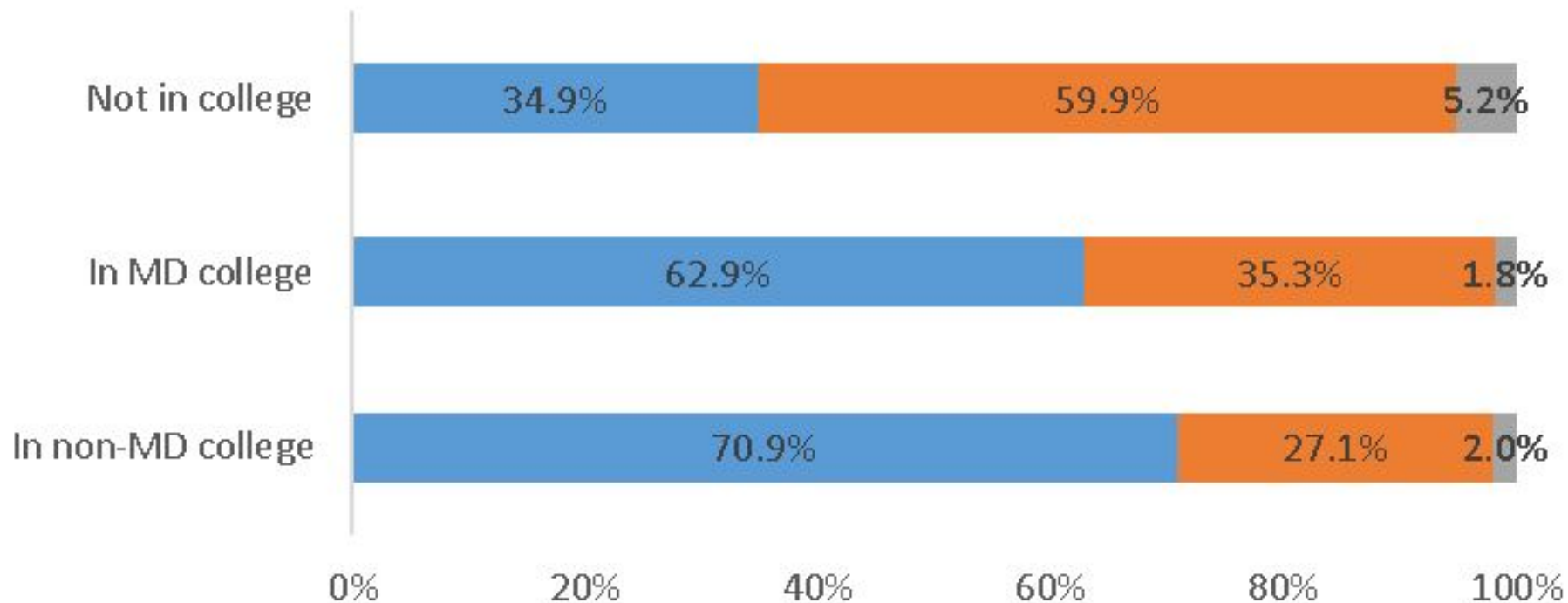
Summary - academic effects

- *Compared to a similar student who experienced poverty without homelessness, experiencing homelessness is estimated to:*
 - Double a student's odds of dropping out of school
 - Decrease a student's odds of enrolling in college by about 30 percent

Wages earned after graduating from high school

Location 1st year after on-time HS graduation by type of poverty

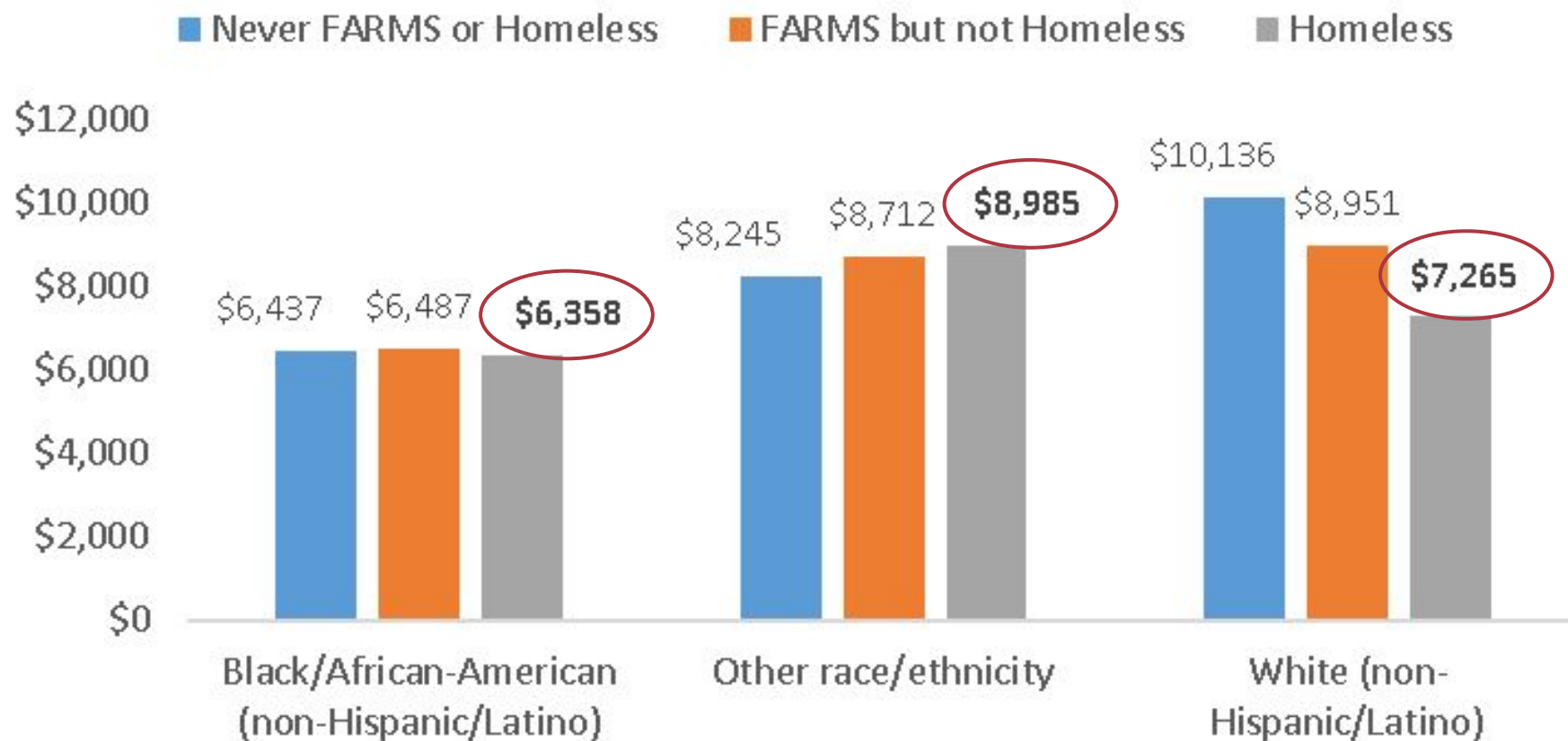
■ Never FARMS or Homeless ■ FARMS but not Homeless ■ Homeless



Mean total wages in 1st year after HS by type of poverty and college enrollment status



Mean total wages in 1st year after HS (not in college) by type of poverty and race/ethnicity



Log wages – not in college

<u>Blacks</u>	<u>Other</u>	<u>Whites</u>
<u>n=3,506</u>	<u>n=1,064</u>	<u>n=3,959</u>
8.40	8.52	8.56

Intercept

Student-level

Never FARMS or homeless

0.08

-0.11

0.14**

FARMS but not homeless

referent

referent

referent

Homeless

0.04

0.06

-0.24*

Grade 6 Reading

✓

✓

✓

Grade 6 Math

✓

✓

✓

School-level

Sch pct never FARMS or homeless

✓

✓

✓

Sch pct homeless

✓

✓

✓

Sch pct black

✓

✓

✓

Sch pct other race

✓

✓

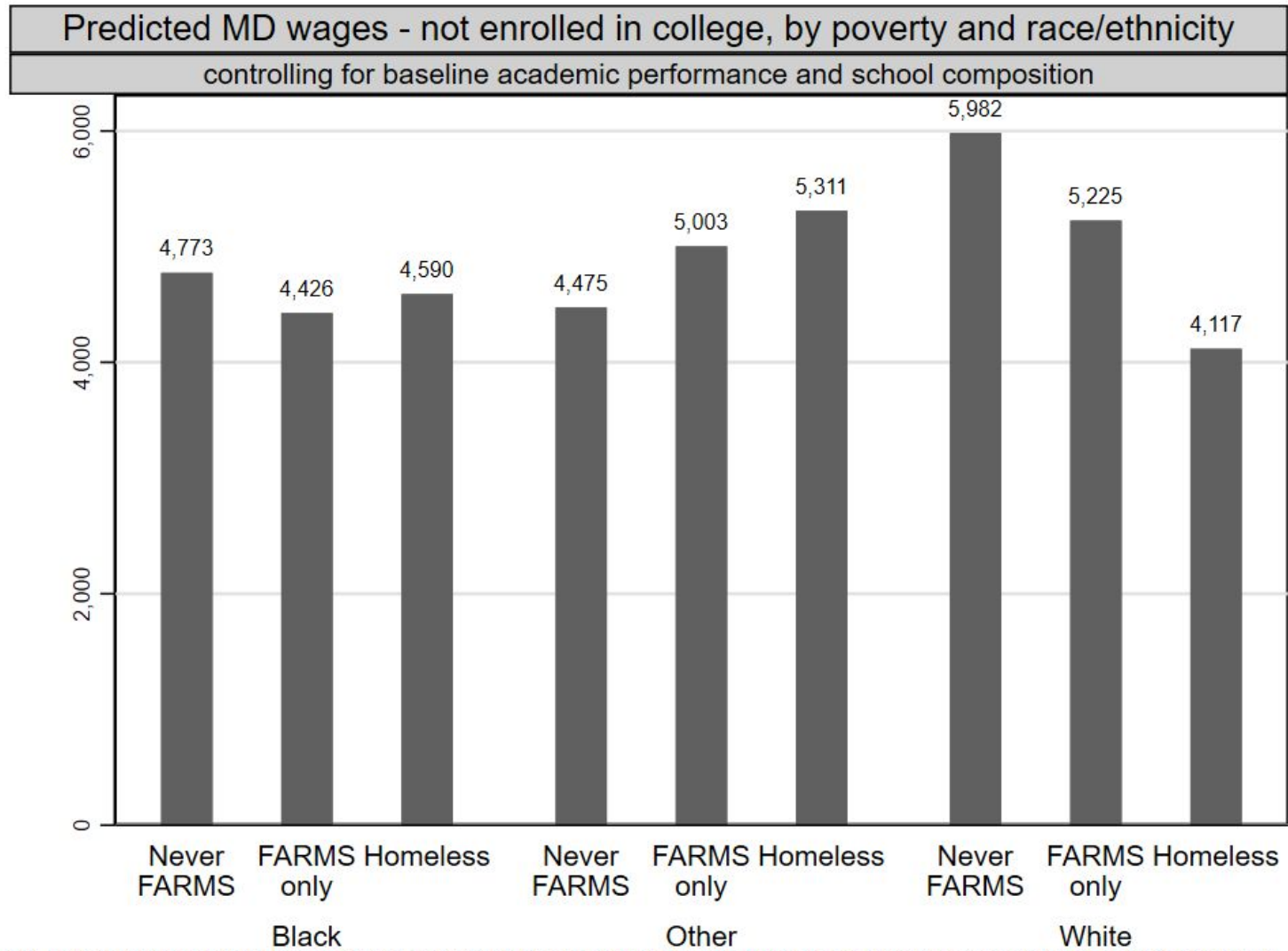
✓

Sch mean Grade 6 Reading & Math

✓

✓

✓

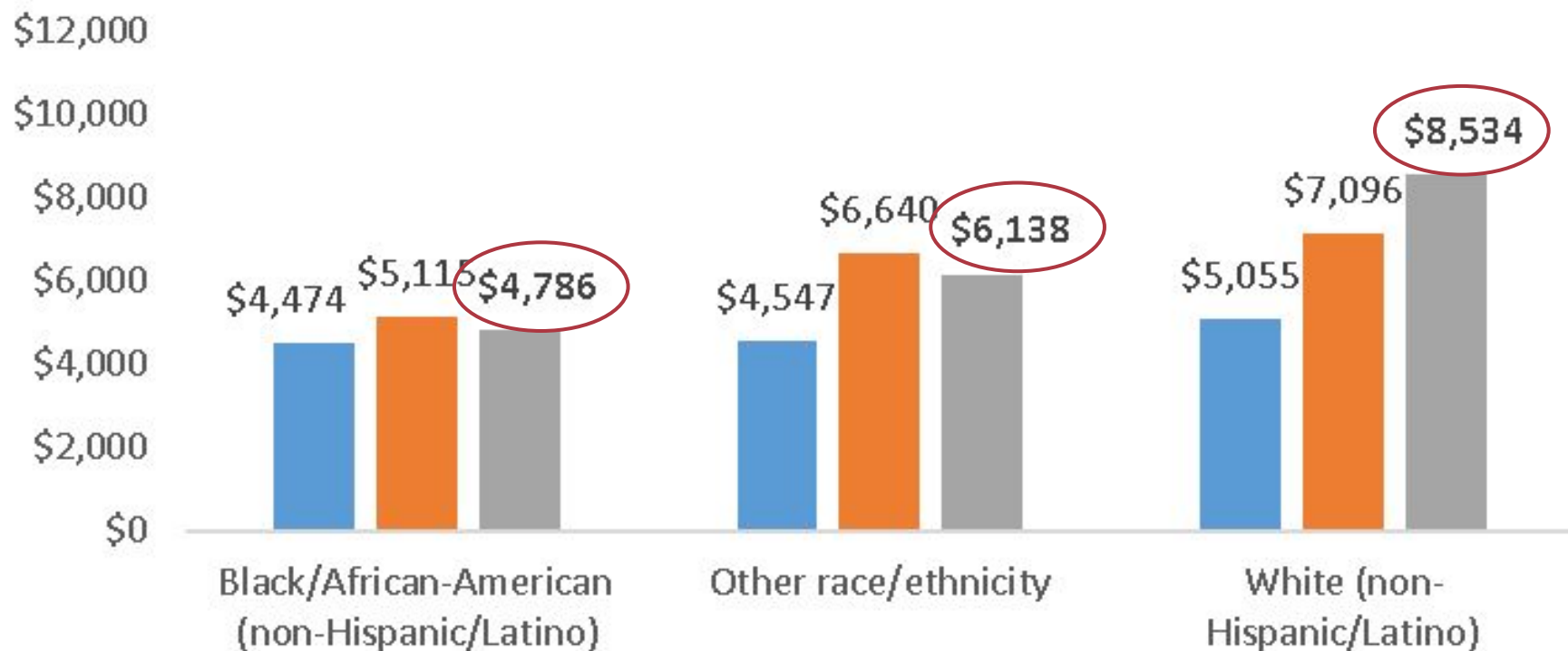


Summary - wages for those not in college

- White students:
 - Compared to a similar student who experienced poverty without homelessness, experiencing homelessness is estimated to lower wages (for White students only)
- Black & Other Race/Ethnicity students:
 - Homelessness no different from poverty without homelessness
 - Those who experienced either kind of poverty are predicted to earn wages that are no different from those who did not experience any kind of poverty
 - This could be due to small Ns (running models for each racial/ethnic group separately)

Mean total wages in 1st year after HS (in MD college) by type of poverty and race/ethnicity

■ Never FARMS or Homeless ■ FARMS but not Homeless ■ Homeless



Log wages – in college in MD

<u>Blacks</u> <u>n=5,313</u>	<u>Other</u> <u>n=3,536</u>	<u>Whites</u> <u>n=9,328</u>
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Intercept

7.93

8.09

8.24

Student-level

Never FARMS or homeless

-0.07

-0.31***

-0.26***

FARMS but not homeless

referent

referent

referent

Homeless

-0.01

-0.01

0.07

Grade 6 Reading

✓

✓

✓

Grade 6 Math

✓

✓

✓

School-level

Sch pct never FARMS or homeless

✓

✓

✓

Sch pct homeless

✓

✓

✓

Sch pct black

✓

✓

✓

Sch pct other race

✓

✓

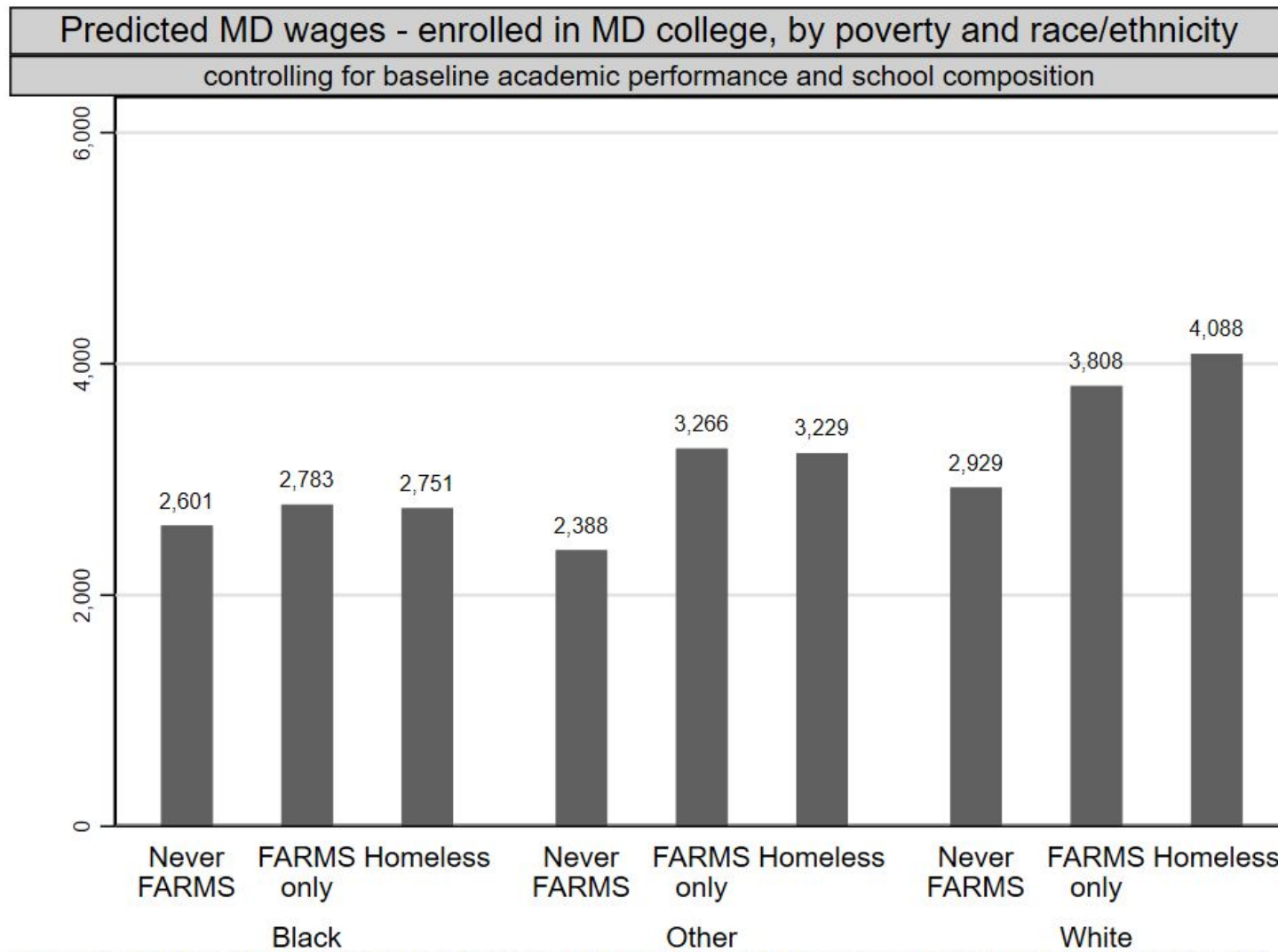
✓

Sch mean Grade 6 Reading & Math

✓

✓

✓



Summary - wages for those in college in MD

- Among whites and students of other race/ethnicities, students who experienced any form of poverty are predicted to have significantly *higher* wages than those who did not experience any form of poverty
 - While in college, both kinds of poverty operate similarly for non-Blacks
 - Experience with poverty likely means working more
 - It could also reflect being in a higher-wage area
- Among Blacks, there is no significant role for either type of poverty
 - Wages are uniformly lower for Blacks compared to other groups

Summary

- Homelessness is an extreme form of poverty, with worse academic outcomes (dropout, college enrollment) than poverty alone
- Effects of poverty and homelessness on wages were not the same for all racial/ethnic groups
 - For those not in college, poverty and homelessness made a difference only for whites
 - For those in college, homelessness and poverty operate similarly, but make no difference for Blacks

Limitations

- This study only considers 6th grade onward and only includes students who did not transfer out of MD public schools
- Wage data does not include federal, independent contractors, out-of-state employment
- Variables we did not include (e.g., location) could explain the relationships between homelessness and outcomes

Suggestions for future research

- Do homeless students in shelters, hotels/motels, or doubled-up do better than unsheltered students?
- Do homeless students in districts with McKinney-Vento grants do better?
- Do homeless students who receive services/funding support (including McKinney-Vento grants and other sources) do better?

Discussion

Questions? Comments? Suggestions?

My contact info:

Bess A. Rose

bess.rose@maryland.gov

(410) 706-3612